PLANNING COMMISSION AGENDA

February 10, 2022

PUBLIC ADVISORY:
NO MEMBERS OF THE PUBLIC WILL BE ALLOWED IN CITY HALL. PERSONS WISHING TO PROVIDE PUBLIC COMMENT MUST DO SO VIRTUALLY UTILIZING ANY OF THE METHODS LISTED BELOW. PARTICIPATION VIA ELECTRONIC MEANS IS ENCOURAGED.

How Can Members of the Public Observe the Meeting?

The meeting may be viewed via Spectrum Channel 3 and 22, AT&T U-verse Channel 99, and/or El Segundo TV at YouTube.com.

How Can Members of the Public Participate in the Meeting and/or Provide Public Comments?

Join via Zoom from a PC, Mac, iPad, iPhone, or Android device, or by phone.
Please use this URL
https://us06web.zoom.us/j/87174487419?pwd=T29ZMUtBaVlIV2hJVkt5TUM4U3J5UT09
If you do not wish for your name to appear on the screen, then use the drop-down menu and click on "rename" to rename yourself to be anonymous.

OR

Join by phone: 1 669 900 9128 US
Enter Meeting ID: 871 7448 7419
Passcode: **323310**

Your phone number is captured by the zoom software and is subject to the Public Records Act unless you first dial "*67" before dialing the number as shown above to remain anonymous.

For Zoom comments, notify meeting host by raising your virtual hand (see hand icon located in the "Reactions" button at bottom of screen) and you will be invited to speak. *The time limit for comments is five (5) minutes per person. Before speaking to the Commission, please state: your name and residence or the organization you represent. Please respect the time limits.*

Members of the public may also provide comments electronically by sending an email to the following address prior to the start of the meeting: planning@elsegundo.org. ***Please include the meeting date and any applicable item number in the subject line***. If you would like to request that your emailed comment be read into the record, please include that request at the top of your email, limit your comments to 150 words or less, and email your comments at least 30 minutes prior to the start of the meeting. Depending on the volume of communications, the emails may be read to Commission at the appropriate time. Please note that all emailed comments are public records subject to disclosure under the Public Records Act.

Additional Information:

Unless otherwise noted in the agenda, the public can only comment on City-related business that is within the jurisdiction of the Planning Commission and/or items listed on the agenda during the public communications portions of the meeting. Additionally, the public can comment on any public hearing item on the agenda during the public hearing portion of such item. The time limit for comments is five (5) minutes per person.
Before speaking to the Planning Commission, please state your name and residence and the organization you represent, if desired. Please respect the time limits.

DATE:	Thursday, February 10, 2022
TIME:	5:30 p.m.
ONLINE ACCESS:	Teleconference/Videoconference
VIDEO ACCESS:	El Segundo Cable Channel 3 (Live). Replayed Friday following Thursday's meeting at 1:00 pm and 7:00 pm on Channel 3. (Schedule subject to change)

All files related to this agenda are available for public review by appointment in the Planning Division office, Monday through Thursday 7:00 am to 5:00 pm and on Fridays until 4:00 pm, beginning at 7:00 am on the Monday prior to the Planning Commission meeting.

The Planning Commission, with certain statutory exceptions, can only take action upon properly posted and listed agenda items.

Unless otherwise noted in the agenda, the public can only comment on City-related business that is within the subject-matter jurisdiction of the Planning Commission and items listed on the Agenda during the public communications portion of the meeting. Additionally, the public can comment on any public hearing item on the Agenda during the public hearing portion of such item. The time limit for comments is generally five minutes per person.

Playing of video tapes or use of visual aids may be permitted during meetings if they are submitted to the Planning and Building Safety Director a minimum of two working days before the meeting and they do not exceed five minutes in length. Written materials distributed to the Planning Commission within 72 hours of the Planning Commission meeting are available for public inspection immediately upon distribution in the City Clerk's office and on the City's website, www.elsegundo.org.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact City Clerk, (310) 524-2307. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

A. Call to Order

B. Pledge of Allegiance

C. Roll Call

D. Public Communications (Related to City Business only and for which the Planning Commission is responsible—5 minutes per person; 30 minutes total). Individuals who received value of $50 or more to communicate to the Planning Commission on another's behalf, and employees speaking on their employer's behalf, must so identify themselves before addressing the Commission. Failure to do so is a misdemeanor. While all comments are welcome, the Brown Act does not allow the Commission to take action on any item not on the agenda. The Commission may respond to comments after public communications is closed.

E. Written Communications (other than what is included in Agenda packets)

F. Consent Calendar

All items are to be adopted by one motion without discussion. If a request for discussion of an item is made, the items should be considered individually under the next Agenda heading.

1. Authorize teleconferencing meetings pursuant to Assembly Bill 361 (JV)

Project Description: Pursuant to Assembly Bill No. 361, the City Council directed all City legislative bodies to consider continuing authorization for the use of teleconferenced meetings pursuant to Government Code § 54953(e).

Environmental Determination: N/A.

RECOMMENDED ACTION: Adopt Resolution No. 2916, making specified findings and authorizing the continued use of teleconferenced meetings pursuant to Government Code section 54953(e).

2. Approval of the Planning Commission Meeting Minutes:

- September 30, 2021 (Special Meeting)
- October 18, 2021 (Regular Meeting)
- November 18, 2021 (Special Meeting)
- December 13, 2021 (Special Meeting)

RECOMMENDED ACTION: Approve the Minutes.

G. Continued Business – Public Hearing

3. Proposed Smoky Hollow Specific Plan Amendment, Tier II Community Benefits Plans, Site Plan Review, Master Sign Program, and Offsite Parking Covenant for the construction of substantial additions to the existing buildings locate at 1475 East El Segundo Boulevard and 1320-1330 East Franklin Street. (BM/ES)

- **Environmental Assessment Nos. EA-1281 and EA-1282**
- **Community Benefit Plan No. 19-02 and 19-03**
- **Site Plan Review Nos. SPR 21-02 and SPR 21-03**
- **Specific Plan Amendment No. 21-01**
- **Master Sign Program No. 21-01**

Project Location: The Project North Site is located on the south side of East Franklin Street, mid-block and east of 136 Oregon Street, the building located at the southeast corner of Oregon and East Franklin Street. The Project South Site is located at the northwest corner of Kansas Street and East El Segundo Boulevard. The projects sites are bound by the Chevron Refinery to the south across East El Segundo Boulevard, and by light industrial and creative office space uses to the north, east, and west within the Smoky Hollow area.

Project Description: The proposed Specific Plan Amendment (SPA) would modify the Height Development Standards for Community Benefit Plan (CBP) Tier II applicable projects in a designated 30-acre subarea of the Smoky Hollow Specific Plan (SHSP) with a max. building height deviation up to 60 feet.

The proposed Project also involves the redevelopment of two adjacent sites within the SHSP, the South Site (aka Parcel A [EA No. 1281]) and the North Site (aka Parcel E [EA No. 1282]). On the 1.01-acre South Site the Project would develop a 44,604-square foot addition to the existing 19,311 sf, one-story brick building that would be structurally preserved in place. This site would have a total building area of 63,915 square feet (FAR = 1.45) and a new building height of 59' 6".

The proposed Project for the North Site would develop a 1.07-acre portion of a 4.34-acre property with two buildings, one research and development and office building and a coffee pavilion building. The existing 19,493 square foot (sf), one-story brick building would be preserved and two new floors with 44,802 square feet would be added above it. This would result in a total building area of 65,061 square feet (FAR = 0.95) and a new building height of 59' 6". The new coffee pavilion will have 766 square feet with a maximum height of 23' 8". This site would also include construction of a new 5,000-square foot public outdoor park with park seating, picnic tables, shade trees and landscaping.

In accordance with the State of California Public Resources Code Section 21092, Sections 15063 and 15072 of Title 14 of the California Code of Regulations Guidelines pertaining to the California Environmental Quality Act, and the El Segundo Municipal Code, an Initial Study/Mitigated Negative Declaration of environmental impacts has been prepared for the proposed project.

RECOMMENDED ACTION:

1) Adopt Resolution No. 2912, recommending the City Council adopt an Initial Study/Mitigate Negative Declaration (IS/MND);

2) Adopt Resolution No. 2913, recommending the City Council approve an Amendment to the Smoky Hollow Specific Plan (SP) No. 21-02;

3) Adopt Resolution No. 2914 recommending the City Council approve Environmental Assessment (EA) No. 1281, Community Benefit Plan (CBP) No. 19-02, Master Sign Program (MSP) 21-01 and Site Plan Review (SPR) No. 21-03 for a 44, 604 square foot addition at 1475 East El Segundo Boulevard, resulting in a 63,915 square foot, three-story building with a maximum height of 59'-6" as measured from average grade to the top of the building; and,

4) Adopt Resolution No. 2915 recommending the City Council approve Environmental Assessment (EA) No. 1282, Community Benefit Plan (CBP) No. 19-03, Master Sign Program (MSP) 21-01, and Site Plan Review (SPR) No. 21-04, a 44,802 square foot

addition and a new pavilion building to serve the neighborhood with a café and gathering point at the entry of a new public park accessible by the public at 1320-1330 East Franklin Avenue, resulting in a 65,061 square foot, three-story building with a maximum height of 59'-6" as measured from average grade to the top of the building.

H. New Public Hearings

4. Pacific Coast Commons Project - Street dedication waiver notice [IS "NOTICE" NECESSARY HERE?]. (PS)

Applicant: Nick Browne, representing BRE EL SEGUNDO HOLDCO LLC

Address: 475-629 North Pacific Coast Highway

Project Description: The Project site is currently occupied by surface parking lots, the Fairfield Inn and Suites Hotel, and the Aloft Hotel. The Project would allow for the redevelopment of the existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel property within the Project site through the adoption of a Specific Plan. The adoption of a Specific Plan would allow for (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures containing approximately 792 parking stalls. The Project site is bound by Palm Avenue on the north, PCH on the east, Holly Avenue on the south, and Indiana Street on the west. Mariposa Avenue bisects the Project site. The Project is required to dedicate portions of the project property frontage as public street in compliance with the Circulation Element requirements. The Applicant has requested the following waivers of street dedication:

- A 3-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lot 1 of Vesting Tentative Map. No. 82806 resulting in a required 4-foot dedication.
- A 3-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lot 4 of Vesting Tentative Map No. 82806 resulting in a required 4-foot dedication.
- A 7-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lots 2 and 3 of Vesting Tentative Map No. 82806 resulting in a 0-foot dedication.

A 3-foot waiver of the 7-foot dedication on the south side of Mariposa Avenue along the project frontage of Lot 4 of Vesting Tentative Map. No. 82806 resulting in a minimum dedication of 4 feet near Indiana Street to a maximum dedication of 12 feet near Pacific Coast Highway to accommodate the proposed 10-foot wide right-turn only lane and 2-foot widening and reconfiguration of the two existing lanes in compliance with the Circulation Element requirements.

RECOMMENDED ACTION:

1) Adopt Resolution No. 2905, recommending the City Council certify the EIR for the Pacific Coast Commons Specific Plan and Development Project;

2) Adopt Resolution No. 2905, recommending that the City Council approve General Plan Amendment No. GPA 19-01, Subdivision No. SUB 19-03 (Vesting Tentative

Tract Map), Site Plan Review No. 19-01, Parking Demand Study, and Waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and mixed-use development project; and,

3) Adopt Resolution No. 2905, recommending that the City Council adopt an Ordinance adopting the Pacific Coast Commons Specific Plan (SP 19-01), approving a zone change (ZC 19-01), a zone text amendment (ZTA 19-08), and a Development Agreement (DA 19-02);

4) Adopt Resolution No. 2906, recommending that the City Council approve modifications to Conditional Use Permit No. 14-01 for the Aloft Hotel;

5) Adopt Resolution No. 2907, recommending that the City Council approve modifications to Conditional Use Permit No. 14-02 for the Fairfield Inn and Suites Hotel.

I. New Business:

None.

J. Report from Director of Development Services or designee

K. Report from the City Attorney's office

L. Planning Commissioners' Comments

M. Adjournment—next regular scheduled meeting for February 24, 2022, at 5:30 pm.

POSTED: *Venus Wesson* (Signature) *February 3, 2022/ 7:26pm* (Date and time)

CITY OF EL SEGUNDO

Planning Commission Agenda Statement

Meeting Date: February 10, 2022
Agenda Heading: Consent

TITLE:

Authorize teleconferencing meetings pursuant to Assembly Bill 361.

RECOMMENDATION:

Adopt Resolution No. 2916, making specified findings and authorizing the continued use of teleconferenced meetings pursuant to Government Code section 54953(e).

BACKGROUND AND DISCUSSION:

On September 16, 2021, Assembly Bill No. 361 ("AB 361") took effect. Among other things, AB 361 amended certain provisions of the Ralph M. Brown Act governing open meetings to allow teleconferencing, including internet-based video conferencing, in a manner similar to previously-issued gubernatorial executive orders. AB 361 allows a legislative body to continue utilizing teleconferencing to conduct public meetings under certain circumstances, provided it makes certain findings.

On October 5, 2021, the City Council adopted Resolution No. 5275 prohibiting other City legislative bodies from meeting exclusively in person, except as determined by the City Manager or until the City Council provides further direction, and directed all legislative bodies of the City to consider the adoption of a resolution authorizing the use of teleconferenced meetings pursuant to Government Code § 54953(e).

Thus, in accordance with City Council direction, the Planning Commission adopted PC Resolution Nos. 2901, 2908 and 2910 authorizing the use of teleconferenced Planning Commission meetings. Since Planning Commission meetings have recently been conducted only via teleconferencing or in a "hybrid" manner of in-person and teleconferencing, and since Federal, State and Local mandates change, staff recommends that the Planning Commission adopt PC Resolution No. 2916, thereby authorizing the continued use of teleconferenced meetings pursuant to Government Code Section 54953(e).

PREPARED BY: Eduardo Schonborn, AICP, Planning Manager

REVIEWED BY: Joaquin Vazquez, Assistant City Attorney

APPROVED BY: Michael Allen, AICP, Development Services Director

ATTACHED SUPPORTING DOCUMENTS:

PC Resolution No. 2916

RESOLUTION NO. 2916

A RESOLUTION OF THE PLANNING COMMISSION FINDING THAT CERTAIN CONDITIONS EXIST TO CONTINUE CONDUCTING PUBLIC MEETINGS VIA TELECONFERENCING PURSUANT TO GOVERNMENT CODE SECTION 54953(e)

The Planning Commission of the City of El Segundo hereby resolves as follows:

SECTION 1: The Planning Commission finds as follows:

A. On March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency in California due to the threat of the COVID-19 pandemic. This gubernatorial proclamation, among other things, suspended local government emergency declaration, reporting, and extension requirements of Government Code § 8630 for the duration of the COVID-19 pandemic.

B. On September 16, 2021, Assembly Bill No. 361 ("AB 361") took effect. Among other things, AB 361 amended certain provisions of the Ralph M. Brown Act governing open meetings to allow teleconferencing, including internet-based video conferencing, in a manner similar to previously-issued gubernatorial executive orders.

C. During a proclaimed state of emergency, AB 361 allows a legislative body to continue utilizing teleconferencing to conduct public meetings under certain circumstances, provided the legislative body makes certain findings.

D. After an initial meeting in which certain findings are made, to continue meeting pursuant to AB 361, the legislative body must, every 30 days thereafter, declare that it has reconsidered the circumstances of the state of emergency and either: (1) the state of emergency continues to directly impact the ability of the members to meet safely in person; or (2) state or local officials continue to impose or recommend measures to promote social distancing.

E. On October 5, 2021, the City Council adopted Resolution No. 5275 prohibiting other City legislative bodies from meeting exclusively in person, except as determined by the City Manager or until the City Council provides further direction. The City Council Resolution directed all legislative bodies of the City to consider the adoption of a resolution authorizing the use of teleconferenced meetings pursuant to Government Code § 54953(e).

F. On October 28, 2021, the Planning Commission adopted Resolution No. 2901 to initially authorizing the use of teleconferenced meetings pursuant to Government Code § 54953(e).

G. Effective November 10, 2021, the Governor extended the statewide COVID-19 emergency until March 31, 2022 (via Executive Order N-21-21).

H. Government Code § 54953(e) allows the City to continue utilizing teleconferencing (which includes internet based video conferencing) to conduct public meetings under certain circumstances.

I. On December 9, 2021, the Planning Commission adopted Resolution No. 2908 authorizing the continued use of teleconferenced meetings pursuant to Government Code § 54953(e).

J. On January 13, 2022, the Planning Commission adopted Resolution No. 2910 authorizing the continued use of teleconferenced meetings pursuant to Government Code § 54953(e).

SECTION 2: *Teleconferencing*. Pursuant to Government Code § 54953(e), the Planning Commission finds as follows:

A. The state of California continues to be in a declared state of emergency pursuant to Government Code § 8625 (the California Emergency Services Act; *see* Government Code § 54953(e)(3); *see also* Governor's Proclamation dated March 4, 2020 and and Executive Order N-21-21 dated November 10, 2021);

B. Based upon the most recent Order of the Health Officer for the County of Los Angeles Department of Public, masks and social distancing continue to be necessary to curb the spread of COVID-19 (Government Code § 54953(e)(3)(B)(ii));

C. The circumstances continue to directly impact the ability of the members of the Planning Commission to meet safely in person;

D. Accordingly, to protect public health, the Planning Commission finds that it is in the public interest to conduct its public meetings via teleconference as defined by Government Code § 54953;

E. The Planning Commission will adhere to all requirements of Government Code § 54953(e) governing teleconferencing during the emergency.

SECTION 3: *Reporting.* Every 30 days following adoption of this Resolution, the Planning Commission will reconsider the extension of the teleconferencing method of public meetings in accordance with Government Code § 54953(e)(3). Such

determinations may take the form of a minute order and be placed on the consent calendar.

SECTION 4: *Electronic Signatures*. This Resolution may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 5: *Recordation*. The Chairperson is authorized to sign this Resolution signifying its adoption by the Planning Commission of the City of El Segundo and the City Clerk, or her duly appointed deputy, may attest thereto.

SECTION 6: *Effective Date.* This Resolution will become effective immediately upon adoption and will remain effective unless repealed or superseded.

PASSED AND ADOPTED this 10th day of February, 2022.

_____
Ryan Baldino, Chair

ATTEST:

_____
Michael Allen, AICP, Secretary

APPROVED AS TO FORM:

_____
Joaquin Vazquez
Assistance City Attorney

MINUTES OF THE
EL SEGUNDO VIRTUAL PLANNING COMMISSION
Special Planning Commission Meeting
September 30, 2021

A. Call to Order

Chairman Baldino virtually called the meeting to order at 5:35 p.m.

B. Pledge of Allegiance

Chairman Baldino led the pledge.

C. Roll Call

Present via teleconferencing: Chairman Baldino
Present via teleconferencing: Vice Chair Newman
Present via teleconferencing: Commissioner Hoeschler
Present via teleconferencing: Commissioner Maggay

Absent: Commissioner Keldorf

D. Public Communications

None.

E. Written Communications (other than what is included in Agenda packets)

None.

F. Consent Calendar

None.

G. New Business:

1. **Presentation of the Draft 2021-2029 Housing Element Update (PS)**

Principal Planner Paul Samaras introduced Veronica Tam from Veronica Tam & Associates, the consultant currently assisting the City with preparation of the housing element.

Veronica Tam provided a PowerPoint presentation, including the requirement to prepare and update the Housing Element, and an overview of the El Segundo Housing Element Update covering the following:

- Housing Element as one of seven required General Plan Elements
- Citywide goals, objectives, and policies, and identifying housing conditions and needs for the city
- It provides an assessment and plan to accommodate the City's current and future housing needs
- A plan for meeting the City's "fair share" of the region's housing needs

- Deadlines for the preparation and submittal of the Housing Element Must be updated every 8 years October 15, 2021 statutory deadline (with 120-day grace period)
- What the State Department of Housing and Community Development (HCD) looks for when reviewing Housing Elements
- Legally required plan for where housing units may be built, and a sites inventory list
- How most affordable housing is constructed by private sector entities that using government incentives
- City may use funds, policies, and programs as incentives to meet housing needs
- City "sets the stage" for housing developers to build projects in line with the City's General Plan, zoning ordinance and other planning documents
- Discussed El Segundo's regional housing needs allocation (RHNA) for 2021-2029
- Brief discussion regarding the various housing programs and status in the current Housing Element

Ms. Tam provided the Commission with the following timeline in the Housing Element process:

June 2021	Initiated Mitigated Negative Declaration (MND)
September 2021	Finalize Sites Inventory & Draft Housing Element
October 2021	Submit Draft Housing Element to HCD for Review
December 2021	Finalize Housing Element
January 13, 2022	Planning Commission Recommends Housing Element
February 1, 2022	City Council Adopts Housing Element & Submits to HCD for Final Certification

Discussion ensued between Commission, staff and Ms. Tam regarding the sites inventory list, how and why certain properties were selected, implications for not have a certified Housing Element, and implications for not building the number of units identified as El Segundo's RHNA.

Motion to Receive and File, with direction to amend the Draft Housing Element prior to submitting to HCD.

H. Report from Director of Development Services or designee

Development Services Director Michael Allen reported that next month, staff will be facilitating in-person planning meetings for committee members only, provided everyone adheres to current LA County health guidelines and wears a mask while in chambers together.

I. Report from the City Attorney's office

None.

J. Planning Commissioner's Comments

Commissioner Maggay stated he is looking forward to having the planning meetings in person.

K. Adjournment – Meeting adjourned at 7:13 pm; next regular scheduled meeting for October 14, 2020 at 5:30 pm

_____ _____

Michael Allen, Director of Development Services Ryan Baldino, Planning Commission

MINUTES OF THE
EL SEGUNDO VIRTUAL PLANNING COMMISSION
Regularly Scheduled Meeting
October 28, 2021

A. Call to Order

Chair Baldino virtually called the meeting to order at 5:30 p.m.

B. Pledge of Allegiance
Chair Baldino led the pledge.

C. Roll Call

Present via teleconferencing: Chairman Baldino
Present via teleconferencing: Vice Chair Newman
Present via teleconferencing: Commissioner Keldorf
Present via teleconferencing: Commissioner Maggay

Absent: Commissioner Hoeschler

D. Public Communications
None.

E. Written Communications (other than what is included in Agenda packets**)**
None.

F. Consent Calendar
None.

G. Continued Business – Public Hearing
None.

H. New Public Hearings
None.

I. New Business:
1. Authorize teleconferencing meetings pursuant to Assembly Bill 361. (GK)

City Attorney Joaquin Vazquez made a comment that the teleconferencing had been enabled through the governor's executive orders, and AB-361 took on those orders and implemented them through state law with the approval of the Bill in September. AB-361, however, requires the legislative body to make certain findings to allow use of teleconferencing meeting.

Vice Chair Newman moved to adopt resolution number 2901, making specified findings and authorizing the use of teleconferenced meetings; Commissioner Maggay seconded that motion. Motion to approve 4-0.

2. Update on Accessory Dwelling Units (MB/ES) - Report from staff regarding the number of ADU applications and permits issued since November 1, 2020

Assistant Planner Baldenegro provided a PowerPoint presentation of the 2021 annual report for ADU applications and permits issued and discussed the City's current ADU regulations. She commenced by stating that the City's current ADU regulations continued to be consistent with stat law; ADUs are allowed in all residential zoning districts by right; and they are allowed as new construction and as converting existing structures, such as converting a garage. She highlighted that between November 1, 2020 through the end of September 2021, 31 applications were submitted for ADU, where 17 applications were for new ADUs and 14 applications were to convert existing structures to ADUs. During that same period, a total of 12 permits were issued, where 5 permits were issued for new ADUs and 7 permits were issued for conversions. Ms. Baldenegro also informed the Commission of various reasons homeowners decide to build ADUs. Based upon what staff hears from applicants at the counter, homeowners decide to building ADUs for extra income; to provide housing for family members; they become empty nesters and elect to downsize to a smaller home and rent the main house. She also noted some of the concerns raised by residents that are conveyed to staff, which include density; traffic; loss of street parking; noise; changes to neighborhood character; privacy Infringement; and proximity.

Chair Baldino proposed motion to Receive and File. Motion passed, 4-0.

3. Water and Sewer Infrastructure age (PW)

City Engineer Lifan Xu spoke on the water and sewer infrastructure and reported that most of the City's water infrastructure was built before 1950 will be replaced; sewer pipes are cleaned annually and are mostly in very good condition; major video inspections are conducted every 10 years to identify if there are any problems with the pipe; and the conditions of the infrastructure is comparable with those in neighboring cities.

After Commission discussion, Public Works Director Elias Sassoon commented that when it comes to water quality, water samples are taken at many locations and very often, and those samples are tested in laboratories to ensure it is safe and meets the required state standards.

Chair Baldino approved motion to Receive and File. Motion passed, 4-0.

4. Update on new affordable housing consultant, Many Mansions (ES/MA)

Rick Schrader, President of Many Mansions, stated that Many Mansions is an affordable housing and service provider that will be working closely with city staff and city council. Mr. Schrader expressed that his plan is to go through the housing element; view the policies and programs in the forthcoming housing element; review existing projects and potential projects to prepare a strategic plan to see where more affordable housing can be developed within the City.

Chairman Baldino and the Planning Commission thanked Rick for his services.

J. Report from Director of Development Services or designee

Development Services Director Michael Allen stated that John Kaliski, Architect/Land Use Specialist will be coming to the Planning Commission with his team in December, to present his observations and findings from his own site visits and development patterns within El Segundo. Director Allen also stated that John Kaliski will put a recommendation together that will come before the planning commission to consider any potential text amendments that result out of the study session, which is being done in response to Senate Bill 9, which will go into effect on January 1, 2022. He stated the goal is to present an Ordinance to Commission in January and to City Council shortly thereafter.

Planning Manager Eduardo Schonborn informed the Commission that the City's Home Share pilot program started on October 1. He encouraged the Commission and public to visit the City's webpage for additional information regarding the program, including applications and guidelines. Lastly, Planning Manager Schonborn noted that the pilot program is a test run that will continue through the end of 2022, and staff will report back to Planning Commission and City Council in late 2022.

K. Report from the City Attorney's office
None.

L. Planning Commissioner's Comments

Vice Chair Newman reminded everyone that the Halloween Frolic will take place on Saturday along Main street and hopes everyone comes out to enjoy the festivities.

Commissioner Keldorf stated she was going to put in a pitch to read and sign the neighbors of Hyperion petition asking the South Coast Air Quality Management District to install fence-line monitoring and an emissions station in El Segundo.

Commissioner Maggay asked if the catalyst project was delayed or if that is something that is coming up. Planning Manager Schonborn confirmed that although there has not been any recent movement due to the applicant exploring some options, he foresees it coming back to Commission as early as the first quarter of next year.

M. Adjournment – Meeting adjourned at 7:00 pm. Since the next regular scheduled meeting of November 11, 2021, the next Planning Commission meeting will be a special meeting on November 18, 2021 at 5:30 pm

_____ _____

Michael Allen, Director of Development Services Ryan Baldino, Planning Commission

MINUTES OF THE
EL SEGUNDO VIRTUAL PLANNING COMMISSION
Special Meeting
November 18, 2021

A. Call to Order

Vice Chair Newman virtually called the meeting to order at 5:30 p.m.

B. Pledge of Allegiance

Commissioner Keldorf led the pledge.

C. Roll Call

Present: Chair Baldino
Present: Vice Chair Newman
Present: Commissioner Keldorf
Present: Commissioner Hoeschler
Present: Commissioner Maggay

D. Public Communications

Byron Washam, a resident of El Segundo indicated he wanted to provide comment regarding the PCC project in advance of the next meeting scheduled on December 9th. He indicated there was a statement in the notice regarding a request to waive the dedication on Mariposa, as well as other items dealing with Palm. In reviewing the environmental impact statement, he could not find any reference to that request. Mr. Washam requested it be noted as to what they mean by that statement, prior to December 9th.

E. Written Communications (other than what is included in Agenda packets)

None.

F. Consent Calendar

None.

G. Continued Business – Public Hearing

None.

H. New Public Hearings

1. Pacific Coast Commons Specific Plan and Environmental Impact Report (JW / PS)

Project Address: 475-629 North Pacific Coast Highway
Applicant: Nick Browne, representing BRE EL SEGUNDO HOLDCO LLC

Item was scheduled to be heard at tonight's meeting; however, applicant has requested item be continued to the December 9th meeting. Motion to open the public hearing and continue the item to December 9th passed, 5-0.

2. **Professional Sports Headquarters and Training Facility (BM/ES)**
   Address: 2000 East El Segundo Blvd, El Segundo, CA
   Applicant: Lionel Uhry (Representing CDC-MAR and Emily Murray, Esq., representing Raytheon)

Contract Planner Brad Meisner provided a PowerPoint presentation regarding the proposed project. He also highlighted that an errata to the Raytheon and Chargers resolutions had been provided on November 17, 2021.

Bob Tarnovsky, Senior Vice President of Real Estate at Continental Development: Clarified entitlement issues and indicated that they do have a blanket entitlement covering the south campus where the Chargers development is envisioned. Mr. Tarnovsky believes that the entitlements within the specific plan area are transferable, so that any development not being used on the south campus can be transferred to the north campus.

Richard Lundquist, Owner of Continental Development: Stated that he not only believes they able to transfer entitlements to the north portion, but that additional acreage purchased from Raytheon can be used to build more on their campus. In closing, Mr. Lundquist highlighted that El Segundo will be the only City in America to house a professional football, basketball, and hockey team.

Fred Mass, Chief of Staff & Counselor to LA Chargers: Thanked everyone participating in the development of the LA Charger's new facility.

Ron Turner: Mr. Turner gave a detailed overview of the LA Charger's building facility.

Craig Garrett, urged LA Chargers to employ their union carpenters

Raphael Pimentel, Union Carpenter - Solicited the Planning Commissions support to approve the LA Charger's project

There were 9 speakers who expressed support for the LA Charger's project

The Planning Commission closed the public hearing and discussion ensued regarding the proposed project, including discussion on the proposed netting, landscaping, the Development Agreement, the first amendment to the DA and the proposed second amendment to the DA. Chair Baldino proposed to approve as written, but include a condition requiring Raytheon to decide if they will choose to implement section 9.2 of the first amendment of the DA or section 9.3, or indicate on the vesting map where that park will be located. After further consideration, Planning Commission moved to approve the project, but include a condition of approval in the Raytheon resolution requiring that prior to issuance of a building permit for Raytheon's Butler building, the applicant enter into an agreement with the city committing to effectuate either section 9.2 or section 9.3 of the first amendment of the DA regarding the recreation and open space area. Motion made by Commissioner Keldorf seconded by Commissioner Hoeschler. Motion passed and approved, 5-0.

I. New Business:
None.

J. Report from Director of Development Services or designee
Michael Allen reminded the Commission that the other item that was on the agenda was continued to the December 9th Planning Commission meeting. He also informed the Commission that staff is making preparations for the SB9 study session with the Commission, and staff will be reaching out to survey the Commission on their availability for a special meeting either the second or third week of December.

K. Report from the City Attorney's office
None.

L. Planning Commissioner's Comments
Commissioner Maggay informed the Commission that he met with resident Cheryl Smith, who is an administrator of a Facebook group that is interested and concerned with the catalyst project. He will also be meeting with the project applicant this week and will report back at the next meeting.

M. Adjournment – meeting adjourned at 8:30 pm.
Next regular scheduled meeting for December 9, 2021 at 5:30 pm

_____ _____

Michael Allen, Director of Development Services Ryan Baldino, Planning Commission

MINUTES OF THE
EL SEGUNDO PLANNING COMMISSION
Special Meeting
December 13, 2021

A. Call to Order

Chair Baldino virtually called the meeting to order at 5:36 p.m.

B. Pledge of Allegiance

Commissioner Maggay led the pledge.

C. Roll Call

Present: Chair Baldino
Present: Vice Chair Newman
Present: Commissioner Keldorf
Present: Commissioner Hoeschler
Present: Commissioner Maggay

D. Public Communications

None.

E. Written Communications (other than what is included in Agenda packets)

None.

F. Consent Calendar

None.

G. Continued Business – Public Hearing

None.

H. New Public Hearings

None.

I. New Business:

1. Receive and File the Single Family (R1) Residential Existing Conditions, Findings, and Considerations Report; and Study Session Regarding Multi-Unit Options and Recommendations to address the requirements of Senate Bill 9 (SB9). (MA/ES)

Development Service Department Director Michael Allen introduced John Kaliski, a consulting architect assisting the City with implementing the provisions of Senate

Bill No. 9 which will be going into effect on January 1, 2022. Mr. Allen is looking for the Commission to provide feedback and ideas and design input to minimize impacts on single family neighborhood from SB 9.

John Kaliski presented a PowerPoint presentation of his findings while assessing the City's single-family neighborhoods, how opportunities exist with lots that have alley access, 25-foot wide lots, and the age of the housing stock. He also provided a detailed account of SB 9, its requirements to allow development and allow for subdivisions in R1 zones of the City.

Chair Baldino opened public communication.
Lewis Hill – 127 W. Palm had concerns about longer term impact to the width of the street and potential increase of traffic.

Chair Baldino closed public communication.

Planning Commissioner comments and concerns.

- Chair Baldino inquired what can be done about the traffic impact and school impact of the R-1 zone. Mr. Kaliski stated they have not looked at the street widths with this study. Although it is something that could be studied, results of that would not prevent implementation of SB 9.
- Chair Baldino asked what kind of feedback staff is seeking, is it standards for development or standards for dividing a single-family lot into two. Mr. Allen stated that staff is looking for feedback on built forms on single family homes.
- Commissioner Hoeschler asked about curb cuts
- Commissioner Keldorf asked if there had been a financial side provided to understand more what the value is on subdividing lots and construction of 800 square feet. Mr. Kaliski responded that it would require an economic evaluation of land costs and values.
- Mr. Hoeschler inquired if SB9 allows the owner to sell half of their lot. Mr. Kaliski stated that an owner could subdivide and sell, but there are provisions in SB9 that prevents investors to buy, subdivide and sell. City Attorney Joaquin Vazquez added that requirements of SB9 lot split include owner occupancy where the property owner is required to sign an affidavit that they intend to occupy the unit on the newly created lot for a period of three years. He also provided the owner occupancy requirement for duplexes.
- Mr. Baldino confirmed his understanding that one of the requirements if you take a R-1 unit and add a duplex that one unit becomes affordable housing unit. Mr. Kaliski confirmed that was correct.
- Mr. Baldino inquired how the affordability requirement would work. Mr. Vazquez stated that the requirement would be through recordation of a covenant.
- Commissioner Maggay provided a list of key elements he would like to see considered in the design element: 1) adequate parking; 2) vehicle access from the alley for the second unit on 25-foot wide lots, as illustrated in slide 50 of the power point of a 25' wide lot; 3) setback for existing versus new construction; 4) lot coverage; 5) entries in back houses include visible entryways.

- Mr. Baldino expressed his concerns with the massing from the front, and that without a porch to provide relief, then one only sees boxes. He would like to see if second stories can be setback or be smaller, minimum building separation, and limit the heights to minimize impacts to our street view caused by maximizing the interior space of the new residences. Mr. Baldino stated that the side yard view must protect privacy of the homes around the divided lots.

J. Report from Director of Development Services or designee

Michael Allen reminded the Commission that the next regular Planning Commission meeting will be next year, on January 13, 2022.

K. Report from the City Attorney's office

None.

L. Planning Commissioner's Comments

Chair Baldino wished everyone Happy Holiday.

M. Adjournment – meeting adjourned at 7:38 pm.

Next regular scheduled special meeting for January 13, 2022 at 5:30 pm

_____ _____

Michael Allen, Director of Development Services Ryan Baldino, Planning Commission

TITLE:

Proposed Smoky Hollow Specific Plan Amendment, Tier II Community Benefits Plans, Site Plan Review, Master Sign Program, and Offsite Parking Covenant for the Construction of Substantial Additions to the Existing Buildings Located at 1475 East El Segundo Boulevard and 1320 East Franklin Street.

RECOMMENDATION:

It is recommended that Planning Commission:

1) Adopt Resolution No. 2912, recommending the City Council adopt an Initial Study/Mitigate Negative Declaration (IS/MND);

2) Adopt Resolution No. 2913, recommending the City Council approve an Amendment to the Smoky Hollow Specific Plan (SP) No. 21-02

3) Adopt Resolution No. 2914 recommending the City Council approve Environmental Assessment (EA) No. 1281, Community Benefit Plan (CBP) No. 19-02, Master Sign Program (MSP) 21-01 and Site Plan Review (SPR) No. 21-03 for a 44, 604 square foot addition at 1475 East El Segundo Boulevard, resulting in a 63,915 square foot, three-story building with a maximum height of 59'-6" as measured from average grade to the top of the building.

4) Adopt Resolution No. 2915 recommending the City Council approve Environmental Assessment (EA) No. 1282, Community Benefit Plan (CBP) No. 19-03, Master Sign Program (MSP) 21-01, and Site Plan Review (SPR) No. 21-04, a 44,802 square foot addition and a new pavilion building to serve the neighborhood with a café and gathering point at the entry of a new public park accessible by the public at 1320-1330 East Franklin Avenue, resulting in a 65,061 square foot, three-story building with a maximum height of 59'-6" as measured from average grade to the top of the building.

BACKGROUND

The Smoky Hollow Specific Plan (SHSP) was adopted in 1986. On October 2, 2018 the SHSP was updated with the intent of transforming the post war, industrial buildings and uses within the 120-acre area illustrated in Figure 1 below, centrally located in the City, west of Pacific Coast Highway and bordering the northern boundaries of the Chevron Oil Refinery.

The 2018 SHSP Update included an Environmental Impact Report, certified by the City in October 2018 (State Clearinghouse No. 2017031071 (EIR, SHSP EIR)).

SITE DESCRIPTION

The SHSP covers approximately 120 acres in the northwest quadrant of El Segundo, west of Pacific Coast Highway (PCH) and North of El Segundo Boulevard. The specific plan area is bounded by Grand Avenue to the north, PCH to the east, E. El Segundo Blvd to the south, and Main Street to the west. The Smoky Hollow Specific Plan area and the associated Zoning Districts are illustrated in Figure 1 below.

Figure 1: *Smoky Hollow Specific Plan Map and Zoning District Boundaries*



The applicant is requesting entitlements for substantial additions at two adjacent sites located within the specific plan area. These sites are part of the "Standard Works" development project, generally bounded by E. Franklin Ave to the north, Kansas St. to the east, E. El Segundo Blvd to the south, and Oregon St. to the west.

The Project Sites are presently developed with commercial and light industrial land uses. The Chevron Oil Refinery is located just south of the SHSP, the Los Angeles International

Airport (LAX) is a mile to the north, and the Pacific Ocean is approximately two miles to the west. Figure 2 illustrates the project site location in proximity to the SHSP area.

Figure 2: North and South Sites



South Site (1475 E. El Segundo Blvd):

The South Site is a 1.01-acre parcel (44,604 square feet) presently developed with a 19,311 square foot building. The applicant proposes to preserve the existing structure and add 44,604 square feet, for a total of 63,915 square feet. The total parcel floor area ratio (FAR) will be 1.45, in compliance with the maximum FAR of 1.5 for Tier II Community Benefits Plan projects. The site, and uses within the surrounding area, were originally designed as supporting uses for the oil and gas industry (Standard Oil). The entire lot outside of the building is paved with asphalt and used for surface parking. There is a slope across the property down from the northwest to the southeast. The site conditions are shown in Figure 3 below.

Figure 3: South Site 1475 E. El Segundo Blvd



North Site (1320-1330 E. El Segundo Blvd):

The North Site is a 4.4-acre parcel and includes 1325 East El Segundo, 140 Oregon, and 1320-1330 East Franklin Street. The subject lot is 1320-1330 E. Franklin Ave, which is a 1.07-acre parcel (19,493 square feet). Adjacent sites include a 19,493 square foot building at 1325 East El Segundo Boulevard, and the recently approved project at 140 Oregon (currently under construction), permitted for 86,921 square feet. With the proposed 65,061 square feet on the subject lot, the combined total floor area for the north site is 179,615 square feet. The total parcel FAR is 0.94, which is compliant with both the by-right FAR maximum of 1.0 for Tier 1 Community Benefits Plan projects and the maximum FAR of 1.5 for Tier II Community Benefits Plan projects. The site and surrounding sites were originally designed as supporting uses for the oil and gas industry (Standard Oil). The lot outside of the building is paved with asphalt and used for surface

parking. There is a recently completed four-story 398-car garage just south of the building. The site is flat with no slope across the property. The site conditions are shown in Figure 4 below.

Figure 4: North Site (1320-1330 E. Franklin Ave)



PROJECT DESCRIPTION

Requested Entitlements

1. Specific Plan Amendment SPA 21-02: Proposed modification to the height development standards for CBP Tier II qualifying projects in proposed Sub-area of the Smoky Hollow East (SH-E) and Public Facilities (PF) zoning districts within the SHSP Area. The proposed amendment will allow a maximum height of 60 feet where, presently, a deviation is permitted up to 50 feet for qualifying Tier II Community Benefit Plan projects. The proposed amendment to allow an additional 10 feet in height will apply to 30 of the 120 total acres of the SHSP area.

The applicant also requests a Specific Plan Amendment to create a Smoky Hollow Sub-area 1 (SPA Sub-area) located within the Smoky Hollow East (SH-E) and Public Facility (PF) zoning districts, bounded on the west by Center St, E. Franklin Ave to the north, Pacific Coast Highway (PCH) [formerly Sepulveda Blvd.] to the east, and E. El Segundo Blvd. to the south, as shown in Figure 5 below. The Development Sites are within the SH-E zoning district and the proposed SPA Sub-area.

Figure 5: SHSP Zoning Districts and Sub-Area



2. Tier II Community Benefit Plans (CBP) No. 19-02 for 1475 E. El Segundo Blvd & CBP 19-03 for 1320-1330 E. Franklin Ave: As set forth in the Specific Plan, a Community Benefits Plan is required to allow permit deviations from height and floor area ratio (FAR) from base development standards per the Specific Plan.

3. Site Plan Reviews SPR 21-03 & SPR 21-04 for 1475 E. El Segundo Blvd & 1320-1330 E. Franklin Ave: Site Plan Review to ensure that the Project is consistent with the goals, policies, and objectives of the General Plan and the El Segundo Municipal Code (ESMC).

4. Master Sign Program (MSP) 21-1: Proposed Master Sign Program to approve signage for the Standard Works development.

5. Offsite Parking Covenant for 1475 E. El Segundo Blvd: Per ESMC 15-15-3(H)(3), Planning Commission may approve an offsite parking covenant for offsite parking exceeding 20 spots or 20%. The applicant intends to secure an offsite parking covenant with the property located at 1310 E. Franklin Avenue for 123 parking spots.

Development Concept

South Site

The proposed Project for the South Site includes developing the 1.01-acre property located at 1475 E. El Segundo Boulevard within the SHSP. The existing 19,311 sf, one-story brick building will be preserved with two new stories measuring 44,604 square feet above, resulting in a 63,915 square foot (FAR = 1.45) Office and Research and Development (R&D) building. As illustrated in figure 6 below, the proposed project will result in three-story building with a maximum height of 59'-6" as measured from average grade to the rooftop of the building.

Figure 6: El Segundo Blvd Elevation of South Site



North Site
The proposed Project for the North Site includes developing an approximately 1.07-acre portion of the 4.4-acre property located at 1320-1330 E. Franklin Avenue within the SHSP. The existing 19,493 square foot, one-story brick building will be preserved, and two levels would be added above it, for a total of 64,295 square feet for R&D and office use. In addition, a 766 square foot pavilion building is proposed, which includes a public café, resulting in a total of 65,061 square feet of floor area for the North site (FAR = 0.94). Specifically, the proposed project on the North Site includes:

- Construction of a two-story 44,802-square foot addition to the existing building that would be structurally preserved in place, for a total floor area of 65,061 square feet (including the two-story pavilion noted below). The resulting three-story main building will measure 59'-6" in height, as measured from average grade to the rooftop of the building.

- Construction of a new two-story pavilion building to serve the neighborhood with a café and gathering point at the entry of a new public park accessible by the public. The new pavilion will have 766 square feet of floor area and will reach a maximum height of 23 feet and 8 inches. A rendering of the proposed kiosk may be found on page 6 of the proposed plans found in Attachment 5.

- Construction of a new 5,000-square foot passive park with park seating, picnic tables, shade trees and landscaping shown in Figure 7 below. Although on private property, the park will be open to the public. A rendering of the proposed park may be found on page 5 of the proposed plans found in Attachment 5.

Figure 7: North Site Open Space

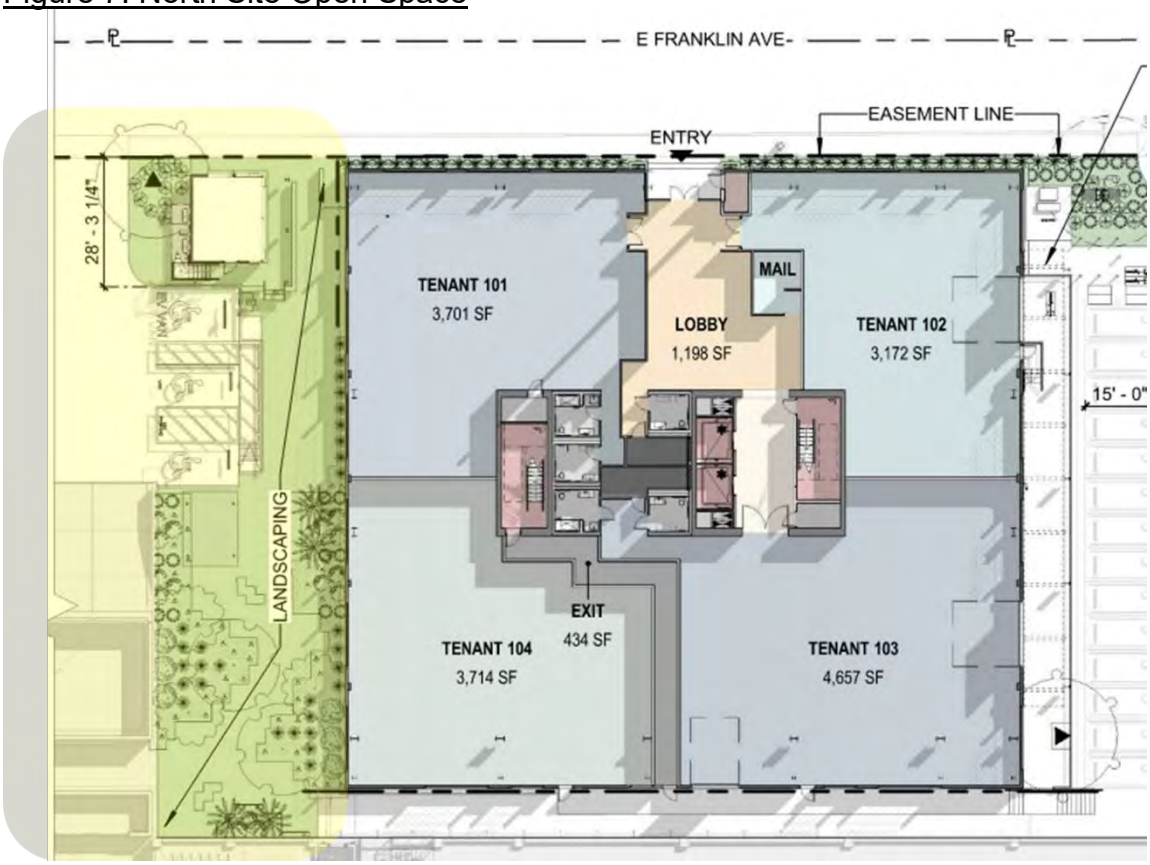


Figure 8: Franklin Ave Elevation (north site)



DISCUSSION:

Specific Plan Amendment

Implementation of the SHSP eventually shifts land uses from industrial to office and other related uses. The SHSP EIR concluded that policies, standards, and regulations outlined in the SHSP were consistent with existing City regulations and will not conflict with existing City General Plan policies.

The SHSP currently allows CBP Tier II level qualifying projects to deviate from maximum building height development standards up to a maximum height of 50 feet as measured to the building parapet, not including elevator equipment or architectural features. The current criteria for CBP Tier II projects are listed in the SHSP Section 2.3.2, “Development Tiers and Community Benefits.” In summary, CBP Tier II projects may allow for:

A. Building Height deviation up to 50 feet;

B. Floor Area Ratio (FAR) > 1.5;

C. Three or more deviations to standards (one of which is height or FAR,) that exceed the minor deviation threshold (10%) allowed by SHSP Section 4.5.1, "Administrative Adjustment".

As analyzed within the Initial Study/Mitigated Negative Declaration for the proposed SHSP amendment and Standard Works project, the proposed Specific Plan Amendment (SPA) will create a new Sub-area within the SHSP area, specifically within the SH-E and PF zoning districts. Further, the proposed SPA will only modify the Height Development Standards for CBP Tier II qualifying projects within the proposed designated Sub-area of the Smoky Hollow East (SH-E) and Public Facilities (PF) Zoning districts of the Specific Plan. The proposed Sub-area (see Figure 5 above) occupies 30 of the 120 acres of the SHSP, and development under the proposed SPA will still be of the same type and overall locations as outlined in the SHSP.

The proposed amendment to Tier II CBP applicable projects in the designated Sub-area of the Smoky Hollow East (SH-E) zoning district will be the following:

A. Building height deviation up to 50 feet *except for the designated Sub-area of the Smoky Hollow East (SH-E) zoning district, which will have a height deviation of up to 60 feet;*

B. Floor Area Ratio (FAR) deviation > 1.5; (**no change to existing text)**

C. Three or more deviations to standards that exceed the minor deviation threshold (10%) allowed by SHSP Section 4.5.1, "Administrative Adjustment". **(no change to existing text)**

As currently permitted by the SHSP, both the South Site and the North Site have a base Floor Area Ratio (FAR) of 1.0 and may exceed the base FAR with approval of a Community Benefits Plan. Under the proposed Project, development of the North Site will result in a total of 65,061 square feet of floor area (FAR=0.94), which is within the permitted base FAR of 1.0. Development of the South Site will result in a total of 63,915 square feet of floor area (FAR=1.45), which is also permitted with the approval of a Community Benefits Plan. Although the development of the South Site would exceed the base FAR, the Project is still within and consistent with the overall growth limits allowed by the SHSP.

Under the SHSP, both the South Site and the North Site have a permitted base building height of 35-feet and may exceed the base building height (up to a maximum of 50-feet) with the approval of a Community Benefits Plan. With the SPA, this height maximum will increase to 60 feet as measured from the average grade to the top of the building for properties within the proposed Sub-area identified in Figure 5 above. Under the Proposed Project, both the South Site and the North Site will be within the proposed Sub-area and will be developed with three story buildings with a maximum height of 59'-6".

Community Benefits Plan

A proposed project that exceeds development standards under the SHSP is required to submit a Community Benefits Plan and is considered through the review process described in SHSP Section 4.5.2: "Community Benefits Plan (CBP) for Tier I and Tier II applicable projects."

A proposed CBP shall outline the request for flexibility from strict interpretation of the development standards and regulations of the SHSP, as well as the proposed public amenities, features, and improvements prioritized in the Specific Plan that will be provided. Examples of potential community benefits include, but are not limited to, publicly accessible open space, publicly accessible parking, enhanced accessibility improvements, and implementation and/or funding of streetscape improvements identified in the Specific Plan.

The design of the building proposed on the North site exceeds the current base standard for building height in the SHSP, and the design of the building proposed on the South site exceeds the current base standards for building height and allowable Gross Floor Area Ratio (FAR). Projects within the SHSP area can request deviations from current development standards with the approval of a Tier I or Tier II CBP. Upon approval of the SPA, the maximum allowable height with a Tier I or Tier II Community Benefits Plan will increase to 60-feet in the designated Sub-area. As such, the Project requests the following deviations with a Tier II CBP:

- **Additional Building Height.** Proposed building heights of up to 59'-6" on both Project sites will exceed the SHSP Base Standard height of 35 feet.

- **Additional Building FAR.** Proposed 1.5 floor area ratio (FAR) (an additional 21,983 square feet) on the South site exceeds the SHSP Base Standard FAR of 1.0.

The SHSP contains 32 design guidelines in five categories: building character, open space, landscaping, connectivity, signage and public art and Public Realm. When reviewing a proposed CBP, the City must consider the project's compliance with these design guidelines. Although compliance with all 32 design guidelines is not required, compliance with at least 17 of the guidelines is required to be considered an exemplary project. The proposed Project incorporates 28 of the 32 design guidelines, far exceeding the minimum threshold for exemplary projects. In exchange for the above deviations allowed by Tier II CBP, the applicant proposes the following community benefits and improvements, at the applicant's expense, pursuant to Smoky Hollow Specific Plan Section 4.5.2.

- **Underground Utilities**. The Project proposes to underground all electric power and low voltage phone and data lines that currently serve the buildings on East

Franklin Ave for the north site, and Kansas Street and E. El Segundo Blvd. for the south site.

- **Public Seating**. Proposed architectural seating will be provided along the sidewalk area within the public right-of-way (ROW) facing E. Franklin Avenue and Kansas Street.

- **Coffee Pavilion/Public Café**. The proposed North Site Project will also include a 276-square foot public café (Coffee Pavilion) and associated outdoor dining area immediately adjacent to the E Franklin sidewalk, in order to active the street and provide a convenient break location for local neighbors. The café is part of the proposed 5,000-square foot public park that will be a landscaped focal point of the Project and of the surrounding area as well.

- **Architecture that enhances building character.**

- **Open space that facilitates gathering.**

- **Landscaping and environmental design.**

In addition, the Development Project will provide the following specific community benefits as summarized from the CBP Tier II application scoring sheets:

Group A – Enhance Building Character

A1. *Build on the quality industrial character:* Project has exposed steel beams and large industrial-style windows.

A2. *Convey a sense of the old and new:* Project will preserve ground floor red brick exterior while adding two setback floors of a modern industrial building

A3. *Build upon existing context:* Project stays within existing footprint but adds 2 floors with roof decks.

A4. *Conserve and retain the character-defining features:* Project preserves ground floor red brick exterior and three historical building entrances.

A5. *Encourage additions that complement the character-defining features:* Project has large industrial windows with exposed steel beams characteristic of mid-century architecture but stacked blond block with exposed aggregate and stain coloring to enhance the industrial appearance.

A6. *Incorporate small, medium, and large scales:* Project includes several interlocking design elements of different scales for visual interest including large to small "nested" windows and balconies to break up the building facade into different sized elements.

A7. *Enhance design at the pedestrian level:* Project will have extensive landscaping along all street frontages with pedestrian scale seating.

A8. *Specify 360º architecture:* Project will have enhanced architecture on all four sides of each building.

A9. *Enhance entry expression:* Project has new landscaping and a double high entry portal at the southwest corner.

A10. *Encourage the use of roll-up doors and sliding walls at street frontage:* Roll-up doors are used in several main entrance locations.

A11. *Orient secondary entries to alleys:* Some secondary access points are oriented toward local alleys.

A12. *Incorporate different materials, colors, and textures:* Project includes a variety of materials, colors, and textures, including red brick, medium grey block, black steel, corten, architectural board formed concrete, and glass.

Group B – Facilitate Gathering

B1. *Form an active street wall:* Project has a new two-story entry portal with enhanced landscaping along street frontages and distinctive entrances.

B3. *Develop outdoor gathering spaces:* Project will have a pocket park with outdoor seating.

B5. *Provide ease of access:* The Project will have multiple pedestrian and vehicular access points and ground floor tenants will have direct access to adjacent streets.

B6. *Enhance surface parking:* Project will have shade coverings for surface parking lots plus stacked parking using current technology.

B7. *Use enduring quality paving materials:* Project will have special paving materials to demarcate pedestrian walkways with integral color and crystal aggregate.

B8. *Provide street furniture:* Project will provide street furniture for seating at the pocket park.

B9. *Use exterior lighting to accentuate safety and design:* Project will provide period lighting on all sides of buildings for pedestrian safety.

Group C – Incorporate Landscaping and Environmental Design

C1. *Design layered and lush landscaping:* Project will have extensive landscaping per landscaping plan.

C2. *Select drought-tolerant and native plants:* Project landscape plan has drought-tolerant and native plants throughout.

C3. *Utilize planters and pots to provide greenery:* Project has planters and pots on Level 2 and 3 decks and balconies and on the rooftop.

C4. *Improve landscaping in parking areas:* Parking areas include landscaping on at least two sides (those facing the buildings).

C5. *Use fences and walls as an extension of the architecture:* Project includes monument signs for both buildings that compliment and extend the building architecture.

C6. *Use natural light:* Project has large windows for 2-story spaces with mezzanines to allow natural light in all interior spaces.

Group D – Encourage Connectivity

D1. *Install bike facilities:* Two bike racks will be installed at each Project building.

Group E – Signage, Way Finding, and Public Art

E1. *Design signs as an integral component:* Project includes integrated tenant signage.

E2. *Incorporate way-finding through integral design:* Project has architecturally integrated signage for both pedestrians and vehicles.

E3. *Encourage public art:* Project will have a large-scale art wall on the west side of the north building.

Public Realm

PR1. *Underground utilities:* The incoming power and low voltage cables for data and phone will be consolidated into one location and undergrounded.

Community Benefit Analysis for CBP No. 19-03 & CBP No. 19.04

Kosmont Companies was retained by City staff to conduct an independent evaluation of the proposed CBP. The Consultant reviewed the Site development application, site plan, floor plans, building design, and preliminary community benefit proposal. It was determined that the combined value of each building component (architectural enhancements, open space that facilitates gathering, landscaping and environmental design, wayfinding & signage, undergrounding utilities, and the addition of a coffee kiosk) will result in a combined marginal cost increase of approximately $4.07 million for the north site, and $3.52 million for the south site. These community benefit items will add value to the Project by making it more attractive to tenants, while also providing exemplary design and services to the larger Smoky Hollow area. The attached Community Benefits Analysis Reports (Attachments 7 & 8) for both sites shows that the Project is expected to generate economic and community benefits in excess of the Projects value as built as a Tier II CBP. Further, the Kosmont report indicates that the Project will provide certain fiscal and economic benefits such as: contributions to the General Fund, an increase in annual taxes, an increase in annual retail sales, and an increase in annual sales and business license taxes.

Site Plan Reviews

Per ESMC 15-30-1, Site Plan Review is required to confirm that the proposed Project is in conformance with the standards of the El Segundo Municipal Code including uses, density, approved FAR, and design guidelines. Both the South Site and the North Site have been evaluated for compliance.

Site Plan Review SPR 21-03– South Site (1475 El Segundo Boulevard)

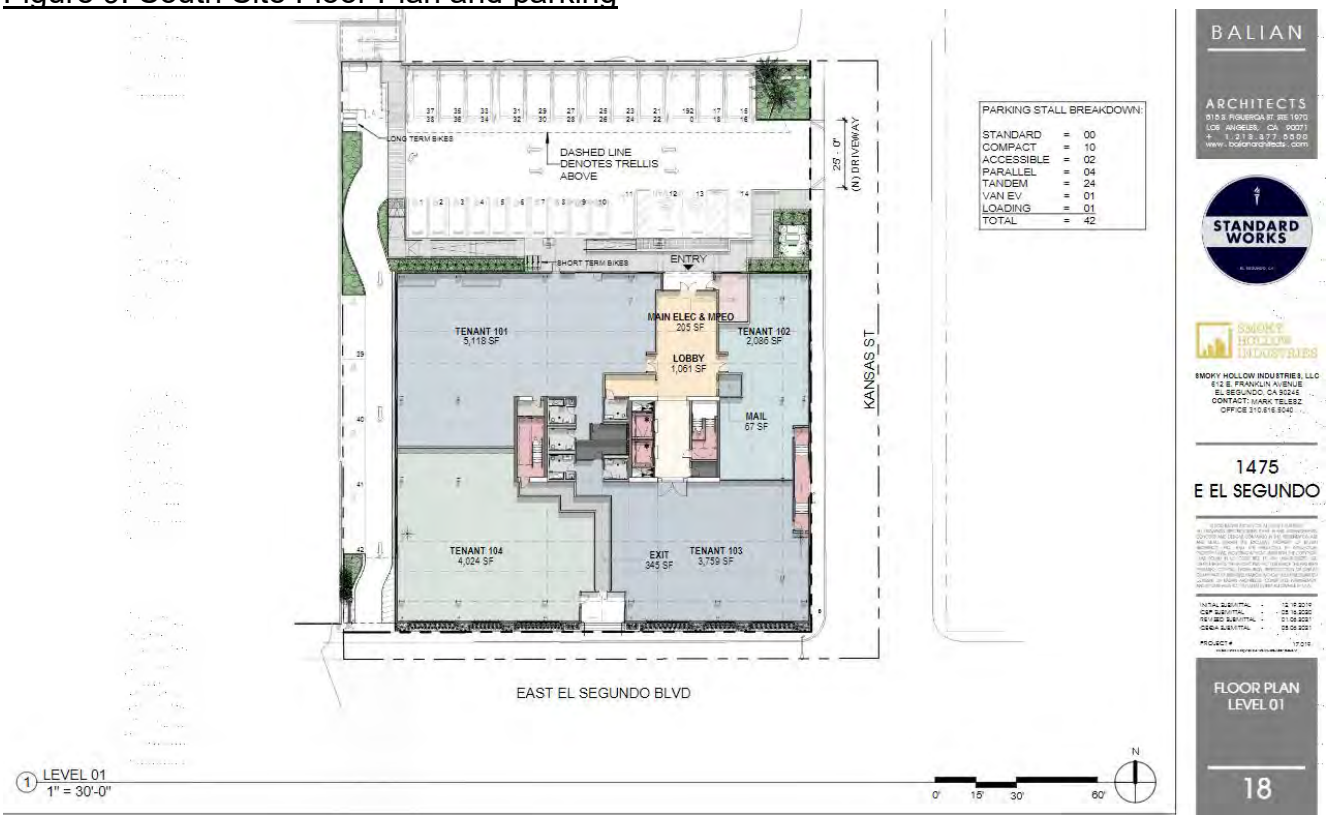
The proposed project consists of a 44,406 square feet addition to an existing 19,311 square feet of building area, for a total building size of 63,915 square feet. The construction is proposed to be 3 stories and approximate 59’-6” in height.

Architecture/Design: The proposed building incorporates elements that are in keeping with the industrial style of the immediate vicinity and incorporates architectural elements for a 360-degree design. Specifically, the ground floor of the building will retain the existing brick and provide appropriately scaled pedestrian orientation including an easily

identified front entrance, transparent window openings, downward facing light sconce fixtures, and a juxtaposition of building wall planes and materials. The upper floors incorporate CMU block wall treatments along with large window openings, a second-floor wrap around roof deck, and a third-floor balcony along the western half of the third floor, facing El Segundo Boulevard.

Parking: The site includes 165 dedicated parking spaces on-site and complies with the 160 minimum parking spaces required. Specifically, 42 new surface level vehicle parking spaces and 5 bike parking spaces are located on the north side and west side of the building and accessed from Kansas Street. Of the 42 new parking spaces, 24 spaces are within a parking lift system along the north property line of the south site, shown clearly on page 9 of the project plans. Another 118 parking spaces are available in the newly completed parking garage located behind (to the south) of 1320-1330 E. Franklin Avenue. The parking garage contains a total of 398 parking spaces. Per ESMC 15-15-3(H)(3), Planning Commission may approve an offsite parking covenant for offsite parking exceeding 20 spots or 20%. The applicant intends to secure an offsite parking covenant with the property located at 1310 E. Franklin Avenue for 123 parking spots.

Figure 9: South Site Floor Plan and parking



Open Space/Landscaping: The SHSP requires a minimum 10% open space for lots greater than 22,400 square feet. Since the South Site measures 43,966 square feet, a minimum of 4,397 square feet of open space is required. The SHSP allows for open space on building rooftops to be counted towards the minimum requirement, provided that at least 50% of the requisite open space be directly accessible from the existing ground floor elevation. The applicant proposes a total of 10,408 square feet (21%) of open space within the South Site, including 408 square feet of vertical planted landscape (along the west side elevation of the building); 3,120 square feet of at-grade open space; and 6,808 square feet of open space (4,765 square feet) / landscaping (2,043 square feet) on the rooftop, accessible from the ground floor elevation via two stairwells and two separate elevators located in the middle of the structure.

Site Plan Review SPR 21-04–North Site (1320 & 1330 Franklin Avenue)
The Project consists of a 45,568 square foot addition to an existing 19,463 square feet of building area, for a total building size of 65,061 square feet. The Project is proposed to be 3 stories, approximately 59'-6" in height. To the west side of the building and along the Franklin Avenue frontage, the applicant proposes a separate, 766 square foot, two-story kiosk building measuring 23'-8" in height. The ground floor of the kiosk building includes a 295 square foot tenant space for a coffee retailer.

Architecture/Design: The proposed building incorporates elements that are in keeping with the industrial style of the immediate vicinity and incorporates architectural elements for a 360-degree design. Specifically, the ground floor of the building retains the existing brick with 6 larger window openings and a transparent prominent front entrance. The upper floors incorporate CMU block wall treatments along with large window openings as well on all elevations of the building. Overall, the ground floor front elevation provides 43% transparency into the building, which exceeds the minimum 15% requirement. Along the ground floor elevations, eight period wall sconce lighting fixtures are provided wrapping the building and incorporated on all 4 sides of the building as shown on the project plans.

Parking: The site maintains a total of 168 parking spaces on-site, in compliance with the minimum parking requirements. Specifically, 38 surface level parking spaces are located on the west side of the building and accessed from Franklin Street and another 130 parking spaces are available in the newly completed parking garage located to behind (to the south) of 1320-1330 E Franklin Street. This parking garage contains a total of 398 parking spaces.

Open Space/Landscaping: The SHSP requires a minimum of 10% open space for lots greater than 22,400 square feet. This requirement was previously met for the North Site parcel with 19,189 square feet of open space/landscaping for the 191,896 square foot (4.4-acre) site approved via Council Resolution 5205 (for 140 Oregon Street Community Benefits Plan), which satisfies the open space requirement for the North site parcel as a whole. As the North Site proposes development of approximately 1.07-acre portion, the applicant is providing an additional 11,847 square feet of landscaping and open space, in

excess of what is required. The SHSP allows for open space on building rooftops to be counted towards the minimum requirement, provided that at least 50% of the requisite open space be directly accessible from the existing ground floor elevation. The applicant proposes a total of 11,847 square feet (29%) of open space to be incorporated within the North Site, which includes a 5,937 square foot landscaped courtyard/pocket park on the west side of the building with direct ground floor access and accessible from along Franklin Avenue; and 5,910 square feet of open space/ landscaping on the rooftop, which is accessible from the ground floor elevation via a two stairwells and two elevators located in the middle of the structure.

Figure 10: North Site Plan



FINDINGS

In considering the proposed project, the Planning Commission reviews components of each requested application and considers the merits of the project(s) to make a recommendation for City Council's consideration. This will include recommending that the project is consistent with the findings associated with the General Plan, Specific Plan, Community Benefits Plan, and Site Plan Review. The following are the findings in **boldface**, following by staff's analysis in normal type.

Specific Plan Amendment

The proposed amendment is consistent with goals, objectives and policies of the General Plan:

Economic Development Element

The City's Economic Development Element of the General Plan specifies the following:

Objective ED1-2: Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Staff believes the proposed amendment is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan objectives and policies above because it promotes economic development, job creation, and improves the City's tax base through inclusion of office, and research and development land uses within the Smoky Hollow Specific Plan area. Further, Kosmont, the City's consulting economic consultant, reviewed the project and determined that it will result in fiscal and economic benefits such as: contributions to the General Fund, an increase in annual taxes, an increase in annual retail sales, and an increase in annual sales and business license taxes.

Land Use Element

The City's Land Use Element of the General Plan specifies the following:

Objective LU4-4: Provide areas where development has the flexibility to mix uses, in an effort to provide synergistic relationships which have the potential to maximize economic benefit, reduce traffic impacts, and encourage pedestrian environments.

Staff believes the proposed amendment is consistent with the General Plan Land Use Element and directly implements and furthers the General Plan objective above because the proposed 10-foot height increase would not detract from or create an impediment to the intent and implementation of the Smoky Hollow Specific Plan. By allowing the additional height, in conjunction with a Community Benefits Plan as required, the additional height will allow more flexibility in the design of new buildings and help promote the retention of the existing buildings to be incorporated into the design of substantial additions. Each new building would be evaluated on its own merit to ensure high quality design and for compatibly with its surroundings. The allowance of the additional height

would also promote new uses and building into the context of the overall Smoky Hollow Specific Plan area and will introduce new architectural styles, enliven the area, and create positive direct and indirect economic impacts consistent with Objective LU4-4. Further, the project incorporates comprehensive features for site layout, building design, architecture, landscape, signs, and lighting, consistent with the General Plan and Specific Plan.

The proposed Specific Plan Amendment will amend the text of the SHSP Tier II Community Benefit Plan to allow buildings up to 60-feet high in a newly created Smoky Hollow Sub-area 1 of the SHSP. The proposed Smoky Hollow Sub-area 1 was identified within the SHSP area to provide a transitional area between residential neighborhoods to the north and the multi-story buildings in the immediate vicinity, including taller buildings farther east of the area along PCH, and the Chevron refinery structures to the south, which features a change in topography.

As the applicant proposes to retain the existing historic building on the first floor, additional height is required to provide the 3-story structure desired. Therefore, the proposed Specific Plan Amendment is necessary and will be entirely consistent with the Smoky Hollow Design Guidelines for enhancing building character such as conveying a sense of old and new, building upon the existing context, conserving and retaining character defining features, encouraging additions that differentiate and are secondary to the bulk and mass of existing buildings, and encouraging 360-degree architecture.

Community Benefits Plan 19-02 and 19-03

A. The proposed additional building height, intensity, or deviation from the development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity.

The proposed building height for the project is compatible with the neighborhood in that multi-story buildings, tall petroleum storage drums, and 200-foot-tall distillation columns at the Chevron oil refinery are located in the immediate vicinity. The additional 25-foot building height from base height standard is not anticipated to be detrimental, as staff believes the project will be compatible and consistent with development on abutting sites (such as the recently approved development at 140 Oregon, which is 55 feet in height) and is consistent with the vision for Smoky Hollow to allow for creative and exemplary office space.

Further, the project is located in a developed area that contains all utilities and public infrastructure. Additionally, before the City issues building permits for the project, the applicant will submit detailed plans to the City for review to ensure compliance with all applicable Building and Fire safety codes.

Lastly, as evidenced by the community benefits analyses prepared by Kosmont, the CBP provides open space and public gathering areas, a public coffee kiosk with outdoor

seating, and enhanced architecture to Smoky Hollow. These community benefits will make a positive impact on Smoky Hollow by attracting high-quality businesses and tenants, providing landscaping and open space that will serve the public nearby and will provide an example of the high-quality design desired by the Smoky Hollow Specific Plan. Therefore, staff believes the project will not be detrimental to the public health, safety, or welfare, and this finding can be made.

B. The proposed community benefit provides exemplary project and/or streetscape design.

The Specific Plan contains 32 specific design guidelines in five categories including, building character, open space, landscaping, connectivity, and signage and art. Compliance with at least 17 of the guidelines is required to consider a project exemplary in building and/or streetscape design. Since the proposed project incorporates 28 of the 32 guidelines, the CBP and related project is considered an exemplary project, and this finding can be made.

C. The proposed community benefits directly implements objectives of the Specific Plan.

Part of the proposed community benefit consists of complying with the Smoky Hollow design guidelines. Compliance with the guidelines directly implements the Smoky Hollow Design Objectives in Specific Plan Section 2.4.1 as follows:

a. Preserve Smoky Hollow's existing character through the use of compatible architectural features, materials, and details.

   The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character. As such, staff believes the project implements this design objective.

b. Insist upon streetscape and landscape amenities that allow for small-scale, informal gathering, both within sites and along public rights-of-way, especially sidewalks, street corners, and along Franklin Avenue; Encourage active and passive design strategies that conserve natural resources.

   The projects incorporate sidewalk-oriented entries for both projects as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. In addition, the project will make use of drought tolerant plant species in the landscaped areas, which will reduce the use of water for landscaping. As such, staff believes the project implements this design objective.

c. Develop more accessible and street-side open space. Buildings fronting public sidewalks, and specifically buildings fronting along Franklin Avenue, shall provide sidewalk-oriented entries and small-scale gathering opportunities.

   The proposed project includes entries that are directly accessed from the public sidewalk and serves to activate both Franklin Avenue and E. El Segundo Boulevard street frontages, thereby creating a vibrant atmosphere. As such, staff believes the project implements this design objective.

d. Project designs, orientation, and spaces should anticipate and facilitate emerging sidewalk and pedestrian activity, reuse of alleys, and access to all transit modes.

   The proposed community benefit plan implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly accessible open spaces. The proposed community benefits plan includes public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish. As such, staff believes the project implements this design objective.

D. The value of the proposed community benefits bear a relationship to the value generated by the project.

The City contracted Kosmont and Associates, Inc. (Kosmont) to prepare a comprehensive financial report of the proposed Tier II Community Benefits Plan for the project (attachments 7 and 8). Kosmont evaluated the value of the community benefits being offered and the financial gain to the applicant by allowing additional building height of 10-feet above the Tier II Community Benefit height limit of 50-feet, which is an additional building height of 25 feet above base height standard.

Staff believes the proposed benefits are adequate because the benefits are not exclusively to the benefit of the applicant and future tenants. The proposed benefits will provide additional services to the public and surrounding area, while also providing open space to an area of the City that is underrepresented in this category. Further, the proposed Project will provide an aesthetic improvement along El Segundo Blvd, Kansas Street, and E. Franklin Street by removing unsightly data and power lines. Therefore, since the value of the proposed benefits bear a relationship to the value generated by the project, staff believes this finding can be made.

E. The proposed community benefits do not principally benefit the project occupants of the project, but rather provide a district or area-wide benefit to the larger Smoky Hollow Plan area.

The applicant is providing the following list of improvements intended to benefit the public directly, and not principally the occupants of the project:

1. Public open space – publicly accessible open space provided on the North Site along the West side of the building with a direct connection to the Franklin Avenue sidewalk. The space will be designed with pedestrian scaled elements and will promote public use in connection with a café space within a kiosk building locate at the Franklin Avenue frontage.
2. Transformative projects - significant investment for an architecturally expressive design that rehabilitates the original 1950s mid-century buildings for both the North and South sites, rather than demolishing. The unique striking design will become a landmark for the neighborhood and possibly the city. The cost for striking architectural elements such as exposed structural steel, large scale balconies and exterior decks, massive mid-century like steel windows and other period materials will build upon the character of the smoky hollow neighborhood and inspire equally striking designs by other developers.
3. Preservation and rehabilitation - preservation and rehabilitation of the existing brick facades on both the North and South sites.
4. Streetscape improvements – new landscaping located directly along the frontage of each building on the North and South sites.
5. Utility improvements - removal of existing overhead utility lines along project frontage on East Franklin Avenue (North Site), East El Segundo Boulevard and Kansas Street (South Site) will be removed and placed underground to beautify the streetscape views.
6. Lighting and wayfinding - period appropriate exterior lighting and directional signage for the project will be provided adjacent to the sidewalks facing Franklin Avenue.

This information was provided in support of Finding B in Tier II that requires the evaluation of these values. The proposed benefits are deemed by Staff to be adequate as the benefits provided are not exclusively for the benefit of the applicant and future tenants. The proposed architectural upgrades to the structure will implement the vision of the SHSP. The Project will also have district-wide benefits to the public through provision of a coffee shop and outdoor seating, open space and right of way improvements to Franklin, Kansas, and El Segundo Blvd, and therefore staff believes this finding can be made.

Site Plan Review 21-03 and Site Plan Review 21-04

The El Segundo Municipal Code (ESMC) provides criteria for reviewing and approving Site Plan Review applications. The Municipal Code indicates that the Planning Commission, or City Council on appeal, has the authority to approve a site plan review application if certain findings can be made in support of the projects. Among the criteria for consideration are site and design considerations and zoning standards including, but not limited to, parcel orientation and shape, building height, placement of buildings, setbacks, building materials and design, parking, and signage.

In consideration of these criteria, ESMC Section 15-30-4(D) states that the Commission may approve or conditionally approve a Site Plan if it makes the following three findings (findings in **boldface**, following by staff's analysis in normal type):

Site Plan Review 21-03 and 21-04 Findings pursuant to ESMC Section 15-30.

A. The proposed development is consistent with the goals, policies, and objectives of the El Segundo General Plan, the Smoky Hollow Specific Plan, and the El Segundo Zoning Code.

The proposed Project complies with the approved Smoky Hollow Specific Plan, which has also been found to be consistent with the General Plan. The SHSP permits a mix of office, research and development, light industrial, and warehouse uses. Further, the SHSP sets standards to achieve high quality development, which includes design guidelines and development standards with criteria for site design, architecture, orientation and massing, parking and loading, landscaping, lighting, and connectivity. The proposed development has been evaluated in the context of the goals, policies and objectives from the SHSP. The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character. The project incorporates sidewalk-oriented entries for the project as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. The proposed Project implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly accessible open spaces by including public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish.

General Plan Economic Development Element Goal ED1 outlines the City's objectives to create a strong, healthy economic community in which all diverse stakeholders may benefit.

<u>Economic Development Element</u>

The City's Economic Development Element of the General Plan specifies the following:

Objective ED1-1.1*:* To build support and cooperation among the City of El Segundo and its business and residential communities for the mutual benefits derived from the maintenance and expansion of El Segundo's economic base.

Policy ED1-1.1: Maintain economic development as one of the City's and the business and residential communities' top priorities, diversifying the City's economic base to meet quality of life goals, and results in job creation and growth potential.

Objective ED1-2*:* Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Policy ED1-2.2: Maintain and promote land uses that improve the City's tax base, balancing economic development and quality of life goals.

The proposed project is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan's goals, objectives and policies above because the project promotes economic development and improves the City's tax base through inclusion of office, research and development, and retail land uses within the Smoky Hollow Specific Plan area.

General Plan Land Use Element Goal LU2 outlines the City's objectives to preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance.

Land Use Element

The City's Land Use Element of the General Plan specifies the following:

Objective LU2-1: Maintain the distinct character of the existing areas of the City.

The proposed project is consistent with the General Plan's Land Use Element and directly implements and furthers the General Plan's goals, objectives and policies above because the proposed project design preserves the existing red brick building, to maintain the character of the post-war period architecture found within Smoky Hollow.

Circulation Element

The City's Circulation Element of the General Plan specifies the following:

Objective C1-1 Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.

Policy C 1-1.14 Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development.

The proposed project is consistent with the General Plan's Circulation Element and directly implements and furthers the General Plan's goals, objectives, and policies above because the project would not disturb or impact the existing roadway network immediately surrounding the project sites. Access to and from the projects are well established by Franklin Avenue, Kansas Street, Oregon Street, and El Segundo Boulevard. In compliance with SHSP EIR Mitigation Measure 18-1, a Traffic Impact Analysis was conducted to analyze any new impacts to the local street network from the Project, based on LOS standards per the General Plan, and calculate a fair share contribution for project traffic impacts. Based on the traffic impact analysis conducted, the proposed Project will not create traffic impacts greater than those identified in the TIA conducted for the SHSP EIR. The project applicant will be required to pay fair share for the improvements to the roadway network as identified in the SHSP EIR. The policies and objectives provide evidence that the proposed development is consistent with the goals, policies, and objectives of the General Plan, Smoky Hollow Specific Plan, and the El Segundo Zoning Code. Therefore, based upon the analysis above, Staff believes that this finding can be made.

B. The proposed project is functionally compatible with the area in which it is located.

The City of El Segundo has distinctive land use patterns, which are divided into four quadrants by the intersection of Pacific Coast Highway and El Segundo Boulevard. Compatibility of an individual land use is determined mainly by its relationship to other uses within its quadrant. The SHSP area is in the northwestern quadrant of the City of El Segundo which is west of Pacific Coast Highway and north of El Segundo Boulevard. The design and implementation of the Specific Plan relates directly to the goals and objectives of the Specific Plan and would be functionally compatible with other uses within the Specific Plan area. The SHSP includes a range of commercial and industrial uses that will contribute to job creation opportunities and balance growth with local resources and infrastructure capacity.

The proposed building height for the project is compatible with the area in that multi-story buildings, tall petroleum storage drums, and 200-foot-tall distillation columns from the Chevron oil refinery are located in the immediate vicinity. The project is located in a developed area which contains all utilities and public infrastructure.

The project is within the Smoky Hollow East (SH-E) zoning district, which provides a transitional land use area between higher-intensity office uses east of PCH and the smaller, single-parcel industrial and creative businesses of the western portion of Smoky Hollow area. The SH-E zoning district accommodates development of incubator industrial, research, and technology uses; medium-sized light industrial and manufacturing; and creative office activities. The Standard Works development project is compatible and consistent with the types of development desired by the Smoky Hollow Specific Plan within the SH-E zoning district. Therefore, based upon the analysis above,

Staff believes that the proposed project is functionally compatible with the area in which it is located, and this finding can be made.

C. The proposed development will not adversely affect the general welfare of the City.

The SHSP development standards ensure that the Projects are developed in an orderly fashion with high quality architecture, building materials, and urban design. The Project's consistency with these standards, its design, and configuration result in a project that will not adversely affect the general welfare of the City. Before the City issues building permits for the project, the applicant will submit detailed plans to the City to review for compliance with all applicable Building and Fire safety codes. Further, the proposed project will promote the orderly development of property, the preservation of property values and preservation of the distinct character of Smoky Hollow. The project will be consistent with surrounding development and will not adversely affect the value of neighboring properties. Staff believes that the finding can be made, as the proposed project is compatible with the neighborhood, and therefore is not anticipated to be detrimental to the public health, safety, or welfare.

ENVIRONMENTAL REVIEW

In October 2018, a Final Environmental Impact Report was certified by the City for the 2018 Smoky Hollow Specific Plan Update. Although the EIR was prepared as a Program EIR, pursuant to Section 15168 of the California Environmental Quality Act (CEQA) Guidelines, project specific impacts can also be evaluated to determine whether there are any new or unforeseen impacts on the environment consistent with CEQA Guidelines 15168(c), which is intended to evaluate later development activity from the program level EIR.

To evaluate the full potential impacts from the proposed project (SHSP amendment and related development), an Initial Study/ Mitigated Negative Declaration (IS/MND) was prepared. The ISMND concluded that there are some potential impacts from the proposed projects; however, the impacts can be mitigated to a level of less than significant. The mitigation measures adopted for the SHSP would continue to apply to the Project along with additional Project-specific mitigation measures recommended as part of the IS/MND document prepared for the Project.

Traffic Impact Analysis

Based on the traffic impact analysis conducted, the proposed Project will not create traffic impacts greater than those identified in the TIA conducted for the SHSP EIR. In compliance with SHSP EIR Mitigation Measure 18-1, a Traffic Impact Analysis Memo dated January 21, 2022 (Attachment 9) was prepared to analyze any new impacts to the local street network from the Project, based on LOS standards per the General Plan, and calculate a fair share contribution and preliminary cost estimate for the identified

improvements. The analysis concluded that the Project will have no additional new impacts and the project's total fair share contribution will be:

- 4.7% for PCH/Grand Avenue for a new right-turn overlap signal phase on all approaches. The total cost estimate for the improvement is $80,788.00, in which $3,797.04 is the project's fair share contribution.
- 5.3% for PCH/El Segundo Boulevard for a Second eastbound left-turn lane, and new right-turn overlap signal phase at the northbound approach. The total cost estimate for improvements is $2,553,500.00 in which $135,335.50 is the project's fair share contribution.

The City shall have the responsibility of ensuring that the improvements will be constructed at the time the City determines that such improvements are needed to maintain desired service levels. With implementation of the traffic improvements identified as Mitigation Measure 18-1 in the SHSP EIR, traffic impacts of the Project will remain at less than significant based on the General Plan requirements. Conditions of approval have been added to the project draft Resolutions to require the applicant to pay fair share contribution for the project prior to issuance of any Certificate of Occupancy.

RECOMMENDATION

The proposed projects involve new, substantial additions to two separate sites located at 1457 East El Segundo Boulevard and 1320-1330 E. Franklin Avenue. As concluded in the analysis above, the Projects comply with the development standards as set forth in the Smoky Hollow Specific Plan. Furthermore, based on the Initial Study/Mitigated Negative Declaration prepared for this project, the Projects will not create significant adverse impacts on the environment with the incorporation of mitigation measures. Therefore, it is recommended that the Planning Commission adopt Resolution 2912 recommending City Council approve an Initial Study/Mitigated Negative Declaration for projects located at 1457 East El Segundo Boulevard (South Site) and 1320-30 Franklin Street (North Site); adopt Resolution 2913 recommending City Council adopt an Amendment to the Smoky Hollow Specific Plan (SPA); adopt Resolution No. 2914 recommending City Council approval of Environmental Assessment 1281, Community Benefits Plan 19-02, Site Plan Review (SPR) No. 21-03, Master Sign Program MSP 21-01, and Offsite parking covenant for development of a 46,000 square foot addition to the building located at 1475 East El Segundo Boulevard (South Site); and adopt Resolution No. 2915 recommending City Council approval of Environmental Assessment 1282, Community Benefits Plan 19-03, Site Plan Review (SPR) No. 21-04, and Master Sign Program MSP 21-01 for 44,000 square foot addition to the building located at 1320-1330 Franklin Street (North Site).

ORIGINATED BY: Bradley J. Misner, AICP, Contract Planner

REVIEWED BY: Eduardo Schonborn, AICP, Planning Manager EAS

APPROVED BY: Michael Allen, AICP, Director of Development Services MA

ATTACHED SUPPORTING DOCUMENTS:

1. Planning Commission Resolution No. 2912
   Exhibit A –Initial Study/Mitigated Negative Declaration
   Exhibit B – Mitigation and Monitoring Reporting Program
2. Planning Commission Resolution No. 2913
   Exhibit A – Draft Ordinance approving the Specific Plan Amendment
3. Planning Commission Resolution No. 2914 (South Site Development)
   Exhibit A – Conditions of Approval
4. Planning Commission Resolution No. 2915 (North Site Development)
   Exhibit A – Conditions of Approval
5. North Site Proposed Development Plans/Exhibits dated January 20, 2022
6. South Site Proposed Development Plans/Exhibits dated January 20, 2022
7. Community Benefits Analysis for 1320 E Franklin Ave., prepared by Kosmont, dated November 2021
8. Community Benefits Analysis for 1475 E El Segundo Blvd., prepared by Kosmont, dated November 2021
9. Traffic Memo dated January 21, 2022

RESOLUTION NO. 2912

A RESOLUTION OF THE PLANNING COMMISSION RECOMMENDING CITY COUNCIL APPROVAL OF AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (EA-1281/EA-1282) AND MITIGATION MONITORING AND REPORTING PROGRAM FOR ENVIRONMENTAL ASSESSMENT NOS. EA-1281 AND EA-1282 REGARDING AN AMENDMENT TO THE SMOKY HOLLOW SPECIFIC PLAN AND THE DEVELOPMENT OF A MULTI-PARCEL OFFICE CAMPUS ON PROPERTY LOCATED AT 1320-1330 E. FRANKLIN AVENUE AND 1475 E. EL SEGUNDO BOULEVARD

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: Recitals.

A. On October 2, 2018, the El Segundo City Council adopted Ordinance No. 1573, certifying a Final Environmental Impact Report (EA-1011) for the Smoky Hollow Specific Plan (State Clearinghouse No. 2017031071) (the "SHSP EIR") and a corresponding Mitigation Monitoring and Reporting Program. The Smoky Hollow Specific Plan area allows for 517,094 square feet of building area for office, commercial, and industrial uses, among other things. The SHSP EIR concluded that there were potential impacts on biological resources, cultural resources, and transportation that would require mitigation in connection with future development projects. Applicable mitigation measures adopted for the SHSP EIR are referenced here and incorporated into Exhibit A.

B. On August 31, 2020, Mark Telesz of Smoky Hollow Industries, LLC filed applications for amendment to the Smoky Hollow Specific Plan (SPA) No. 21-02 ; Community Benefit Plan (CBP) No. 19-02, Site Plan Review (SPR) No. 21-03, and Environmental Assessment (EA) No. 1281 for a Tier II Community Benefits Plan and Site Plan Review of the proposed South Site of the Standard Works project at 1475 E. El Segundo Blvd.; CBP No. 19-03, Site Plan Review (SPR) No. 21-04, and Environmental Assessment (EA) No. 1282 for a Tier II Community Benefits Plan and Site Plan Review of the proposed North Site of the Standard Works project at 1320-1330 E. Franklin Ave.; Master Sign Program (MSP) 21-01; for development a multi-parcel office campus totaling approximately 128,976 square feet, surface parking lots, publicly accessible open space, and a public coffee shop/kiosk on a total 5.35 acres (hereinafter, the "Project" or "Standard Works Project").

C. Approval of the proposed Project is a subsequent discretionary action in furtherance of the SHSP and requires amendments to the SHSP.

D. The applications have been reviewed by the City's Development Services Department for, in part, consistency with the General Plan and conformity with the El Segundo Municipal Code ("ESMC") and the SHSP.

E. The Development Services Department commissioned MIG, Inc. to evaluate the environmental impact of the proposed Standard Works Project and amendments to the SHSP in light of the standards for subsequent environmental review outlined in Public Resources Code section 21166 and California Environmental Quality Act ("CEQA") Guidelines section 15162. Based on MIG's evaluation of the potential environmental impacts of the proposed modifications to the SHSP project, an IS/MND was prepared pursuant to CEQA Guidelines section 15162.

F. The IS/MND was circulated for public review/comment from December 15, 2021 through January 14, 2022. Only one comment letter (Caltrans) was received during the public review period.

G. On January 27, 2022, the Planning Commission continued the project, at the request of the project applicant, to February 10, 2022;

H. On February 10, 2022, the Planning Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the proposed amendments, including, without limitation, information provided to the Planning Commission by City staff and public testimony; and,

I. This Resolution and its findings are made based upon the evidence presented to the Commission at its February 10, 2022, hearing including, without limitation, the staff report submitted by the Development Services Department and the totality of the evidence in the administrative record.

J. This Resolution and its findings are made based upon the totality of the evidence in the administrative record before the Commission at its February 10, 2022 public hearing, including, without limitation, the staff report prepared by the Development Services Department.

SECTION 2: *Factual Findings and Conclusions*. The Commission finds as follows:

A. The IS/MND was presented to and considered by the Planning Commission at a duly-noticed meeting held on February 10, 2022.

B. The Project involves both legislative and quasi-judicial components. The legislative component consists of an amendment to the Smoky Hollow Specific Plan (SHSP) that would increase by ten feet (from 50 feet to 60 feet) the maximum permissible height of structures within a designated subarea of the SHSP Area. The subarea in which the increased height would potentially be available is generally bounded by Center Street on the east, El Segundo Boulevard on the south, Franklin Avenue on the north, and Sepulveda Boulevard on the west. The additional ten feet of building height within the subarea could be allowed only in connection with the approval of a Tier II Community Benefits Plan pursuant to the SHSP. The quasi-judicial components of the Project include Community Benefit Plan (CBP) No. 19-02, Site Plan Review (SPR) No. 21-03, and Environmental Assessment (EA) No. 1281 for a Tier II Community Benefits Plan and Site Plan Review of the proposed

South Site of the Standard Works Project at 1475 E. El Segundo Blvd.; CBP No. 19-03, Site Plan Review (SPR) No. 21-04, and Environmental Assessment (EA) No. 1282 for a Tier II Community Benefits Plan and Site Plan Review of the proposed North Site of the Standard Works Project at 1320-1330 E. Franklin Ave.; and Master Sign Program (MSP) 21-01.

C. The proposed project for the South Site would develop a 1.01-acre property located at 1475 E. El Segundo Boulevard. The existing 19,311 square-foot, one-story brick building on the site would be preserved with two new levels totaling 44,604 square feet added above it. This would result in a total floor area of 63,915 square feet (FAR=1.45) for R&D and office use. The new three-story building would have a maximum height of 59 feet and 6 inches from the average grade to the top of the building.

D. The proposed project for the North Site would develop a 1.07-acrea portion of a 4.34-acre property located at 1320-1330 E. Franklin Avenue. The existing 19,493 square-foot, one-story brick building located at 1330 E. Franklin Avenue would be preserved and two levels totaling 44,802 square feet would be added above it. In addition, a new, two-story pavilion building would be constructed and would include a public café. This would result in a total of 65,061 square feet of floor area for the North Site (FAR=0.95), including 64,295 square feet for R&D and office use and 766 square feet for the pavilion building. The three-story main building would have a maximum height of 59 feet and 6 inches from the average grade to the top of the building. The pavilion building will reach a maximum height of 23 feet and 8 inches. The South Site will also include construction of a new 5,000 square-foot public outdoor park with park searing, picnic tables, shade trees and landscaping.

E. The City of El Segundo is the lead agency for the Project. The IS/MND was prepared for the Project in compliance with the requirements of CEQA and the CEQA Guidelines and is adequate and appropriate for the City's use as the lead agency.

F. The Project will either have no impacts or less than significant impacts in the following areas: Aesthetics, Agriculture and Forestry Resources, Air Quality, Energy, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Utilities/Service Systems, and Wildfire.

G. Areas of concern were noted as potentially significant if not mitigated. Mitigation measures have been incorporated into the IS/MND and will be imposed of the Project through the City's adoption of a Mitigation Monitoring and Reporting Program ("MMRP") in compliance with CEQA Guideline 15074(d). These mitigation measures, several of which are carried over from the SHSP EIR, are imposed to address potential environmental effects with respect to: Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Hazards & Hazardous Materials, Transportation, and Tribal Cultural Resources. With the implementation of this mitigation, all potential environmental effects will be reduced

to a less than significant level. The MMRP is attached to this Resolution as Exhibit B and incorporated herein.

H. The mitigation measures set forth in the MMRP are specific and enforceable. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedules, and verification of compliance in order to ensure that the Project complies with the adopted mitigation measures.

I. The mitigation measures contained in the MMRP will also be imposed as enforceable conditions of approval. All mitigation measures are capable of being fully implemented by the Project applicant.

J. All Conditions and Mitigation Measures identified in the SHSP EIR (EA-1011), on file with the State of California (SCH No. 2017031071), remain in full force and effect.

K. Pursuant to CEQA the Planning Commission has independently reviewed the Initial Study/Mitigated Negative Declaration together with all comments received regarding the Mitigated Negative Declaration and, based on the whole record before it, finds that the Mitigated Negative Declaration was prepared in compliance with CEQA and the CEQA Guidelines, that there is no substantial evidence that the Project will have a significant effect on the environment with the incorporation of mitigation, and the Mitigated Negative Declaration reflects the independent judgment and analysis of the Planning Commission. Accordingly, based upon the evidence presented to the Planning Commission, the City need not prepare an environmental impact report for the proposed Project.

SECTION 3: *Recommendation.* Based on the facts and findings hereinabove set forth and the totality of the evidence in the administrative record, the Planning Commission recommends that the City Council approve and adopt the Initial Study/Mitigated Negative Declaration and the MMRP in substantially similar form.

SECTION 4: *Reliance on Record.* Each and every one of the findings and determination in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 5: The documents and other materials that comprise the record of proceedings in this matter are located in the offices of the Development Services Department, City of El Segundo, 350 Main Street, El Segundo, CA 90245. The custodian of these documents is the Development Services Director, or his/her designee.

SECTION 6: This Resolution will remain effective unless superseded by a subsequent resolution.

SECTION 7: The Commission Secretary is directed to mail a copy of this Resolution to Mark Telesz of Smoky Hollow Industries, LLC, and to any other person requesting a copy.

PASSED, APPROVED AND ADOPTED this 10th DAY of FEBRUARY, 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, AICP, Secretary

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2912

Exhibit A

Summary of Mitigation Measures Draft Initial Study/MND

**denotes mitigation measure carried over from the Smoky Hollow Specific Plan EIR*

Biological Resources

BIO MM 7-1* To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.

BIO MM 7-2* If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

Cultural Resources

CUL MM 8-2*Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

CUL MM 8-3*In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a

qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

CUL MM 8-4 If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.

Geology and Soils

MM GEO-1 Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.

Greenhouse Gas Emissions

EECAP 4.1* *Encourage or Require Energy Efficiency Standards Exceeding Title 24.* This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.

EECAP 5.2* *Promote Water Efficiency Standards Exceeding SB X7-7.* In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.

Hazards and Hazardous Materials

MM HAZ-1 Prior to issuance of a Certificate of Occupancy for the North Site (1330 E. Franklin Street), the applicant shall remove and properly decommission the vertical and lateral well network of the former vapor extraction system including abandonment of any groundwater monitoring wells and semi-permanent vapor probes on the property. This measure shall be implemented to the satisfaction of the City with input and regulatory oversight and written signoff by DTSC.

MM HAZ-2 Prior to issuance of a grading permit for the North Site (1330 E. Franklin Street), the applicant shall prepare and process a Soils Management Plan through the state Department of Toxic Substances Control (DTSC) for review and approval. Prior to issuance of a building permit, the applicant shall provide written confirmation from DTSC to the City that the Soil Management Plan has been implemented as approved.

MM HAZ-3 Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1330 E. Franklin Street), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.

Transportation (VMT)

MM VMT-1 **Unbundle Parking Cost.** This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between

2.6% and 13%. **Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.**

MM VMT-2 **Parking Management Strategies.** Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. **The maximum reduction from this measure is 3%.**

MM VMT-3 **Mandatory Travel Behavior Change Program, Promotions & Marketing.** This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the building lobbies to enable users an easy way to access information about transit routes. **The maximum reduction due to this measure is 1%.**

MM VMT-4 **Implement Commute Trip Reduction Marketing.** This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. **For this project, a conservative reduction of 3% has been assumed.**

MM VMT-5 **Include Bike Parking in Excess of City Code.** This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and

therefore, it is recommended that the project provide at least 18 spaces. **This results in a VMT reduction of 0.625%.**

MM VMT-6 **Include Secure Bike Parking and Showers.** This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. **This results in a VMT reduction of 0.625%.**

Tribal Cultural Resources

MM-TCR-1 **Native American Monitoring.** Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation and the Gabrielino Tongva Indians of California, the tribes that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.

The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes shall retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project site while evaluation

and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).

Smoky Hollow Specific Plan Amendment (SPA21-01) and Community Benefit Plans for the Standard Works Project at 1320-1330 E. Franklin Avenue (CBP19-03) and 1475 E. El Segundo Boulevard (CBP19-02)

Initial Study

prepared for

CITY OF EL SEGUNDO
Development Services Dept.
Planning Division
350 Main Street
El Segundo, CA 90245
Contact: Eduardo Schonborn, AICP

prepared with the assistance of

MIG Inc.
1650 Spruce Street, Suite 106
Riverside, CA 92507

Public Review Draft
December 13, 2021

This report prepared on 50% recycled paper with 50% post-consumer content.

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Appendix G Hydrology/Water Quality Studies
Appendix H Hazardous Materials Information

* includes Native American Consultation Documentation

Initial Study

1. Project Title

Smoky Hollow Specific Plan Amendment (SPA21-01) and Community Benefit Plans for the Standard Works Project at 1320-1330 E. Franklin Avenue (CBP19-03) and 1475 E. El Segundo Boulevard (CBP19-02)

2. Lead Agency Name and Address

City of El Segundo
Development Services Department, Planning Division
350 Main Street
El Segundo, CA 90245

3. Contact Person Name and Information

Eduardo Schonborn, AICP
Telephone: (310) 524-2312
Email: eschonborn@elsegundo.org

Project Applicant

Mark Telesz
Smoky Hollow Industries, LLC
612 E. Franklin Avenue
El Segundo, CA 90245
Telephone: 310-616-5040
Email: mt@smokyhollowindustries.com

4. Project Location

The Standard Works Project ("Project" or "proposed Project") is located within the Smoky Hollow Specific Plan ("SHSP" or "Specific Plan") area, which comprises 120 acres in the southern portion of the City of El Segundo ("City" or "El Segundo"). The SHSP area is situated east of the downtown El Segundo Main Street Corridor and supports a number of well-established commercial, office, and light industrial uses just north of the Chevron Oil refinery (see Exhibit 1, Regional Location).

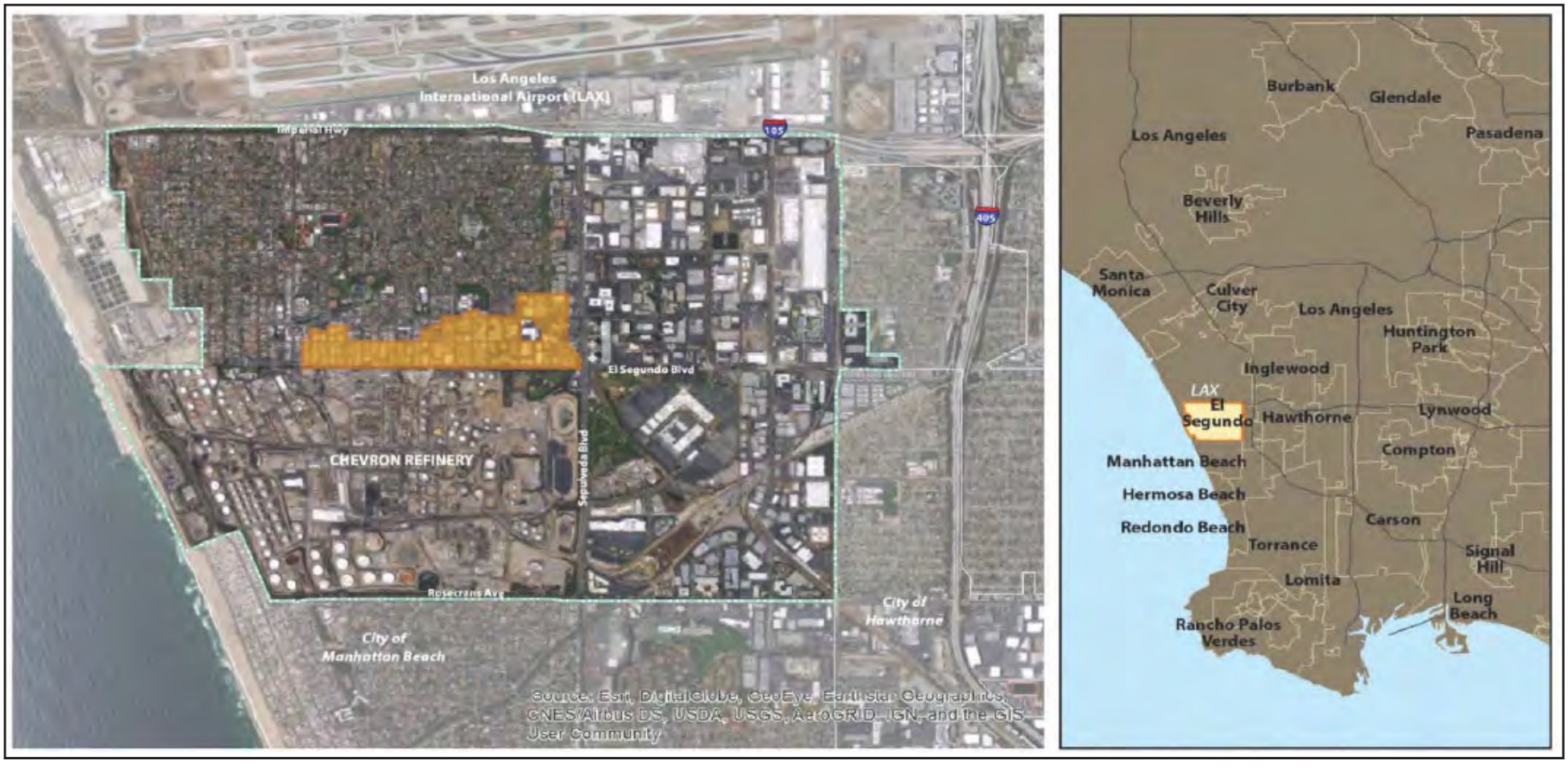
The SHSP area is oriented east-west and is bounded by Indiana Street and Pacific Coast Highway to the east, downtown El Segundo to the west, the Chevron refinery and El Segundo Boulevard to the south, and commercial/industrial neighborhoods generally north of E. Franklin Avenue (see Exhibit 2, Smoky Hollow Specific Plan Area).

The Project, described in more detail in Section 7, consists of (1) the redevelopment of two sites within the SHSP area (the "Development Sites"), as shown in Exhibit 3, Development Sites Location Map; and, (2) a proposed amendment to the SHSP that would affect a Sub-area of the SHSP (the "Specific Plan Amendment Sub-area" or "SPA Sub-area"), as shown in Exhibit 5, SPA Sub-area. The SPA Sub-area is located in the Smoky Hollow East (SH-E) and Public Facility (PF) zoning districts, and is bounded by Center Street to the west, E. Franklin Avenue to the north, Pacific Coast Highway (PCH) [formerly Sepulveda Blvd.] to the east, and E. El Segundo Blvd. the south, as shown in Exhibit 4, SHSP Zoning Districts.

The Development Sites are in the SH-E zoning district and within the proposed SPA Sub-area.

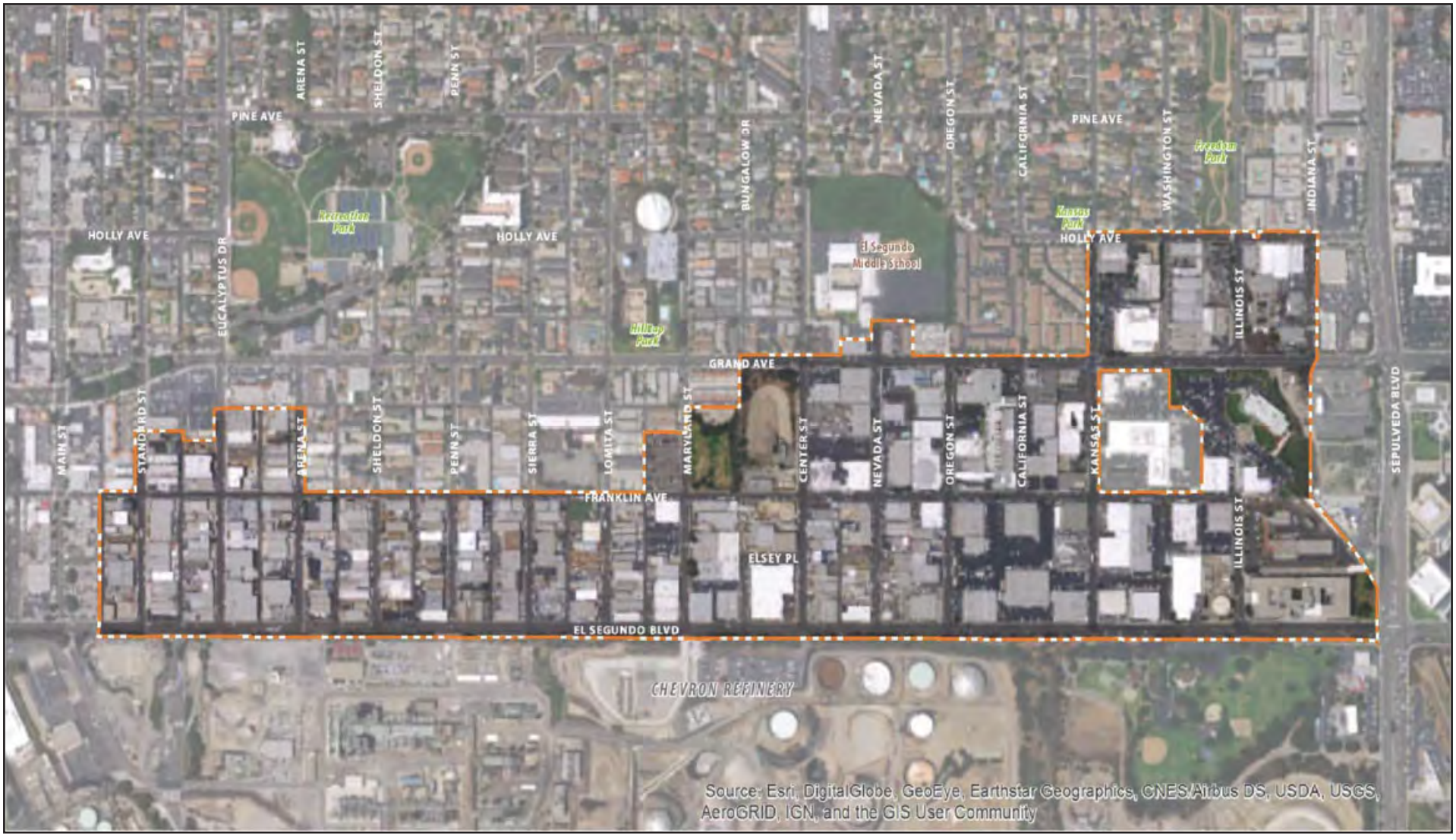
The Development Sites are located north of East El Segundo Boulevard and south of East Franklin Avenue, between Oregon Street and Kansas Street in the City of El Segundo, California, as shown in Exhibit 6, Standard Works Development Project Sites. The Development Sites are rectangular-shaped parcels that are currently occupied by single-story commercial structures and associated asphalt paved parking.

The Development Sites comprise two specific development areas that are proximate to each other; the South Site (also known as Parcel A) and the North Site (also known as Parcel E) as shown in Exhibit 6, Standard Works Development Project Sites. The Development Sites and the SPA Sub-area, taken together, will be referred to as the "Project Site" in this document.



Smoky Hollow Specific Plan Boundary

City of El Segundo City Limits



Smoky Hollow Specific Plan Boundary

Exhibit 2 Smoky Hollow Specific Plan Area Map

Standard Works Development Project
City of El Segundo, California



Exhibit 3 Development Sites Location Map

Standard Works Development Project
City of El Segundo, California

5. General Plan Designation and Zoning

The Project Site has a General Plan land use designation of Smoky Hollow Specific Plan (SHSP). The Development Sites are in the Smoky Hollow East (SH-E) zoning district and the SPA Sub-area includes property in both the SH-E and Public Facility (PF) zoning districts. The SH-E district provides a transitional land use area between higher-intensity office uses east of Sepulveda Boulevard and the smaller, single-parcel industrial and creative businesses of the western portion of the SHSP area. The SH-E zoning district provides for the development of incubator industrial, research, and technological uses; medium-sized light industrial and manufacturing; and creative office uses. The Public Facility (PF) Zoning District is for public land uses necessary to support community needs within the City, including libraries, community facilities, schools, and utilities. Exhibit 4, SHSP Zoning Districts, shows the various zoning districts within the Specific Plan and includes the boundary of the proposed Specific Plan Amendment Area. Exhibit 5, SPA Sub-area, shows the location of the SPA Sub-area covered by the proposed Specific Plan Amendment on an aerial photo base.

6. Project Setting

The Project Site is developed with various commercial and light industrial land uses. The Chevron Oil Refinery is located just south of the SPA Sub-area, the Los Angeles International Airport (LAX) is a mile to the north, and the Pacific Ocean is approximately two miles to the west. The Development Sites, which include the South Site and the North Site, are shown in Exhibit 6, Standard Works Development Project Sites, on an arial photo base.

South Site - 1475 E. El Segundo Blvd. The South Site is an industrial site originally constructed in the 1950's-60's. It includes a single-story brick building of approximately 19,311 square feet used for industrial/warehouse and office uses. The site and the entire surrounding area uses were originally designed as supporting uses for the oil and gas industry (Standard Oil). The entire lot outside of the building is paved with asphalt and used for surface parking. There is a slope across the property down from the northwest to the southeast.

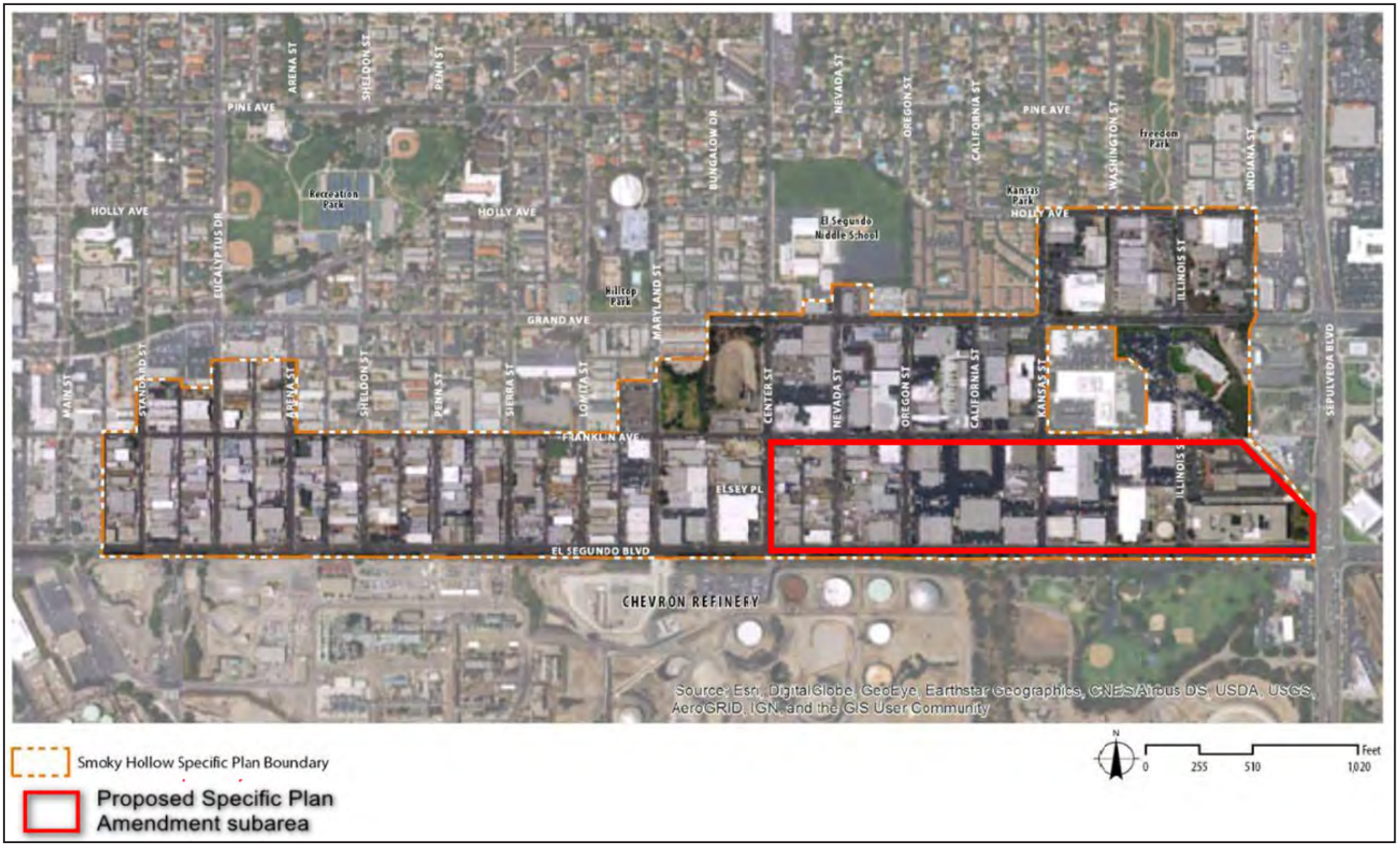
North Site - 1320-1330 E. Franklin Ave. The North Site is an industrial site originally constructed in the 1950's-60's. It includes a single-story brick industrial building of approximately 19,493 square feet used for industrial/warehouse and office uses. The site and the entire surrounding sites were originally designed as supporting uses for the oil and gas industry (Standard Oil). The entire lot outside of the building is paved with asphalt and used for surface parking. There is a recently completed four-story 400-car garage just south of the building. The site is flat with no slope across the property.

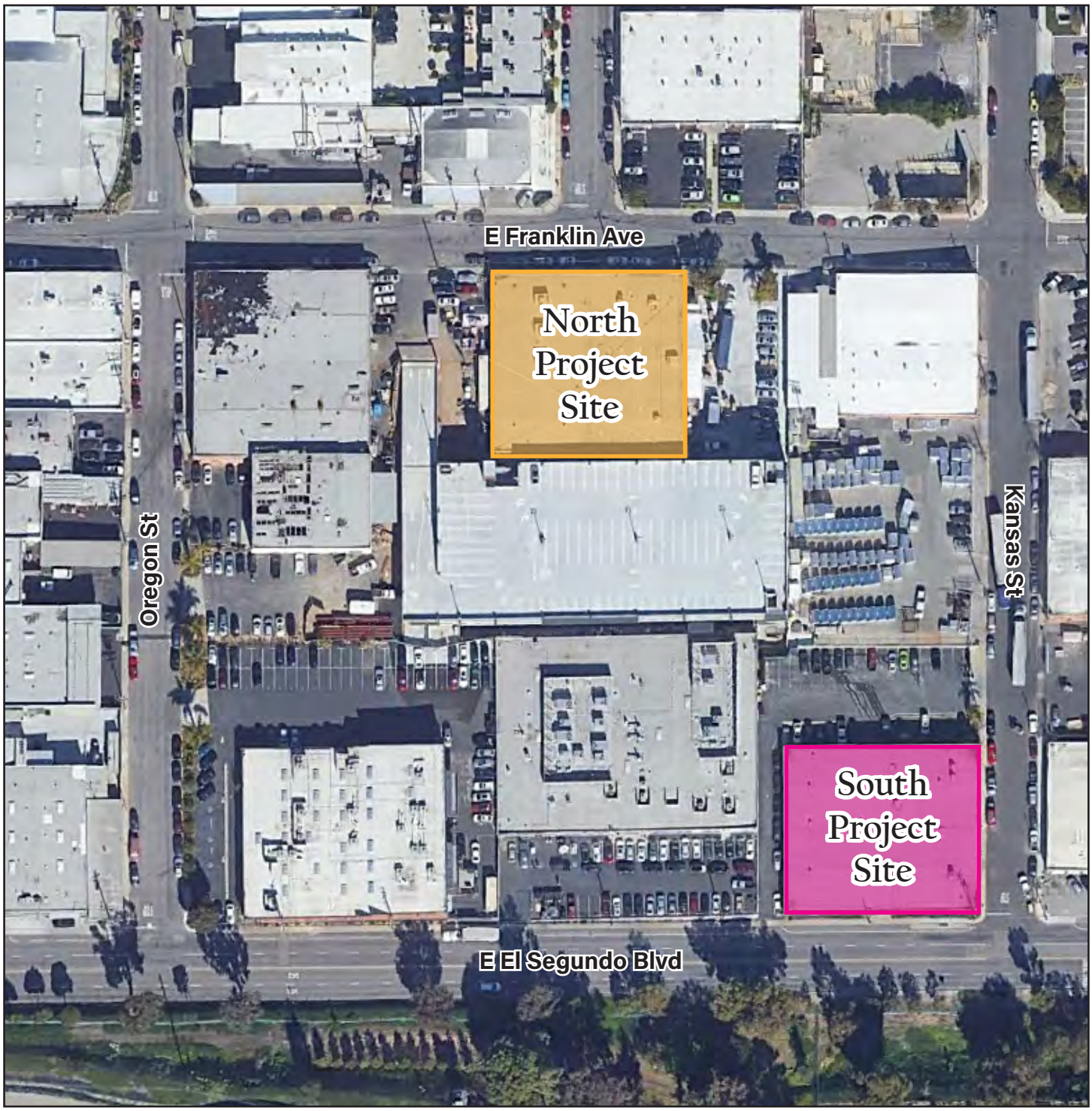
7. Surrounding Land Uses

The Project Site is located in an urbanized and industrial environment situated on gently rolling hills. The Chevron Oil refinery, located just south of the SHSP area, is a large industrial facility with towers, reservoirs, an electrical substation, offices, and other facilities typical of a refinery. The area was developed predominantly in the 1950s when manufacturing and refinery-related businesses were established close to the Chevron refinery, the aerospace industry, and transportation opportunities provided by LAX. After a long period of inactivity, new developments and businesses have begun to move into the Specific Plan area. Demand for development has largely come from technology and creative firms, including architecture, real estate, furniture, manufacturing, and digital advertising

firms. Exhibit 7, Surrounding Land Uses, shows the location of the Development Sites on an aerial base and office and light industrial land uses in the surrounding area.


PINE AVE
ARENA ST
SHELDON S
PENN ST
BUNGALOW DR
NEVADA ST
OREGON ST
CALIFORNIA ST
PINE AVE
WASHINGTON ST
Freedom Park
INDIANA ST
HOLLY AVE
EUCALYPTUS DR
Recreation Park
HOLLY AVE
Hilltop Park
El Segundo Middle School
Kansas Park
HOLLY AVE
ILLINOIS ST
GRAND AVE
MAIN ST
STANDARD ST
ARENA ST
SHELDON ST
PENN ST
SIERRA ST
LOMITA ST
MARYLAND ST
CENTER ST
NEVADA ST
OREGON ST
CALIFORNIA ST
KANSAS ST
SEPULVEDA BLVD
FRANKLIN AVE
ELSEY PL
ILLINOIS ST
EL SEGUNDO BLVD
CHEVRON REFINERY
Smoky Hollow Specific Plan Boundary
Parks and Open Space
Proposed Specific Plan Amendment subarea
Specific Plan Zoning Districts
Smoky Hollow West
Smoky Hollow East
Public Facility
Parking
N
0
250
500
1,000
Feet


PINE AVE
ARENA ST
SHELDON ST
PENN ST
BUNGALOW DR
NEVADA ST
OREGON ST
CALIFORNIA ST
PINE AVE
WASHINGTON ST
Freedom Park
INDIANA ST
HOLLY AVE
Recreation Park
HOLLY AVE
El Segundo Middle School
Kansas Park
HOLLY AVE
ILLINOIS ST
EUCALYPTUS DR
Hilltop Park
MARYLAND ST
GRAND AVE
SEPULVEDA BLVD
MAIN ST
STANDARD ST
ARENA ST
SHELDON ST
PENN ST
SIERRA ST
LOMITA ST
CENTER ST
NEVADA ST
OREGON ST
CALIFORNIA ST
KANSAS ST
FRANKLIN AVE
ELSEY PL
ILLINOIS ST
EL SEGUNDO BLVD
CHEVRON REFINERY
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Smoky Hollow Specific Plan Boundary
Proposed Specific Plan Amendment subarea
N
0
255
510
1,020
Feet



Not to Scale

Exhibit 6 Standard Works Development Project Sites



Exhibit 7 Surrounding Land Uses

Standard Works Development Project
City of El Segundo, California

8. Project Description

The Smoky Hollow Specific Plan (SHSP) provides a planning framework and long-term strategy to guide public and private investment in the 120-acre Smoky Hollow area. The SHSP utilizes a variety of planning tools, including: development standards, design guidelines (including height limits, signage, landscaping, etc.), and other regulatory tools and metrics; public infrastructure improvements; and a comprehensive strategic set of policy, physical, and programmatic implementation actions. The SHSP emphasizes flexibility and creativity to enable new businesses to thrive, and it supports the long-term health and expansion of the many existing businesses. According to the SHSP, it "builds on the eclectic nature of Smoky Hollow, sets policy to create a dynamic public realm, and grounds the regulatory framework in economic reality". For additional information on specific plan requirements, see Section 9, *Regulatory Framework, Smoky Hollow Specific Plan*.

Smoky Hollow Specific Plan Amendment

The SHSP sets forth development standards, including a height standard, for development within the SHSP area. The SHSP also establishes a discretionary process for developing a Community Benefits Plan (CBP)[1] which allows developers to deviate from some of the otherwise applicable development standards in exchange for incorporating specified community benefits into a project proposal.

There are two types or tiers of Community Benefit Plans within the SHSP:

Tier I addresses a FAR deviation up to 1.5 and one or more deviations to standards (neither of which is height or FAR) that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment.

Tier II addresses a building height deviation up to 50 feet, FAR greater than 1.5, or three or more deviations to standards (one of which is height or FAR) that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment.

A CBP Tier 1 application must demonstrate: the proposed additional building height, intensity, or deviation from development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity; the proposed community benefit provides exemplary project and/or streetscape design; and the proposed community benefit directly implements objectives of the Specific Plan. A CBP Tier II application must demonstrate these Tier I items plus the value of the community benefits bears a relationship to the value generated by the project; and the community benefits proposed do not principally benefit the project or occupants of the project, but rather provide a district or area-wide benefit to the larger Smoky Hollow Plan area.

[1] Community benefits are based on the principle that in exchange for allowing incremental increases in development intensity, the community should, in return, receive certain benefits, including beneficial design features such as publicly accessible open space and other development requirements that serve the community's core needs.

Projects within the SHSP area are allowed to request deviations from current City development standards with the approval of a Tier I or Tier II CBP. The proposed Development Project (see below) would/seeks to amend the SHSP to allow for an increase in the maximum permissible height for CBP Tier II qualifying projects. Allowable heights would increase to 60 feet from the current Tier II maximum of 50 feet only within a specific sub-area of the SHSP Smoky Hollow East area. Approval of the SPA is required before the Development Sites can be permitted at a maximum height of 59.5 feet.

The Project is proposing an amendment to the text of the SHSP Tier II Community Benefit Plan to allow for taller buildings in a Sub-area of the SHSP. Pursuant to Section 4.7 of the SHSP, "…*modifications to the text or exhibits of this Specific Plan may be warranted in the future to accommodate unforeseen conditions or events. The City will process revisions pursuant to California Government Code Section 65450, et seq. All Specific Plan amendments shall be found consistent with the El Segundo General Plan in compliance with Government Code Section 65454. The Specific Plan may be amended as often as deemed necessary by the City Council in compliance with Government Code Section 65453*."

Tier II Community Benefits Plan

A proposed project that exceeds development standards under the SHSP is required to submit a Community Benefits Plan and is considered through the review process described in Section 4.5.2: Community Benefits Plan (CBP) for Tier I and Tier II applicable projects.

The proposed Specific Plan Amendment (SPA) would modify the Height Development Standards for CBP Tier II qualifying projects only in a designated Sub-area of the Smoky Hollow Specific Plan area shown in Exhibits 4 and 5. The Sub-area occupies 30 of the 120 acres of the SHSP. The SHSP currently allows CBP Tier II level qualifying projects to deviate from maximum building height development standards up to a maximum height of 50 feet (to the building parapet not including elevator equipment or architectural features). Section 2.3.2, Development Tiers and Community Benefits, of the SHSP states **"**The current criteria for CBP Tier II projects are as follows per Table 2-2: Building Intensity and Height Standards by Zoning District and Table 4-1: Community Benefit Plan of the SHSP:

A. Building height deviation up to 50 feet;
B. Floor Area Ratio (FAR) > 1.5;
C. Three or more deviations to standards (one of which is height or FAR) that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment."

The modification to Tier II CBP applicable projects in the designated Sub-area of the Smoky Hollow East (SH-E) zoning district would only be the following:

A. Building height deviation up to 50 feet <u>except for the designated Sub-area of the Smoky Hollow East (SH-E) zoning district which will have a height deviation of up to 60 feet</u>;
B. Floor Area Ratio (FAR) deviation > 1.5;
C. Three or more deviations to standards that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment.

Proposed Development Project

Project Characteristics

The proposed Project also involves the redevelopment of two adjacent sites, South Site, referred to as Parcel A in Project documentation and technical studies, and North Site, referred to as Parcel E in Project documentation and technical studies, as previously shown in Exhibit 6. The Project proposes an office development including construction of two office buildings and a coffee pavilion. Table 1 summarizes the development characteristics of the two Development Sites. The proposed site plans for the two Development Sites are shown in Exhibit 8 (South Site Development Site Plan) and Exhibit 9 (North Site Development Site Plan). Appendix A contains development information relative to the two Development Sites described below.

Caretaker Units. It should be noted the original submitted Standard Works Project included four caretaker units on the top floor of each of the two Project buildings. These units were subsequently removed but the technical studies that were prepared to support the CEQA analysis for the original Project included the caretaker units. Therefore, the technical studies for the revised current Project incrementally overestimate potential Project impacts and, therefore, represent a conservative analysis.

South Site

The proposed Project for the South Site would develop a 1.01-acre property located at 1475 E. El Segundo Boulevard within the SHSP. The existing 19,311 sf, one-story brick building, located at 1475 E. El Segundo Boulevard would be preserved with two new levels added above it. This results in a total floor area of 63,915 square feet for the South Site (FAR = 1.45) for R&D and office use. The proposed construction activities on the South Site would include:

- Construction of a 44,604-square foot addition to the existing building that would be structurally preserved in place for a total building floor area of 63,915 square feet.
- The three-story building would have a maximum height of 59 feet and 6 inches from average grade to the top of the building.

Exhibit Figure 8 illustrates the proposed site plan for the South Site.

North Site

The proposed Project for the North Site would develop a 1.07-acre portion of a 4.34-acre property located at 1320-1330 E. Franklin Avenue within the SHSP. The existing 19,493 square foot, one-story brick building located at 1330 E. Franklin Avenue would be preserved and two levels would be added above it. In addition, a new pavilion building would be constructed and would include a public café. This would result in a total of 65,061 square feet of floor area for the North site (FAR = 0.95), including 64,295 sf for R&D and office use and 766 sf for the pavilion building.

The proposed construction activities on the North Site would include:

- Construction of a two-story 44,802-square foot addition to the existing building that would be structurally preserved in place, for a total floor area of 65,061 square feet (including the two-story pavilion noted below). The three-story main building would have a maximum height of 59 feet and 6 inches, from average grade to the top of the building.

- Construction of a new two-story pavilion building to serve the neighborhood with a café and gathering point at the entry of a new public park accessible by the public. The new pavilion will have 766 square feet of floor area and will reach a maximum height of 23 feet and 8 inches.
- Construction of a new 5,000-square foot public outdoor park with park seating, picnic tables, shade trees and landscaping.

The proposed site plan for the North Site is provided in Exhibit 9.

Table 1 Standard Works Project Summary

Project Site	South	North	Total
Project Site (acres)	1.01	4.34	5.35
Total	**1.01**	**4.34**	**5.35**
Existing Development and Proposed Demolition			
Project Site (square feet)	19,311	19,493	38,804
Total to be demolished	0	0	0
Total Existing Building Space to remain	**19,311**	**19,493**	**38,804**
Proposed Buildings and FAR			
Project Site (square feet)	44,604	45,568	90,172
Project Site Parking Structure	N/A	N/A	N/A
New Construction	44,604	45,568	90,172
Total Development (sf)	**63,915**	**65,061**	**128,976**
Project Site FAR[1]	1.45	0.95	
Maximum Building Heights[2]			
Project Site (feet)	59' 6"	59' 6"	59' 6"
Landscaping, Open Space, and Parking			
Project Site Parking (spaces)	165	168	333
Total Parking	165	168	333
Landscape Area (sf)	4,397	19,190	23,587
Private Open Space (sf)	11,731	10,599	22,331
Public Open Space (sf)	0	5,000	5,000
Total Open Space[4]	**11,731**	**15,599**	**50,918**

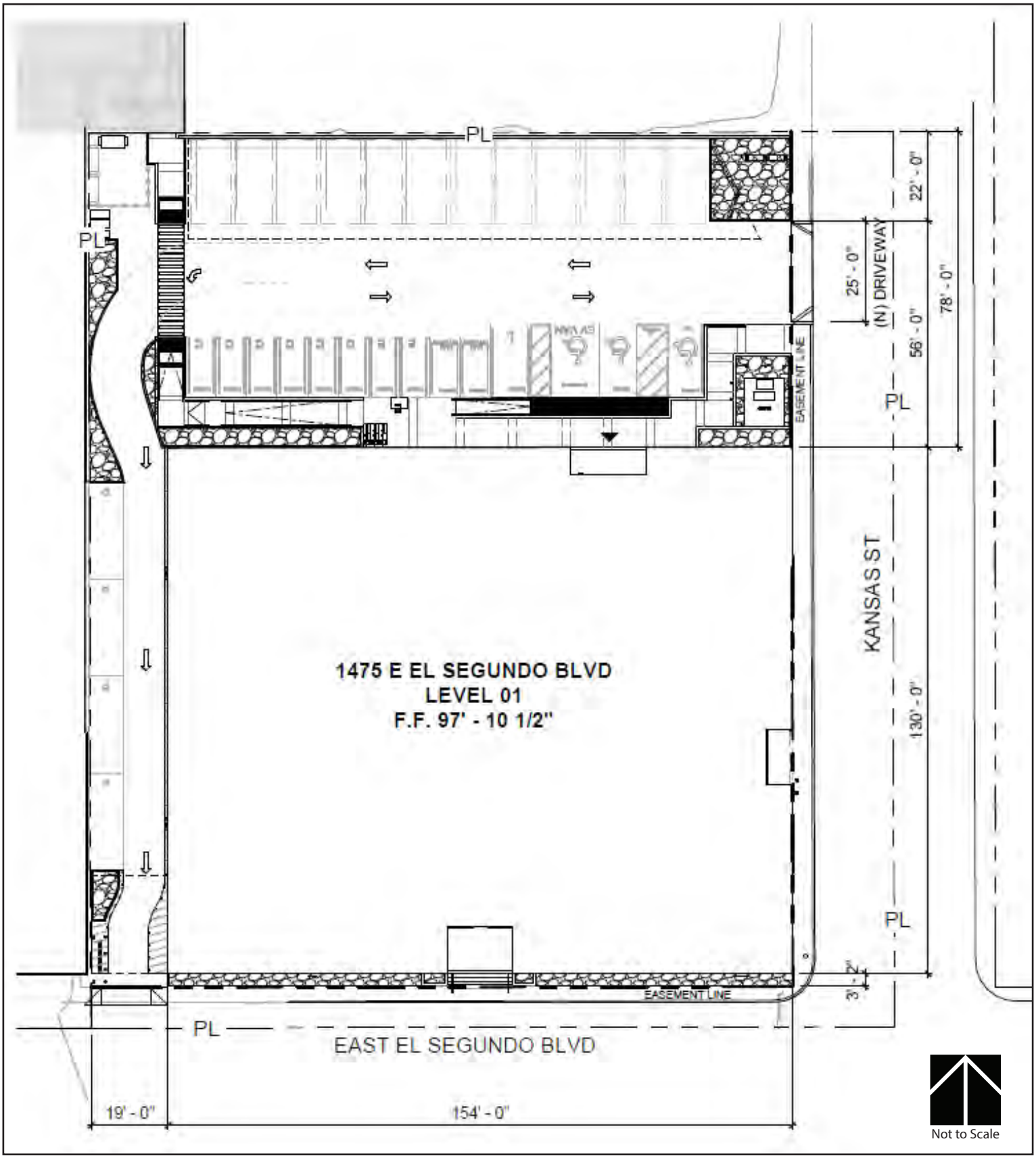
sf: square feet

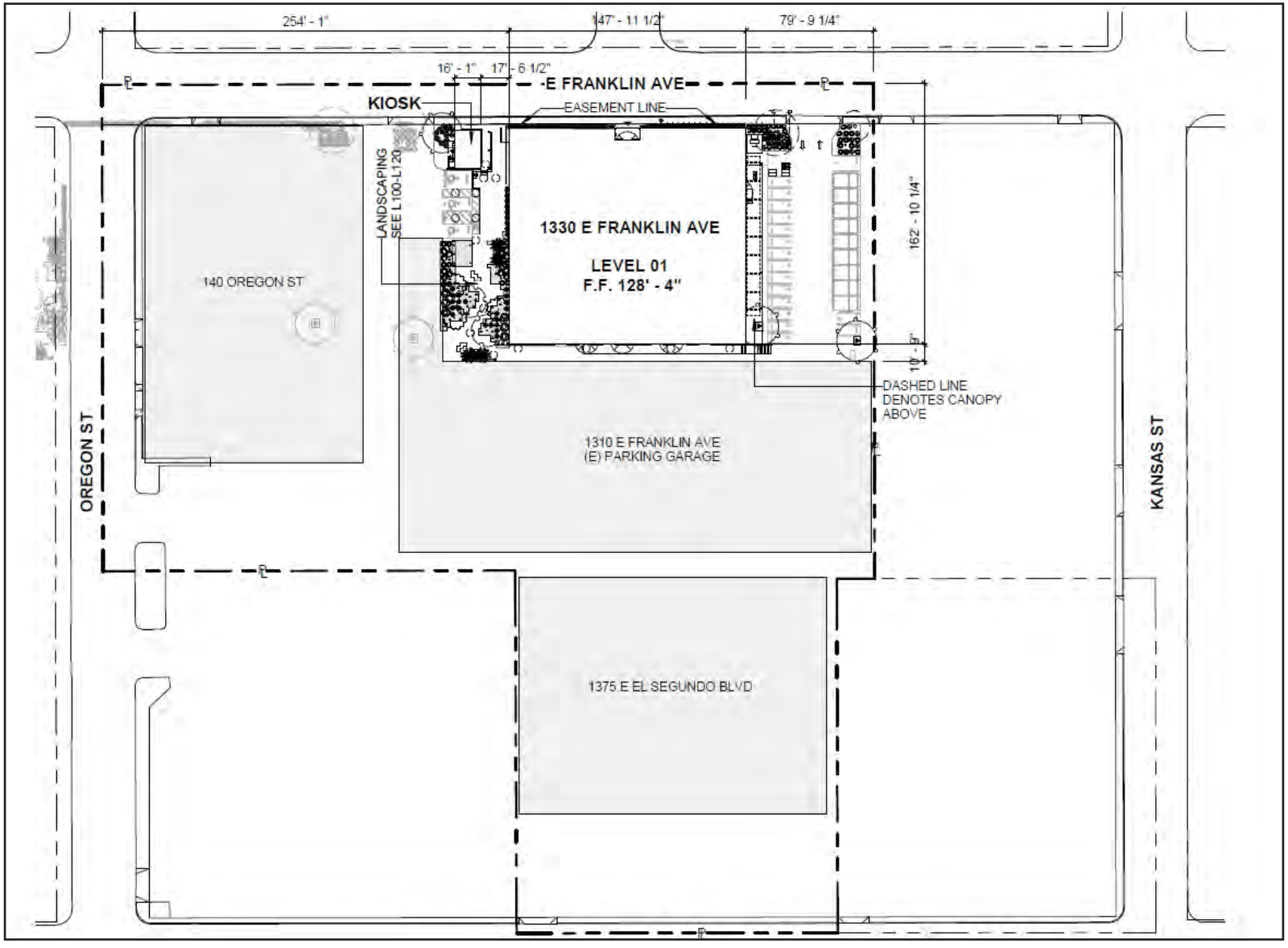
[1] Floor Area Ratio (FAR) includes the office and café uses but does not include the parking structures.

[2] Above the average grade to top of building.

[3] Includes both new on-grade onsite spaces plus spaces in existing parking structure

[4] Open space includes both pedestrian hardscape and planting.


PL
PL
22' - 0"
25' - 0"
(N) DRIVEWAY
78' - 0"
56' - 0"
EASEMENT LINE
PL
KANSAS ST
1475 E EL SEGUNDO BLVD
LEVEL 01
F.F. 97' - 10 1/2"
130' - 0"
PL
3' - 2"
EASEMENT LINE
PL
EAST EL SEGUNDO BLVD
19' - 0"
154' - 0"
Not to Scale


254' - 1"
147' - 11 1/2"
79' - 9 1/4"
16' - 1"
17' - 6 1/2"
E FRANKLIN AVE
KIOSK
EASEMENT LINE
LANDSCAPING
SEE L100-L120
1330 E FRANKLIN AVE
LEVEL 01
F.F. 128' - 4"
162' - 10 1/4"
10' - 9"
DASHED LINE
DENOTES CANOPY
ABOVE
140 OREGON ST
1310 E FRANKLIN AVE
(E) PARKING GARAGE
1375 E EL SEGUNDO BLVD
OREGON ST
KANSAS ST

Not to Scale

Architecture, Open Space, and Landscaping

The Project proposes a contemporary industrial aesthetic design using exposed steel, large steel 1950s mid-Century-like industrial windows, exposed sandblasted custom concrete masonry unit (CMU) block walls, large scale balconies and exterior decks, reused red brick and glulam wooden beams from the same building, and other period materials that will complement the character of the Smoky Hollow neighborhood. Preserving the existing 1950's red brick facade is an objective of the proposed design as well as a goal of the Smoky Hollow Specific Plan. The existing brick walls will be sandblasted to bring their color and vibrancy back to life and the new block walls will be custom fabricated onsite and also have a sandblasted finish to expose the aggregate. The Project is intended to have a "lively and pedestrian-oriented atmosphere which will contribute to the ongoing development in the Smoky Hollow area." Elevations of the Project are shown in Exhibit 10, Project Elevations.

The proposed Project will add 23,587 square feet of new landscaping on both Project Development Sites consisting of drought-tolerant and California native plant species (see Exhibit 7: Landscaping Plan). The Project will provide private open space for office tenants in rooftop patios - 11,731 square feet on South Site and 10,599 square feet on North Site. The Project will also provide approximately 5,000 square feet of public open space including an outdoor pocket park and pedestrian walkways with benches and trees to provide shade. Landscaping for the Project is shown in Exhibit 11, Landscaping Plans.

Site Access and Parking

South Site

This part of the Project will require a total of 165 parking spaces of which 42 on-grade parking spaces will be provided on-site. The remaining required 123 parking spaces will be provided in the recently completed parking garage (on the North Site) through a proposed Off-Site Parking Covenant (per El Segundo Municipal Code Section 15-15-3(H) and SHSP Development Standards Table 2-2(H).)

North Site

This part of the Project will require a total of 168 parking spaces all of which will be provided onsite. It will include 38 on-grade parking spaces and the remaining 130 spaces will be provided in the recently completed parking garage structure on this parcel.

Utilities and Infrastructure Improvements

The Project is located in a portion of the City's developed area where utilities and public infrastructure are already in place. The applicant is proposing to underground all power lines on E. Franklin Ave for the North Site and on Kansas Street for the South Site. The Project design includes low-impact development (LID) and best management practices (BMP) features for stormwater retention on the site, including groundwater infiltration basins. As with the existing development on the Development Sites, the proposed Project would utilize all City public services such as police, fire, and other public institutions.




TENANT
1310


KANSAS ST.


E EL SEGUNDO BLVD.



PICNIC TABLE

CAFE TABLE

I-BEAM BENCH

I-BEAM

PRECAST BEAM BENCH

N

0' 20' 40'

SCALE: 1" = 20'

Exhibit 11 Landscaping Plan (North Site)



FIRST FLOOR PLANTING LEGEND

TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY LIST*	SIZE	MATURE SIZE	WATER USE (MUCOLS)	NOTES
	Melaleuca linariifolia	Snow in Summer	2	36" BOX	30' H&W	LOW	
	Fraxinus oxycarpa 'Monmal'	Ice Blue	3	36" BOX	25' H&W	MOD	

SUCCULENTS / SHRUBS / GROUNDCOVER

	Hesperaloe 'Brakelights'	Brakelights Red Yucca	74		2-3' H&W	LOW	
	Asparagus densiflorus 'Myers'	Foxtail Fern	18		2' H X 2-3' W	MOD	
	Leucadendron 'Jester'	Jester Conebush	7		4-5' H&W	LOW	
	Muhlenbergia capillaris 'Lenda'	Regal Mist Pink Muhly Grass	3	SG	4' H X 3' W	MOD	
	Yucca rigida	Blue Yucca	5	SG	12' H X 5' W	LOW	
	Westringia fruticosa 'WES05'	Mundi Westringia	34		1-2' H X 4-6' W	LOW	306 SF @ 36" OC TRIANGULAR SPACING
	Rosmarinus officinalis 'Huntington Carpet'	Huntington Carpet Rosemary	69	SG	1-2' H X 6-8' W	VERY LOW	242 SF @ 24" OC TRIANGULAR SPACING
	Rhaphiolepis umbellata 'RUMTHIGH'	Southern Moon Yeddo Hawthorn	12	SG	5' H X 6-8' W	LOW	96 SF @ 36" OC TRIANGULAR SPACING
	Campsis radicans 'Mondal'	Balboa Sunset Trumpet Vine	3		+30' L	MOD	
	Wisteria sinensis 'Cooke's Purple'	Purple Chinese Wisteria	3		20-30' L	MOD	
		TOTAL LIST	##				
		TOTAL OTHER					

*QUANTITIES LISTED FOR CONVENIENCE ONLY; CONTRACTOR TO VERIFY
**PLANTS OVER STRUCTURE OR IN PLANTERS RARELY REACH MATURE SIZE

TREES PROVIDED (PER SHSP TABLE 2-4)	
TREES WITH A PROJECTED GROWTH TO A MINIMUM OF 25' H&W (8 REQUIRED)	9
ADDITIONAL TREES LESS THAN 25' H&W	7
TOTAL TREES PROVIDED	16
IRRIGATION (PER SHSP TABLE 2-4)	
ALL LANDSCAPED AREAS, INCLUDING TREES AT SURFACE PARKING LOTS, SHALL BE PROVIDED WITH APPROPRIATE PERMANENT WATERING FACILITIES	

Exhibit 11 Landscaping Plan (South Site)

Standard Works Development Project
City of El Segundo, California

Sustainability Features

1. Level 1 Red Brick Walls – The design reuses the existing red brick exterior walls and is saving considerable material and all of the environmental costs associated with demolishing rather than rebuilding.

2. Level 2 & 3 Block Walls – The design and detailing of the addition to the existing building is not typical. The proposed exterior façade is simply concrete masonry blocks with no interior or exterior finishes – a single building material that acts as interior finish, exterior finish, waterproofing, vapor barrier and structural system all in itself, and is installed by a single trade/person who is already at the jobsite. In comparison, a typical building façade assembly may require multiple layers of materials and trades including paint, drywall, drywall mudding and taping, framing/nailing & insulation, exterior sheathing, waterproofing, the final façade material and associated attachments.

   NOTE: These two Project features will eliminate hundreds of thousands of pounds of waste materials associated with typical building façade assemblies and all the greenhouse gas emissions associated with the production and installation of the walls.

   Exposed Structural Steel - Additionally, in a "typically" designed building, the structure (the actual columns and beams that hold up the building) is typically hidden from view or covered up with even more material. The proposed design exposes the columns and beams and features them as design elements, which uses less materials and results in less pollution.

3. Independent Heating, Ventilating, and Air Conditioning (HVAC) Systems – each suite within the building is designed with its own independent HVAC system, allowing for efficient heating and cooling.

Project Construction

Construction of the North and South sites are anticipated to commence in January/February 2022 and January 2023, respectively. Construction activities on the North site would last approximately 14.5 months, and construction activities on the South site would last approximately 17 months.

Community Benefits Plan

The design of the building proposed on the North site exceeds the current base standard for building height in the SHSP, and the design of the building proposed on the South site exceeds the current base standards for building height and allowable Gross Floor Area Ratio (FAR). Projects within the SHSP area are allowed to request deviations from current City development standards with the approval of a Tier I or Tier II Community Benefits Plan. The proposed project would amend the SHSP to allow for an increase in the maximum permissible height for CBP Tier II qualifying projects. Allowable heights would increase to 60 feet from the current Tier II maximum of 50 feet. Approval of the SPA is required before the Development Sites can be permitted at a maximum height of 59.5 feet. The Project requests the following deviations from the current development standards which requires a Tier II Community Benefits Plan:

Additional Building Height. Proposed building heights of up to 59.5 feet on both Project sites would exceed the SHSP Base Standard height of 35 feet.

Additional Building FAR. Proposed 1.5 floor area ratio (FAR) (an additional 21,983 square feet) on the South site exceeds the SHSP Base Standard FAR of 1.0.

In exchange for the above deviations allowed by Tier II CBP, the applicant is proposing the following community benefits and improvements, at the applicant's expense, pursuant to Smoky Hollow Specific Plan Section 4.5.2. The following Community Benefits are based on objectives and suggestions directly identified as development standards in the SHSP with the objective of benefiting the Smoky Hollow Specific Plan area. Additionally, the Specific Plan contains 32 design guidelines in five categories: building character, open space, landscaping, connectivity, signage and public art and Public Realm. Compliance with at least 17 of the guidelines is required to be considered as an exemplary project; the proposed Project incorporates 29 of the 32 design guidelines, far exceeding the minimum threshold for exemplary projects. A summary of the main the community benefits that are proposed for the Project include the following:

Underground Utilities. The Project proposes to underground all electric power and low voltage phone and data lines that currently serve the buildings on East Franklin Ave and Kansas Street.

Public Seating. Proposed architectural seating will be provided along the sidewalk area within the public right-of-way (ROW) facing E. Franklin Avenue and Kansas Street.

Coffee Pavilion/Public Café. The proposed Project would also include a 276-square foot public café (Coffee Pavilion) and associated outdoor dining area immediately adjacent to the E Franklin sidewalk, in order to active the street and provide a convenient break location for local neighbors. The café is part of the proposed 5,000-square foot public park that will be a landscaped focal point of the Project and of the surrounding area as well.

Architecture that enhances building character. Explained above under "Architecture, Open Space, and Landscaping" and "Resiliency Features".

Open space that facilitates gathering. Explained above under "Architecture, Open Space, and Landscaping" and "Resiliency Features".

Landscaping and environmental design. Explained above under "Architecture, Open Space, and Landscaping" and "Resiliency Features".

In addition, the Development Project will provide the following specific community benefits as summarized from the CBP Tier II application scoring sheets:

Group A – Enhance Building Character

A1. *Build on the quality industrial character:* Project has exposed steel beams and large industrial-style windows.

A2. *Convey a sense of the old and new:* Project will preserve ground floor red brick exterior while adding two setback floors of a modern industrial building

A3. *Build upon existing context:* Project stays within existing footprint but adds 2 floors with roof decks.

A4. *Conserve and retain the character-defining features:* Project preserves ground floor red brick exterior and three historical building entrances.

A5. *Encourage additions that complement the character-defining features:* Project has large industrial windows with exposed steel beams characteristic of mid-century architecture but stacked blond block with exposed aggregate and stain coloring to enhance the industrial appearance.

A6. *Incorporate small, medium, and large scales:* Project includes several interlocking design elements of different scales for visual interest including large to small "nested" windows and balconies to break up the building facade into different sized elements.

A7. *Enhance design at the pedestrian level:* Project will have extensive landscaping along all street frontages with pedestrian scale seating.

A8. *Specify 360^{o} architecture:* Project will have enhanced architecture on all four sides of each building.

A9. *Enhance entry expression:* Project has new landscaping and a double high entry portal at the southwest corner.

A10. *Encourage the use of roll-up doors and sliding walls at street frontage:* Roll-up doors are used in several main entrance locations.

A11. *Orient secondary entries to alleys:* Some secondary access points are oriented toward local alleys.

A12. *Incorporate different materials, colors, and textures:* Project includes a variety of materials, colors, and textures, including red brick, medium grey block, black steel, corten, architectural board formed concrete, and glass.

Group B – Facilitate Gathering

B1. *Form an active street wall:* Project has a new two-story entry portal with enhanced landscaping along street frontages and distinctive entrances.

B3. *Develop outdoor gathering spaces:* Project will have a pocket park with outdoor seating.

B5. *Provide ease of access:* The Project will have multiple pedestrian and vehicular access points and ground floor tenants will have direct access to adjacent streets.

B6. *Enhance surface parking:* Project will have shade coverings for surface parking lots plus stacked parking using current technology.

B7. *Use enduring quality paving materials:* Project will have special paving materials to demarcate pedestrian walkways with integral color and crystal aggregate.

B8. *Provide street furniture:* Project will provide street furniture for seating at the pocket park.

B9. *Use exterior lighting to accentuate safety and design:* Project will provide period lighting on all sides of buildings for pedestrian safety.

Group C – Incorporate Landscaping and Environmental Design

C1. *Design layered and lush landscaping:* Project will have extensive landscaping per landscaping plan.

C2. *Select drought-tolerant and native plants:* Project landscape plan has drought-tolerant and native plants throughout.

C3. *Utilize planters and pots to provide greenery:* Project has planters and pots on Level 2 and 3 decks and balconies and on the rooftop.

C4. *Improve landscaping in parking areas:* Parking areas include landscaping on at least

two sides (those facing the buildings).

C5. *Use fences and walls as an extension of the architecture:* Project includes monument signs for both buildings that compliment and extend the building architecture.

C6. *Use natural light:* Project has large windows for 2-story spaces with mezzanines to allow natural light in all interior spaces.

Group D – Encourage Connectivity

D1. *Install bike facilities:* Two bike racks will be installed at each Project building.

Group E – Signage, Way Finding, and Public Art

E1. *Design signs as an integral component:* Project includes integrated tenant signage.

E2. *Incorporate way-finding through integral design:* Project has architecturally integrated signage for both pedestrians and vehicles.

E3. *Encourage public art:* Project will have a large scale art wall on the west side of the north building.

Public Realm

PR1. *Underground utilities:* The incoming power and low voltage cables for data and phone will be consolidated into one location and undergrounded.

9. Regulatory Setting

The following presents a discussion of other plans and documents that affect the Project Site.

Smoky Hollow Specific Plan

The Smoky Hollow Specific Plan (SHSP) covers approximately 0.2 square mile (120 acres) with a variety of lot sizes located on small streets. The land use pattern and character of the SHSP area are largely shaped by the original industrial uses that developed during the mid-20th century to serve the Los Angeles International Airport, aerospace/defense, and nearby refinery industries. The location of the SHSP is shown in Exhibit 12.

The SHSP is a “specific plan” under State planning law and is one of several policy and regulatory tools used by the City of El Segundo to implement the City’s General Plan. The SHSP implements the General Plan through the establishment of more detailed policies, regulations, and actions specifically focused on the SHSP area, and generally provides for the reuse and focused redevelopment of properties within the 120-acre plan area, at higher intensities. It also allows for a greater proportion of land uses related to office and research and development compared to the existing light industrial uses. The SHSP also provides for improvements to the circulation system, increased on street parking, streetscape improvements, and enhanced development standards and design guidelines (City of El Segundo 2018a).

SHSP Development and Growth

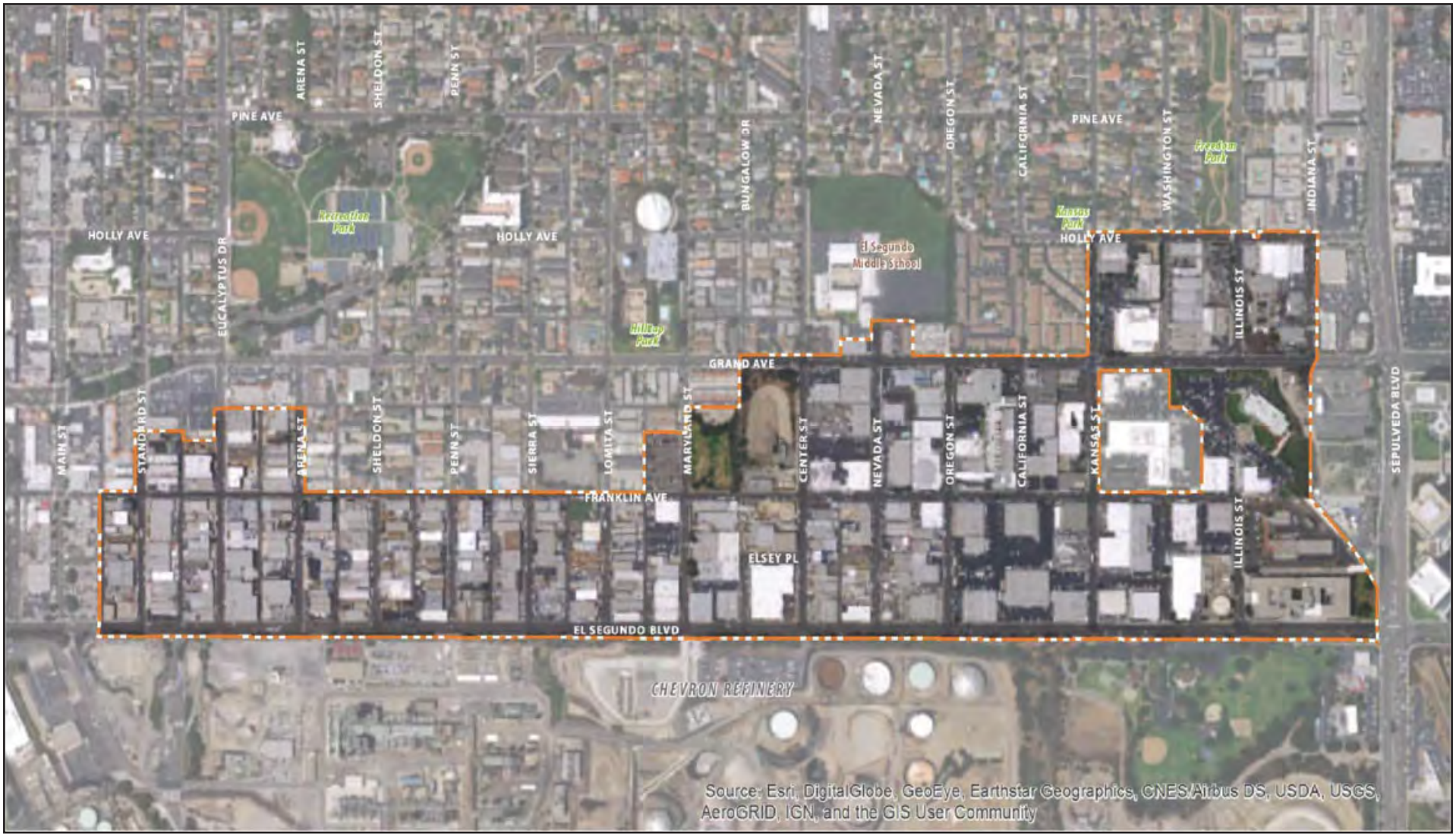
When it was approved in March 2018, the SHSP contained 329 parcels encompassing 94.3 net acres (not including street rights-of way) and was already developed with approximately 2.46 million square feet of building area mainly for industrial and office land uses (see Table 1: Smoky Hollow Specific Plan Land Uses).

The SHSP estimated a development capacity of up to 2.97 million square feet of office, industrial, and public facility building space through 2040. This represents a net increase of 517,094 square feet of total building area for residential, office, and commercial uses, as shown in Table 1 below. Table 1 indicates the SHSP will result in a net increase of 1,213,751 additional square feet of office space by 2040, with a total increase in building area of 2,973,910 square feet compared to an existing (2018) 2,456,816 square feet. At present there is still approximately 30 acres of developable land left within the SHSP although the proposed Project represents redevelopment of an existing light industrial site.

Table 2: Smoky Hollow Specific Plan Land Uses

Land Use Category	Existing Overall Intensity	2040 Overall Intensity	Difference
Office	330,607	1,544,358	+1,213,751
Research & Development	110,202	514,786	+404,584
Light Industrial	1,901,602	777,900	-1,123,702
Commercial	84,445	106,906	+22,461
Public Facilities	29,060	29,060	0
Parking	900	900	0
Residential[1]	9 units	15 units	+6 units
Total Building Area	**2,456,816**	**2,973,910**	**+517,094**

Source: SHSP EIR, Table 2-1. Existing and Projected Year 2040 Land Use
[1] Caretaker Units



Smoky Hollow Specific Plan Boundary

Exhibit 12 SHSP Planning Area Map

Standard Works Development Project
City of El Segundo, California

Smoky Hollow Specific Plan Environmental Impact Report

The Final Environmental Impact Report for the Smoky Hollow Specific Plan Update, State Clearinghouse No. 2017031071 (EIR, SHSP EIR) was certified by the City in October 2018 in accordance with Sections 15086, 15088, 15089 and 15132 of the California Environmental Quality Act (CEQA) Guidelines. The SHSP EIR was a "Program EIR" as described in Section 15168 of the CEQA Guidelines, which is an EIR that is prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically, (2) as logical parts in the chain of contemplated actions, (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. Pursuant to CEQA Guidelines Section 15168(c), later activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared. If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration. That later analysis may tier from the program EIR as provided in Section 15152 of the CEQA Guidelines. In accordance with Sections 15168(c) and 15152 of the CEQA Guidelines, the analysis contained in this Initial Study tiers from the SHSP EIR.

The SHSP EIR adopted a Mitigation Measure Monitoring and Reporting Program to mitigate any impacts from the implementation of the SHSP (City of El Segundo 2018b). The EIR concluded that there were potential impacts on Biological Resources, Cultural Resources, and Transportation that would require mitigation in connection with future development projects. The mitigation measures adopted for the SHSP that would apply to the Project are listed below in Table 3 and at the end of this document along with all Project-specific measures recommended as part of the environmental evaluation of the Project.

Table 3: Smoky Hollow Specific Plan Mitigation Measures

Identified Impact	Mitigation Measure
Biological Resources	
Potential impacts on special-status species, nesting birds, and migratory birds.	**BIO MM 7-1.** To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.
Potential impacts on special-status species, nesting birds, and migratory birds.	**BIO MM 7-2.** If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active

Identified Impact	Mitigation Measure
	nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.
Cultural Resources, Paleontological Resources, and Tribal Cultural Resources	
Adverse change in the significance of a historic resource	**CULT MM 8-1.** Prior to issuing any permit for demolition or redevelopment of a building in the Specific Plan area that is 50 years old or greater, an assessment of the building must take place by a person who meets the *Secretary of the Interior's Professional Qualifications and Standards* for history, architectural history, architecture, or historic architecture to assess if it meets the criteria for inclusion on a historic register. If a building meets the criteria for inclusion on the California or National registers, the City will have to prepare and file a completed DPR 523 form with the South Central Coastal Information Center and the California Office of Historic Preservation, and the building will be treated as a historic resource under CEQA, subject to all regulations that relate to the treatment of historic resources.
Adverse change in the significance of an archaeological, paleontological or tribal cultural resource	**CULT MM 8-2.** Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.
Adverse change in the significance of an archaeological, paleontological or tribal cultural resource	**CULT MM 8-3.** In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground- disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan.
Greenhouse Gas Emissions	
Conflict with an applicable plan, policy, or regulation adopted for	**EECAP 4-1.** *Encourage or Require Energy Efficiency Standards Exceeding Title 24.* This measure will develop City

Identified Impact	Mitigation Measure
the purpose of reducing the emissions of greenhouse gases	staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.
Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	**EECAP 5-2.** *Promote Water Efficiency Standards Exceeding SB X7-7.* In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater. Approximately 1,873 kWh can be saved for every acre foot (AF) of water use replaced by recycled water.

Source: City of El Segundo 2018b

[1] Transportation MMs from the SHSP were deleted because they were based on Level of Service (LOS) and CEQA documents can no longer recommend LOS mitigation, only mitigation for vehicle miles traveled (VMT).

10. Required Approvals

The City of El Segundo is the Lead Agency for the proposed Project. As the Lead Agency, the City of El Segundo City Council has the ultimate authority to approve or deny the Project. The proposed Project would require the following approvals:

- Specific Plan Amendment (SPA) No. 21-01 to modify the Height development standards for CBP Tier II qualifying projects in a Sub-area of the Smoky Hollow Specific Plan area.
- Tier II Community Benefit Plans (CBP No. 19-02 for 1475 E. El Segundo Blvd; CBP 19-03 for 1320-1330 E. Franklin Ave) to permit deviations from height and floor area ratio (FAR) from base development standards per the Specific Plan.
- Site Plan Review to ensure that the Project is consistent with the goals, policies and objectives of the general plan, the Specific Plan, and the El Segundo Municipal Code (ESMC).
- Master Sign Program (MSP) No. 21-01 for Standard Work campus.

11. Native American Consultation

One tribe has requested to be notified of projects in the City of El Segundo—the Gabrieleño Band of Mission Indians – Kizh Nation. The City of El Segundo initiated consultation with the Gabrieleño Band of Mission Indians – Kizh Nation in June 2021 pursuant to Public Resources Code Section 21080.3 (also known as Assembly Bill [AB] 52) for this Project. Please refer to the Explanation of Checklist Responses for Item **18**. *Tribal Cultural Resources*, for information regarding notification of and consultation with the Gabrieleño Band of Mission Indians – Kizh Nation.

Since the Project includes a Specific Plan Amendment, the Project must comply with Senate Bill (SB) 18, Government Codes Sections 65352.3 and 65352.4. SB 18 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans. SB 18 letters were sent to representatives from the Gabrieleño Band of Mission Indians – Kizh Nation, Gabrielino /Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, Santa Rosa Band of Cahuilla Indians,

and Soboba Band of Luiseno Indians on July 28, 2021. The tribes have 90 days to request consultation from receipt of the notification. The City has yet to receive a request to consult under SB 18 from any tribe.

Environmental Factors Potentially Affected

This Project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
■	Geology/Soils	■	Greenhouse Gas Emissions	■	Hazards & Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	■	Transportation	■	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable

standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

12/13/2021
Date

EDUARDO SCHENBORN
Printed Name

PLANNING MANAGER
Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

The proposed Project includes the SPA and two Development Sites both of which are within the SPA Sub-area. The SPA Sub-area is close to the Pacific Ocean but in a highly urbanized area, and views are mainly of various urban land uses. Views of the ocean to the west or landforms to the southeast are visible from elevated positions (i.e., taller buildings). There are no scenic resources or highways in or adjacent to either the development or SPA portions of the Project area but there are substantial light and glare from adjacent urban uses.

a. Would the project have a substantial adverse effect on a scenic vista?

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

(a-b) A scenic vista is generally considered as a publicly accessible, prominent vantage point that provides expansive views of highly valued landscapes or prominent visual elements. As described in the General Plan, the City is located within the urbanized Los Angeles area, and is considered part of the Los Angeles International Airport (LAX)/South Bay subregion at the southwestern edge of the Los Angeles coastal basin. The Project site is not located within a designated state scenic highway and not visible from any designated scenic highways.

The SPA proposes an increase in maximum building height from 50 to 60 feet, within a small Sub-area of the SHSP. The SHSP EIR concluded the SHSP area had no scenic vistas, contained no scenic resources and was not within or visible from a scenic highway so the proposed SPA would have no impact on a scenic vista nor will it damage scenic resources or affect a scenic highway and no programmatic mitigation is required. Further, due to the urbanized character of the surrounding area, approval of the SPA would not degrade the visual character of the site and its surroundings. The SHSP EIR concluded the SHSP would actually improve the visual quality and character of the area by removing dilapidated buildings and older uses. Therefore, visual impacts of the SPA would be less than significant and no programmatic mitigation is required.

The Development Sites are located approximately 1.8 miles east of the coastline but scenic views of the Pacific Ocean are not available from the Project area due to existing development. The closest scenic vista is of the elevated Palos Verdes Estates approximately 8.3 miles southeast of the Development Sites. The Project is within the SHSP which has no designated scenic vistas, so development of the Project will have no impact on a scenic vista, and no mitigation is required.

The Project will develop a small Sub-area of the SHSP which is in an urban area and has no scenic resources. The closest officially designated state scenic highway is State Route 27 located approximately 13.7 miles northwest of the Development Sites. The closest roadway eligible for designation as a state scenic highway is State Route 1 located approximately 6.1 miles northwest of the Development Sites (Caltrans 2021). The Development Sites are not visible from these highways so the Project will not damage scenic resources or affect a scenic highway and no mitigation is required.

NO IMPACT

c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

(c-d) The Project site is located within an urban area with a variety of urban land uses such as commercial, office, and residential land uses. A project is generally considered to have a significant visual/aesthetic impact if it substantially changes the character of an area such that it becomes visually incompatible or degrades the existing context and quality of the site and its surroundings. Depending on the location of the light source and its proximity to adjacent light-sensitive uses, light introduction may become a nuisance, affecting adjacent areas and diminishing the view of the clear night sky. Light spillage is typically defined as unwanted illumination from light fixtures on adjacent properties.

The SPA proposes a ten-foot increase in maximum permissible building heights for a Sub-area of the SHSP so its effects on visual quality or light and glare will be minimal (i.e., taller buildings and their lighting will be more visible within a limited urbanized area). Slightly taller buildings will also incrementally increase shading and shadows on adjacent non-residential properties to the north, east, and west. However, the overall effect of a ten-foot increase in building heights will not significantly increase shade or shadow impacts on adjacent properties which are all non-residential in nature. With approval of the SPA, future development will be consistent with zoning (i.e., the SHSP) and its design guidelines relative to scenic quality. Consistent with the conclusions of the SHSP EIR, impacts of the SPA related to visual character or quality and lighting and glare will therefore be less than significant and no programmatic mitigation is required.

The Project will develop/redevelop approximately 5.35 acres of the 120-acre SHSP within a highly urbanized area. The Project will modernize the overall appearance of the buildings while maintaining their historical architecture (first floor brick facades).

The Project proposes two buildings with maximum heights of 59’ 6” and lighting from these buildings will be incrementally more visible in the surrounding (highly urbanized) area. With approval of the SPA, the Project will be consistent with design aspects of the SHSP including lighting limitations. Though the proposed Project will create new sources of nighttime light and glare, due to its setting, even the increased heights of the Project buildings over the current SHSP standards will not be significant in terms of lighting and glare impacts due to similar types of buildings in the surrounding area. Views of the taller Project buildings will not create substantial light or glare and will not result in adverse visual impacts during either the day or night. Therefore, the Project will not significantly degrade the visual character of the site and its surroundings, or create a new source of substantial light or glare that will adversely affect daytime or nighttime views in the area. Impacts will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. Regarding cumulative impacts, the SPA Sub-area occupies 30 acres or 15% of the 120-acre SHSP area and 0.8% of the 3,495 acres occupied by the City as a whole. The potential increase in overall building height within the SHSHP Sub-area (from 50 to 60 feet), including the proposed height increase of the two Project buildings (to 59.5 feet from 50 feet), would represent an incremental and less than significant cumulative aesthetic impact within the City relative to scenic vistas, scenic resources, scenic highways, or light and glare. No mitigation would be required for the SPA or the Development Project regarding aesthetic impacts.

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

The State of California considers agriculture an important environmental resource and the California Resources Agency monitors the distribution of agricultural land throughout the state. Forestry is also an important type of agricultural activity in the state which is monitored by the California Department of Forestry and Fire Protection. The Project area is located in the Los Angeles (LA) Basin, which once supported agriculture and forest resources but now is highly urbanized and has very limited agriculture and no identified forest resources.

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

(a-e) According to the Farmland Mapping and Monitoring Program of the California Resources Agency (FMMP 2021), there are no prime or other important farmland designations, forest land or forest-related zoning within City limits which includes the SHSP. Therefore, the proposed SPA would have no impacts in that regard and no programmatic mitigation is required.

Maps produced by the CalFire Forest and Range Assessment Project (FRAP 2021) indicate the City and SHSP are in an urbanized area with no forest resources. According to the City General Plan Land Use Element and Zoning Map, the City contains no agricultural or forest-related land use or zoning designations. In addition, there is no land in the City under a Williamson Act contract (agricultural preserve). These conclusions are supported by both the GP EIR and the SHSP EIR. Therefore, the proposed development of the Project will have no impacts on any agricultural or forest resources. No mitigation is required.

NO IMPACT

Cumulative Impacts. The SPA Sub-area, including the Project Development Sites, contain any agricultural or forest resources. Therefore, neither the SPA or the Development Sites will have any cumulative impacts relative to agricultural or forest resources.

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Air quality is one of the most serious risks to human health in the South Coast Air Basin (SCAG) which has generally had poor air quality for many decades. Air quality is monitored and managed by both the California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and to meet the standards.

A detailed Air Quality Assessment was prepared for the Project (MIG 2021a)*(*Appendix B*)*. The proposed Project is located within the Los Angeles Basin which is highly urbanized and has generally poor air quality much of the year. Air pollutants are generated by a variety of stationary and mobile sources and air quality is still often unhealthy despite decades of state and regional regulations. New development is evaluated to determine if or to what degree measures should be implemented to reduce air pollution and protect public health.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

SCAB is designated as nonattainment for the federal and state 1-hour and 8-hour ozone standards, the state PM_{10} standards, and the federal and state $PM_{2.5}$ standards, and the Los Angeles County portion of SCAB is also designated as nonattainment for federal lead standards. The SCAQMD adopted its most recent Air Quality Management Plan (AQMP) in 2016 which includes strategies for the attainment of state and federal air quality standards.

The SPA requests a ten-foot increase in maximum permissible building heights within in a Sub-area of the SHSP to allow for more architectural flexibility in adapting older industrial

buildings to modern standards. This change in maximum allowed height would not, in and of itself, result in any increase in development potential that was not anticipated in the General Plan or SHSP and its EIR. Therefore, it would have no effect on consistency with the 2016 AQMP which was based on the City's General Plan land uses adopted in 2016. For that reason, the SPA would therefore have no impact relative to the AQMP and no programmatic mitigation is required.

Regarding the proposed Standard Works Project, the SCAQMD concludes a project that conflicts with or obstructs the implementation of the South Coast Air Basin 2016 Air Quality Management Plan (AQMP) if it could hinder implementation of the AQMP, could delay efforts to meet attainment deadlines, and/or interfere with SCAQMD efforts to maintain compliance with, and attainment of, applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993), a project is consistent with the AQMP if: (1) it is consistent with the growth assumptions in the AQMP; and (2) it does not increase the frequency or severity of an air quality standards violation or cause a new one.

The proposed Project would not induce population growth because it involves non-residential development, and the employment induced by the Project would be well within that accounted for in the City's General Plan and the Southern California Association of Governments 2016 Regional Transportation Plan / Sustainable Communities Strategy (2016 RTP/SCS), which formed the growth assumptions for the AQMP.[2] Therefore, the proposed Project would not conflict with the first AQMP consistency criterion. As described in the analysis in Section 3.b below, the Project would not exceed the construction or operational air quality thresholds maintained by the SCAQMD. Therefore, the Project would not conflict with or obstruct implementation of the SCAQMD 2016 AQMP (SCAQMD 2017). Impacts are less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The following section provides the calculated potential air emissions associated with the construction and operations of the Project and compares the emissions to the SCAQMD CEQA thresholds of significance. As recommended by SCAQMD, the California Emissions Estimation Model (CalEEMod) was used to calculate the Project construction and operational emissions for volatile organic compounds (VOC), oxides of nitrogen (NOx), carbon monoxide (CO), sulfur dioxide (SO_2), large particulates (PM_{10}), and fine particulates ($PM_{2.5}$).

The SPA requests a ten-foot increase in maximum permissible building heights for more architectural flexibility within a Sub-area of the SHSP but no other development changes such as land use or intensity of use (FAR). Any increased building height under the SPA would not result in any additional ground disturbance (i.e., project footprint) and no increase in FAR or overall development, so it will have no demonstrable effect on the emission of small particulate material during construction or operation. Therefore, the SPA would have no effect (i.e., no increase or decrease) of any air pollutant emissions for which the Basin is

[2] The 2016 RTP/SCS accounted for 7,000 new jobs being formed in the City between 2012 and 2040 (SCAG, 2016).

in non-attainment (ozone and $PM_{2.5}$). The SPA would have no impacts in this regard so no programmatic mitigation is required.

An air quality assessment was prepared for the Project by MIG in August 2021 which examined criteria air pollutant emission impacts of Project construction and operation. The proposed Project's potential construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version (V.) 2020.4.0. Construction phase and duration and the type and amount of equipment used during construction were generated using CalEEMod default assumptions and modified as necessary to reflect the following Project-specific context, information, and details: the type and length of construction phases for each site, as well as the equipment used in each phase, was modified per information provided by the Project applicant; 600 cubic yards of soil was assumed to be exported from each site; and fugitive dust control measures were incorporated into the model consistent with requirements contained in SCAQMD Rule 403, Fugitive Dust.

The proposed Project's operational emissions from area, energy use, and mobile sources were estimated also using CalEEMod, V. 2020.4.0. The modeling was based on the proposed Project's first full year of operations (assumed to be 2023 for the North Site and 2024 for the South Site), using default data assumptions generated by CalEEMod, modified as necessary to reflect the following Project-specific context, information, and details: Project-specific land use information (i.e., lot acreage, building square footage, etc.) was applied to the model; and CalEEMod default weekday trip generation rates were replaced with the trip generation and vehicle miles travelled information contained in the Focused Traffic Analysis Memorandum (Kimley-Horn, 2021) and VMT memorandum (Translutions, 2021) prepared for the proposed Project.

For the Project, an air quality assessment prepared by MIG in August 2021 indicates its "worst case" daily air pollutant emissions would not exceed standards established by the SCAQMD during either construction or operations, as indicated in Tables 4 and 5 (MIG 2021a).

Table 4: Project Emissions - Construction

Emission Condition	Maximum Pollutant Emissions (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Highest Daily Emissions[1]	13.0	47.2	50.8	0.1	5.9	3.8
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Table 3, MIG 2021a
[1] unmitigated maximum daily emissions from construction at one or both sites in summer or winter, whichever is highest

Table 5: Project Emissions - Operations

Emission Condition	Maximum Pollutant Emissions (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Highest Daily Emissions[1]	7.7	4.2	42.9	0.2	8.5	2.1
SCAQMD	55	55	550	150	150	55

Threshold						
Exceeds Threshold?	No	No	No	No	No	No

Source: Table 4, MIG 2021a

[1] unmitigated daily regional emissions from operations (area-wide, energy, and mobile sources) at both sites in summer or winter rates, whichever is highest and minus emissions from existing uses ("worst case")

The air quality assessment utilized the latest SCAQMD software and Project characteristics to estimate both short-term and long-term emissions. Since the worst case emissions were determined to be less than the SCAQMD's established thresholds, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment. Impacts are considered less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

(c-d) Some land uses are considered more sensitive to air pollution than others because of the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to the health effects of air pollution due to their immature immune systems and developing organs. As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution.

The SPA requests a ten-foot increase in maximum permissible building heights in a Sub-area of the SHSP but no other development changes that affect land use or intensity of use (FAR). Any increased building height under the SPA would not result in any additional ground disturbance (i.e., project footprint) and no increase in FAR or overall development, so it will have no demonstrable effect on the emission of small particulate material during construction or operation. Therefore, the SPA would have no effect (i.e., no increase or decrease) of any air pollutant emissions for which the Basin is in non-attainment (ozone and $PM_{2.5}$). The SPA would have no impacts in this regard so no programmatic mitigation is required.

The air quality assessment prepared for the Project by MIG in August 2021 also examined localized impacts of Project air pollutant emissions on nearby sensitive receptors (e.g., parks, schools, hospitals and other uses with children, the elderly, sick, etc.). The assessment used the SCAQMD's Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, which would result in significant adverse localized air quality impacts. The proposed Project's potential construction emissions were estimated using the California Emissions

Estimator Model (CalEEMod), Version (V.) 2020.4.0. Construction phase and duration and the type and amount of equipment used during construction were generated using CalEEMod default assumptions and modified as necessary to reflect the following Project-specific context, information, and details: the type and length of construction phases for each site, as well as the equipment used in each phase, was modified per information provided by the Project applicant; 600 cubic yards of soil was assumed to be exported from each site; and fugitive dust control measures were incorporated into the model consistent with requirements contained in SCAQMD Rule 403, Fugitive Dust. The proposed Project's maximum daily construction emissions were then compared against the SCAQMD's-recommended LST thresholds.

The air quality assessment indicated the closest potential sensitive air quality receptors to the perimeter of the proposed Project area (i.e., within 1,000 feet) include: (1) the multi-family residential developments on East Grand Ave, approximately 600 feet north of the North Site of the proposed Project area; (2) Chevron Park, approximately 150 feet south of the South Site of the proposed Project area; and (3) Wyle Park, approximately 1,000 feet west of the North and South Sites of the proposed Project area.

The SCAQMD has several ways of determining potential impacts on sensitive receptors. The first is the use of Localized Significance Thresholds (LSTs). Table 6 presents the reasonable worst-case estimate of pollution from Project construction on sensitive receptors based on LSTs. Table 6 demonstrates that Project emissions will not exceed established SCAQMD LST thresholds for short-term emissions during construction.

Table 6: Localized Significance Thresholds - Project Construction

Emission Condition	Maximum Pollutant Emissions (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Highest Daily Emissions[1]	40.3	47.6	4.8	3.4
SCAQMD LST Threshold	139	2,228	56	21
Exceeds Threshold?	No	No	No	No

Source: Table 5, MIG 2021a

[1] unmitigated maximum daily emissions from construction at one or both sites in summer or winter, whichever is highest ("worst case")

The second way to evaluate sensitive receptors is to examine emissions of Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs). These pollutants can cause severe health effects at very low concentrations (non-cancer effects), and many are suspected or confirmed carcinogens (i.e., can cause cancer). People exposed to HAPs/TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects may include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and/or other health problems.

A portion of the PM_{10} and $PM_{2.5}$ emissions generated during construction of the Project would be diesel particulate matter, or DPM, a known TAC. The proposed Project's construction activities would not expose adjacent residential receptors to substantial levels of DPM and therefore not pose a substantial adverse health risk for several reasons. First, the proposed Project does not involve substantial earthmoving or grading activities that

would require large amounts of heavy-duty equipment associated with the highest DPM emissions. Second, construction activities associated with the Project would be short-term (as estimated in CalEEMod, total Project construction is estimated to last approximately six months). Finally, potential long-term adverse health risks from DPM are evaluated assuming a constant exposure to emissions over a 70-year lifetime, 24 hours a day, seven days a week, with increased risks generally associated with increased proximity to emissions sources. Since construction activities would only generate DPM emissions on an intermittent, short-term basis, DPM emissions from construction activities would be unlikely to result in adverse long-term health effects to existing sensitive receptors that exceed the SCAQMD's significance criteria.[3]

Finally, the SCAQMD CEQA Air Quality Handbook indicates that land uses associated with odor emissions and complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills.

Based on this analysis, the Project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people (including sensitive receptors). Impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA will not result in the potential for any increase in overall development (FAR or total square footage) within the Sub-area but only an increase in building heights. These changes would not affect the emission of air pollutants during construction since no additional land would be impacted, and the level of operation of new development would not increase simply due to being housed in a taller building. Therefore, the SPA would not result in any cumulative air quality impacts relative to AQMP consistency, emission of criteria pollutants, emissions affecting sensitive receptors, or odors and other emissions.

The air quality assessment for proposed Development Project determined it would have less than significant impacts related to AQMP consistency, emission of criteria pollutants, emissions affecting sensitive receptors, or odors and other emissions. According to the SCAQMD, a project that is consistent with the AQMP and does not emit air pollutants in excess of its daily regional and localized standards does not have any cumulatively considerable air quality impacts. The air quality assessment determined the proposed Development Project had less than significant air pollutant emissions and was consistent with the AQMP even without any project-level mitigation. Therefore, the Project will not have cumulative air quality impacts.

[3] The SCAQMD has established the following thresholds of significance for projects that generate TAC emissions: Maximum Incremental Cancer Risk ≥ 10 in 1 million; Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million); Chronic & Acute Hazard Index ≥ 1.0 (project increment).

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	■	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	■	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

Biological resources are considered important aspects of the environment in California which are monitored and managed by the California Department of Fish and Wildlife (CDFW) under the State Endangered Species Act and State Fish and Game Codes. The Project area has low biological diversity and ecological sensitivity due to its urban conditions.

The greater Los Angeles region and Project area once supported extensive native vegetation and wildlife but now is highly urbanized and natural habitat is limited despite proximity to the Pacific Ocean. The Project area contains no natural drainages or habitat other than landscaping and street trees. The limited plant and animal species that are present in the surrounding area must be tolerant of human activity.

a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Project Site does not contain any natural vegetation, natural communities, or biological resources that could support any sensitive plants or wildlife species. The property is not in an area designated as critical habitat for any sensitive wildlife species, nor is the area subject to any conservation plans, recovery plans, or similar policies and ordinances. There are no wetlands, marshes, surface drainages, ponds, lakes, streams, or any type of water-based habitat or any riparian communities on or near the Project site.

The proposed SPA would allow taller buildings in the future compared to the existing SHSP. However, these development characteristics have no influence on nor are they affected by biological resources, and the SHSP EIR determined the SHSP area contains no significant biological resources. Therefore, the proposed SHSPA will have no impacts on habitats or to listed or otherwise sensitive species, consistent with the conclusions of the SHSP EIR, and no programmatic mitigation is required.

The Project Site contains no native vegetation or habitat for listed, candidate, or otherwise sensitive species, although there are a number of street trees and landscaping at present and proposed as part of development of the Project. Street trees may support nesting or otherwise sensitive bird species. Construction work during the bird nesting season (February 1 to August 31) may impact protected birds, so the proposed Project will be subject to Mitigation Measures 7-1 and 7-2 from the SHSP EIR as outlined below. With implementation of these measures, the Project will have less than significant impacts on any species identified as a candidate, sensitive, or special status species.

Mitigation Measures. The SHSP EIR contains the following mitigation measures (MM) to avoid impacts related to listed or otherwise sensitive biological species:

BIO MM 7-1 To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project

Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.

BIO MM 7-2 If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

(b-c) As previously indicated, there are no wetlands, marshes, surface drainages, ponds, lakes, streams, or any type of water-based habitat or any riparian communities on or near the Project site.

The proposed SPA would allow taller buildings in the future compared to the existing SHSP. However, these development characteristics have no influence on nor are they affected by biological resources, and the SHSP EIR determined the SHSP area contains no wetlands or related resources such as riparian habitat or other sensitive natural community. Therefore, the proposed SHSPA will have no impacts regarding these resources and no programmatic mitigation is required.

The Project Site contains no wetlands or related resources such as riparian habitat or other sensitive natural community. This conclusion is consistent with the results of the SPSH EIR. Therefore, the proposed Project will have no impacts regarding these resources and no mitigation is required.

NO IMPACT

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

There are no wetlands, marshes, surface drainages, ponds, lakes, streams, or any type of water-based habitat or any riparian communities on or near the Project site. No food or water sources are onsite or in the surrounding areas that would support migrating fish or wildlife.

The proposed SPA only affects building height and would have no influence on or be affected by wildlife movement. In addition, the SHSP EIR concluded the SHSP area

contains no wildlife movement or migratory corridors. Therefore, the proposed SHSPA will have no impacts in this regard and no programmatic mitigation is required.

The Development Sites are within the SHSP and also do not contain any natural drainages or channels, and no natural or vacant areas in or adjacent to the Development Sites that could function as a wildlife movement corridor. However, the Development Sites will have landscaping and street trees which may support various species of migratory birds. Therefore, consistent with the SHSP EIR, **Mitigation Measures 7-1 and 7-2** are recommended for the Project development to reduce potential impacts related to migratory birds to less than significant levels (See sub-section 4.a above).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The SHSP would permit new development or activities such as the removal or maintenance of certain street trees protected by the El Segundo Street Tree Ordinance (Municipal Code Title 9, Chapter 3, Street Trees). The EIR stated that public projects would be governed by criteria in the ordinance, and private persons would be required to obtain a permit and replace removed street trees pursuant to the ordinance. The SPA would only change the maximum permissible height of some buildings so it would have no impact regarding conflicts with local policies or ordinances protecting biological resources and no programmatic mitigation is required.

Development of the two Development Sites will remove existing landscaping, mainly shrubs, in the existing planters along the south side of the South Side (facing El Segundo Boulevard) and the north side of the North Site (facing Franklin Avenue). These landscaping materials are covered by the City's Street Tree Ordinance. The proposed Project will replace landscaping materials lost by Project construction and install extensive new landscaping, including a number of new trees in the common areas of the two sites, per the Project landscaping plans and as approved by the City through the development review process. No other City ordinances or regulations are related to biological resources or that affect the Project properties so impacts are less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is a disturbed site with no existing natural vegetation. Although there are areas within El Segundo that contain sensitive habitat, they are located in coastal areas such as the coastal habitat for the El Segundo Blue Butterfly (ESBB). As described in the General Plan Conservation Element, the ESBB is listed on the federal endangered species list and is dependent upon native coastal buckwheat plants which are not present in the Project area. At this time, the butterfly occurs only on a 1.96 acre preserve adjacent to and maintained by the Chevron Refinery and in the dune area under the flight path of the Los Angeles International Airport.

Relative to the SPA, the SHSP EIR indicated there were no established Habitat Conservation Plans or Natural Community Conservation Plans within or adjacent to the

SHSP. In addition, none have been approved since the SHSP was approved. Therefore, the proposed SPA would have no impact and no programmatic mitigation was required.

At this time there are no HCPs or NCCPs that affect the Development Sites since they are part of the SHSP, so there are no impacts in this regard and no mitigation required.

NO IMPACT

Cumulative Impacts. The SPA Sub-area, including the Development Project sites, does not contain any significant biological resources, habitat or natural drainages, habitat conservation plans, and does not support any listed or otherwise sensitive species of plants or animals to any significant degree. The SPA would allow for increased maximum building heights within the Sub-area from 50 to 60 feet, which would have no demonstrable effect on biological resources or species. The Development sites similarly contain no biological resources. Therefore, the SPA and the Development Project will not make any significant contributions to cumulatively considerable regional impacts to biological resources.

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	■	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	■	☐	☐

The LA Basin has been inhabited for thousands of years by Native American tribes and for over two hundred years by European settlements. Although highly urbanized, it is still possible that archaeological or historical artifacts or even human remains may be found during excavation in native soils in this area.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

A historical resource is defined in CEQA Guidelines Section 15064.5(a)(3) as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period, or method of construction; representing the work of an important creative individual; or possessing high artistic values.

The proposed SPA would allow for increased building heights, however, individual projects would still be required to comply with CEQA, federal and state laws regarding historical resources, and the City's development review process which requires further evaluation if potentially significant historic buildings are present. Therefore, the SPA will have less than significant impacts regarding historical buildings and no programmatic mitigation is required.

The SHSP EIR indicated that some buildings within the SHSP area were over 50 years in age and may have the potential to be considered as a historic resource if they meet local, state, or national criteria for inclusion on a historic register. Any work on a building or structure that meets the criteria to be considered a historic resource could result in significant impact under CEQA if proper treatment does not occur.

The SHSP EIR concluded that implementation of Mitigation Measure MM 8-1 would reduce this potential impact to a less than significant level. The SHSP EIR contains Mitigation Measure 8-1 which requires an historical assessment of any buildings 50 years old or greater (see previous Table 3, Smoky Hollow Specific Plan Mitigation Measures).

The two existing buildings on the Development Sites are both over 50 years old. The Project applicant retained GPA Consulting (GPA) to prepare historical assessments of both Development Sites per applicable guidelines and standards (see Appendix E). The South Site was evaluated in September 2020 and updated in June 2021 while the North Site was evaluated in May 2019 as part of a parking structure that has since been built on that property (140 Oregon Street) before a parcel consolidation. That report was updated in June 2021 in conjunction with the current Project application (GPA 2021a+b).

The GPA assessments concluded that none of the buildings on the Development Sites would be eligible for listing in the California Register under Criteria 1, 2, 3, and 4 due to lack of association with a historic context. Additionally, the resources were evaluated in accordance with Section 15064.5(a)(2)–(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of California Public Resources Code, and they are not considered historical resources for the purposes of CEQA (GPA 2021a+b). These reports meet the requirements of SHSP EIR Mitigation Measure 8-1. The GPA reports demonstrate that Project impacts to historic resources will be less than significant and no Project-specific mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

An archaeological resource is defined in Section 15064.5(c) of the CEQA Guidelines as a site, area, or place determined to be historically significant as defined in Section 15064.5(a) (see definition of historical resource in checklist response 14.a) or as a unique archaeological resource defined in Public Resources Code Section 21083.2 as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest, or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically recognized important prehistoric or historic event or person.

The proposed SPA would only increase the maximum allowable deviation to building heights. However, future development would still be required to comply with CEQA, federal and state laws regarding archaeological and/or tribal resources, including consultation, and the City's development review process. Therefore, the SPA will have less than significant impacts regarding archaeological resources and no mitigation is required. The SPA will therefore have no impacts on archaeological resources and no programmatic mitigation is required.

The Project will develop two sites (North and South) within the Project area. Although minimal grading is required to redevelop the existing onsite buildings, there is the potential that archeological resources may be found on the Development Sites. Since the SHSP EIR indicated archaeological resources may be present due to the region's long occupation by Native American tribes, there is the potential that archeological resources could be impacted during grading. However, implementation of **Mitigation Measures CUL MM 8-2 and CUL MM 8-3 from the SHSP EIR** (shown below) would reduce potential impacts to

archaeological (and/or paleontological) resources from grading on the Development Sites to less than significant levels:

CUL MM 8-2 Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

CUL MM 8-3 In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

Implementation of Mitigation Measures CUL MM 8-2 and CUL MM 8-3 as outlined above will also reduce potential impacts of the Project on archaeological resources to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Based on the fully developed conditions on the site and the extent of disturbance on the entire property and surrounding areas, there is little likelihood that construction would encounter and impact any human remains.

The proposed SPA would increase the maximum allowable building heights. However, future development would still be required to comply with state law (i.e., Health and Safety Code Section 7050.5) regarding human remains if found during grading. With regulatory compliance, the SHSPA will have less than significant impacts regarding human remains and no programmatic mitigation is required.

During grading of the Development Site, it is at least possible human remains could be discovered. In addition to Mitigation Measure CUL MM 8-3, the following measure is recommended to be consistent with state law.

CUL MM 8-4 If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in

accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.

Human remains that are Native American in origin are protected by a number of federal and state laws, and local tribal representatives must be consulted if such remains are found during grading. While the potential for finding human remains during grading on the Project site is considered low, compliance with Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, as specified in Mitigation Measure MM CUL-4, will reduce potential impacts to less than significant levels and no mitigation is required.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Cumulative Impacts. The SPA addresses only building heights within the SPA Sub-area and will not increase FAR, new building footprints, or total allowable building area of new development. Therefore, it will have no impact on construction activities that could disturb previously unknown cultural resources. In addition, the Development Project proposes no increase in FAR or overall square footage of development which could disturb cultural resources. Therefore, the SPA and Development Project will not contribute to any cumulative impacts regarding cultural resources, including the discovery of any human remains.

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	■	☐

The extensive urban uses and people in the LA Basin, including existing uses on the Development Sites, utilize a variety of energy resources for transportation, heating and cooling homes and businesses, and normal daily activities. State laws and regulations require efficient use of energy resources which still largely rely on non-renewable fossil fuels.

a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*
b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

(a-b) The proposed SPA would allow for a ten-foot increase in maximum permissible building heights within the SPA Sub-area. However, individual projects would still be required to comply with CEQA, federal and state laws regarding energy use and conservation, and the City's development review process. Therefore, the SPA will have less than significant impacts regarding the two energy-related significance thresholds, unnecessary consumption of energy and consistency with energy conservation plans, and no programmatic mitigation is required.

The proposed Project consists of the redevelopment of two existing light industrial buildings and a detailed energy analysis was prepared for the Project (MIG 2021a)(Appendix B). Construction activities associated with the Project would require the use of heavy-duty, off-road equipment and construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Heavy-duty construction equipment would be required to comply with CARB's airborne toxic control measures which restricts heavy-duty diesel vehicle idling to five minutes, installing particulate filters on older trucks, etc. It is noted that the design of the Project includes several features that reduce GHG emissions compared to typical new construction activities. For example, the proposed exterior façade consists of concrete masonry blocks with no exterior or interior finishes that eliminates the need to use and transport other materials such as drywall, drywall mud and tape, sheathing, etc. The Project

would also incorporate structural features into its design, avoiding the need to manufacture, transport, and install materials intended to hide or cover structural elements.

Once operational, the proposed Project would consume energy for vehicle trips, electricity and natural gas usage, and water and wastewater conveyance. As estimated using CalEEMod, the Project would consume approximately 1,371 million British thermal units (MMBTU) and1,679 megawatt-hours (mWh) per year. In addition, the Project is also estimated to result in a total of approximately three (3) million annual VMT which, based on the average gasoline fuel efficiency in the Los Angeles County basin, would consume approximately 133,694 gallons of gasoline.[4]

Electricity, natural gas, and gasoline fuel consumption are energy sources necessary to operate and maintain the Project in a safe manner. Lighting is essential for safety and security and natural gas consumption is needed for heating and other temperature-controlled activities. Due to energy efficiency standards being improved over time, the new structures would be more efficient in its energy consumption than the existing structures. For mobile sources, the Project includes mitigation to reduce VMT and fuel consumption (see sub-section 17, Transportation). In addition, the SHSP EIR found that the SHSP would not conflict with the California Air Resources Board (CARB) Scoping Plan, the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS, now called "Connect SoCal"), or the City's EECAP as these plans relate to energy conservation and efficiency.

As a part of the SHSP, the Project would not conflict with or obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. As discussed above, the proposed Project would be built to the latest CALGreen Code and would be more energy efficient than the existing structures at the site and would not conflict with or obstruct a state or local plan for renewable energy. For these reasons, the proposed Project would not result in the wasteful, inefficient, or unnecessary use of energy resources. Impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA affects only building heights within the SPA Sub-area and will not change FAR or total building square footage of new development. Similarly the Development Project does not increase overall development on the Project sites. Development within the SPA, including the proposed Project, will comply with applicable regulations and plans regarding energy conservation. Therefore, the SPA and the Development Project will not contribute to significant cumulative impacts regarding energy.

[4] According to the Board of Equalization (BOE), statewide taxable sales figures indicate a total of 15,365 million gallons of gasoline fuel were sold in 2019 (CEC, 2021). Although exact estimates are not available by County, retail fuel outlet survey data indicates Los Angeles County accounted for approximately 23% of total statewide gasoline sales (CEC, 2020). Based on CARB's EMFAC2017 web database, the overall average fuel economy for all gasoline vehicles in the Basin in year 2020 would be 22.7 miles per gallon.

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	■	☐	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

Southern California contains many earthquake faults as well as localized geologic and soil constraints. New development must be assessed to assure these various earth-related constraints do not affect human health and safety. The area may also contain fossils or other paleontological resources that can be impacted by Project grading in native soils.

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 serves to mitigate the hazard of surface faulting to structures for human occupancy and is intended to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as Alquist-Priolo Earthquake Fault Zones, around the surface traces of active faults and to issue maps delineating these zones. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). The Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. The City is located in a seismically active region in Southern California near several fault systems.

Both the GP EIR and the SHSP EIR indicate there are no active faults beneath or adjacent to the SHSP or the Project Sites. Therefore, there are no impacts and no programmatic mitigation required.

The Development Sites are not underlain by or adjacent to any active faults or fault zones as outlined in the SHSP EIR. The Project is located in the northern portion of the Peninsular Ranges geomorphic province which is characterized by many active, potentially active, and inactive faults, although the site is not within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards (CGS, 2017). In addition, no active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the Development Sites. Therefore, there are no impacts and no mitigation is required.

NO IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Ground shaking is the primary cause of structural damage during an earthquake. Magnitude, duration, and vibration frequency from earthquakes would vary greatly, depending on the fault and its distance from the Project Site.

The SPA allows for up to ten feet of additional building height within the SPA Subarea. The SPA Sub-area could experience moderate to strong ground shaking. All future development within the SHSP area must comply with the stringent seismic design provisions of the latest California State Building Code, as adopted by the City and be required to document seismic compliance with a geotechnical study which will addresses specific project design on a specific site. This compliance will help reduce potential programmatic risks of property loss or hazards to occupants relative to the SPA to a less than significant level and no programmatic mitigation is required.

The Development Sites, as part of the SHSP area, could experience strong seismic ground shaking and related effects in the event of an earthquake on one of the identified active or potentially active faults in the region (SHSP DEIR Table 9-1). The Project Site is underlain by Pleistocene age older dune sand deposits, referred to as the El Segundo Sand Hills, which consist primarily of dense, poorly graded sand (p. 4, GWI 2017)(Appendix F). The Project geotech study estimates the Development Sites will be subject to a peak ground acceleration[5] of 0.6g (p. 6, GWI 2017). Due to the risks associated with strong ground shaking, implementation of **Mitigation Measure GEO-1** is recommended.

MM GEO-1 Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.

The Project will implement Mitigation Measure MM GEO-1 to ensure potential risks (impacts) to public health and safety, as well as building structural safety, from strong ground shaking will be reduced to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

(a.3 - a.4) Liquefaction is the transformation of a deposit of soil from a solid state to a liquefied state, typically during prolonged ground shaking events such as earthquakes, and the soil particles loose cohesion and allow both horizontal and vertical movement. The Project Site is characterized by relatively flat topography and no unusual geographic features exist on the site or in the vicinity.

Future buildings under the SPA may be up to ten feet taller than currently allowed within the SPA Sub-area. However, any future development would still be subject to the requirements of the SHSP, state building code seismic guidelines, and the City's development review process regarding geologic and soil constraints. Therefore, the proposed SPA would have less than significant impacts relative to ground rupture and strong seismic shaking and no programmatic mitigation is required.

The Project Site is part of the SHSP and new projects must prepare a site-specific geotechnical report to identify potential geologic and soil constraints for proposed development. A geotechnical study for the Development Sites was prepared by Geocon West in 2017 (Appendix F). The report evaluated potential risks from seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides.

[5] 0.6g = 60% the force of gravity exerted horizontally

The State of California Seismic Hazard Zone Map for the Venice Quadrangle (CDMG 1999), which covers the Project Site, indicates it is not located in an area designated as having a potential for liquefaction. In addition, the County of Los Angeles Seismic Safety Element (Leighton 1990) indicates that the sites are not located in an area having a potential for liquefaction because the area is underlain by dense Pleistocene age dune sand deposits that are not prone to liquefaction. Also, the historic high groundwater levels in the area are greater than 40 feet beneath the ground surface. Based on this information, the Project geotechnical report concluded the potential for liquefaction and associated ground deformation beneath the sites was very low (p. 8, CWI 2017).

According to the County of Los Angeles Safety Element (Leighton 1990), the Development Sites are not within a "Hillside Area" or an area identified as having a potential for slope instability. Additionally, the Project Site is not within an area identified as having a potential for seismic slope instability (CDMG 1999). There are no known landslides near the Development Sites, therefore, the potential for slope stability hazards to adversely affect the proposed development is considered low (p. 8, CWI 2017).

LESS THAN SIGNIFICANT IMPACTLESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Unstable soil conditions could develop if exposed soils experience rain and wind erosion or disturbance by construction equipment. The Project would be subject to the requirements of a municipal National Pollutant Discharge Elimination System (NPDES) Permit implemented through a Standard Urban Stormwater Mitigation Plan (SUSMP) and the City's Municipal Code. Both the Municipal Code and the SUSMP require application of erosion and sedimentation control best management practices (BMPs) during construction for proper water quality management. Erosion control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment before it can travel offsite. The Project is also required to comply with South Coast Air Quality Management District (SCAQMD) Rule 403 which would reduce the potential for wind erosion by requiring dust control measures during construction.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area. However, any future development would still be subject to state and local water quality and erosion control requirements. Therefore, the proposed SHSPA would have less than significant impacts relative to erosion or loss of topsoil and no programmatic mitigation is required.

For construction of the Development Sites, the Project applicant would be subject to the erosion control requirements of the Municipal NPDES Permit and the City's Municipal Code. Specifically, construction runoff is regulated by the NPDES Construction General Permit which requires identification of a variety of water quality control BMPs to be specified on construction plans and implemented throughout construction. Such BMP requirements may include, but would not be limited to, containing stormwater runoff on-site during rain events, limiting grading during the wet season, covering slopes susceptible to erosion, and retaining non-stormwater runoff, such as runoff from vehicle washing, on site. Through these existing, mandatory regulatory compliance measures, potential water quality impacts during construction would be avoided or reduced to less than significant levels and would avoid conflicts with water quality standards established by the Regional Water Quality Control Board.

In addition, long-term erosion-related impacts could result from operation of the completed Project. While the Project would generate stormwater runoff during Project operation, the proposed increased landscaping and infiltration design would reduce the volume of runoff compared with the existing Project site since the existing site is fully developed with impervious surfaces and minimal landscaping. Further, the Project would be required to have a stormwater management system that is designed to comply with the City's Low Impact Development (LID) requirements which state that the first flush (resulting from the 85th percentile annual rainstorm) which often contains sediment would need to be infiltrated in the soils via infiltration wells, captured in a cistern and treated for on-site re-use, or filtered through bio-retention planters and released. The Project proposes several onsite dry wells to accomplish this runoff treatment requirement.

Like any development within the SHSP, the proposed Project will be required to implement standard erosion control measures (ECMs) during both construction and operation, as documented in the Hydrology and LID studies prepared for the Project by Brandow and Johnston in 2018 and 2020 (Appendix G). To document compliance with various state, regional, and local water quality regulations, the Project is required to document how it will control short-term erosion during construction with a Storm Water Pollution Prevention Plan (SWPPP). In addition, the Project must comply with Municipal Code Section 5-4-9, Construction Activity Stormwater Measures which include BMPs as outlined in the Project water quality studies (Appendix G). Finally, the Project must document how it will control long-term erosion or water pollution during operation through implementation of a Water Quality Management Plan (WQMP). With these actions, the Project will have less than significant impacts related to erosion with implementation of standard regulatory compliance and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The Project Site has a relatively flat topography with no hillsides onsite or in the surrounding area. Further, the Project site is not located on a cliff, mountainside, bluff, or other geographic feature with stability concerns.

Future buildings under the SHSPA may be up to ten feet taller within the SPA Sub-area, but any future development would still be subject to the requirements of the SHSP and the City's development review process regarding geologic and soil constraints. Therefore, the proposed SPA would have less than significant impacts relative to unstable geologic or soil conditions and no programmatic mitigation is required.

The Development Sites are within the SHSP and the SHSP EIR indicated the SHSP would have no constraints relative to unstable geologic units. The site-specific geotechnical report considered the potential risks to the sites from landslides, lateral spreading, subsidence, liquefaction, or collapse to be relatively low (CWI 2017). Therefore, the proposed Project would have less than significant impacts relative to unstable geologic or soil conditions and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area. However, any future development would still be subject to the requirements of the Uniform Building Code regarding foundation design and soil stability, and the City's General Plan[6] and development review process regarding geologic and soil constraints. With implementation of regulatory compliance and General Plan Safety Element Goal PS2, future development under the proposed SPA would have less than significant impacts relative to expansive soils and no programmatic mitigation is required.

The Project-specific geotechnical report for the Development Sites stated that…"based on the predominantly granular nature of the soils encountered during site exploration, the soils are considered to be "non-expansive" (p. 13, CWI 2017). Impacts will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but any future development would still be subject to the requirements of the SHSP and the City's development review process regarding geologic and soil constraints. In addition, the SHSP requires all new development to connect to the local sewer system. Therefore, the proposed SHSPA would have no impacts relative to septic or alternative wastewater systems and no programmatic mitigation is required.

The Development Sites will connect to the existing sewer system and so their development would also have no impacts related to septic tanks and soil limitations. The development plans for the Project indicate both sites will be connected to the local sewer system so there are no impacts relative to soil conditions and septic or alternative wastewater systems (Appendix A).

NO IMPACT

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project Site does not contain any unique geological features or formations and it has been highly disturbed so the potential for finding paleontological resources (fossil materials) is considered low. Future buildings under the SPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but any future development would still be subject to SHSP EIR Mitigation Measures CUL MM 8-2 and CUL MM 8-3 which require monitoring in the event paleontological resources are found during grading. Therefore, the proposed SPA would have no impacts relative to paleontological resources and no mitigation is required.

Regarding the Development Sites, the SHSP EIR stated there were no indications of unique paleontological resources within the SHSP area but it was possible that subsurface native soils could contain fossilized remains. Previous development activity has disturbed soils,

[6] Safety Element Goal PS2 with Program PS-2.1A and Policies PS2-2 and PS2.2A

and only grading that extends deeper than prior disturbance is likely to encounter fossilized resources. Contact with such resources during construction activities could result in significant impacts. The Development Sites are within the SHSP and implementation of Mitigation Measures CUL MM 8-2 and CUL MM 8-3 from the SHSP EIR would reduce potential impacts of any grading associated with developing the Development Sites to less than significant levels (as outlined in sub-section 5.b and as shown below).

CUL MM 8-2 Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

CUL MM 8-3 In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

With implementation of EIR Mitigation Measures CUL MM 8-2 and CUL MM 8-3, potential impacts of the Project on paleontological resources will be reduced to less than significant levels.

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Cumulative Impacts. The SPA only increases building heights and will not increase FAR or the total amount of development expected within the SPA Sub-area, nor will the Development Project increase FAR or the total amount of development on the Project site. The SPA and Development Project would therefore not increase potential risks to new development from geologic or soil constraints. All potential geological and soil-related impacts can be reduced to less than significant levels by careful design and regulatory compliance, and project-specific mitigation when needed similar to that recommended for the Development Project. Therefore, the SPA and the Development Project will not make any significant contributions to cumulatively considerable regional impacts related to geology, soils, or paleontological resources.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	■	☐	☐

In recent years concerns have been raised about greenhouse gas (GHG) emissions like carbon dioxide and their influence on global warming and climate change. New development must be assessed to determine if its GHG emissions exceed established thresholds and if so what measures must implement to help incrementally reduce its GHG emissions.

a. Would the project generate Greenhouse Gas emissions, either directly or indirectly, that may have a significant impact on the environment?

A detailed GHG assessment was prepared for the Project (MIG 2021b)(Appendix B) in August 2021. The proposed SPA would allow for a ten-foot increase in maximum permissible building heights within the SPA Sub-area. However, individual projects would still be required to comply with CEQA, federal and state laws regarding energy use and conservation (and therefore air quality and GHG), state laws and regional regulations regarding air quality, and the City's development review process. Therefore, the SPA will have less than significant impacts regarding greenhouse gas emissions and no programmatic mitigation is required.

The Project would generate GHG emission from both short-term construction and long-term operational activities. A detailed GHG emissions assessment was prepared for the Project (MIG 2021b)(Appendix B). The assessment used the California Emissions Estimation Model (CalEEMod V. 2020.4.0) program recommended by SCAQMD to estimate construction and operational emissions using the same default assumptions and Project-specific variables applied to the air quality emissions estimates. Construction activities would cease to emit GHG upon completion, unlike operational emissions that would be continuous year after year. The SCAQMD recommends amortizing construction GHG emissions over a 30-year period and including with operational emissions estimates. This normalizes construction emissions so that they can be grouped with operational emissions and compared to appropriate thresholds, plans, etc. Once operational, the proposed Project would generate GHG emissions from area, stationary, mobile, water/wastewater, and solid waste sources.

Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the Project site during demolition, site preparation, grading, building construction, paving, and architectural coating

activities. Construction activities would cease to emit GHG upon completion, unlike operational emissions that would be continuous year after year. The SCAQMD recommends amortizing construction GHG emissions over a 30-year period and including with operational emissions estimates. This normalizes construction emissions so that they can be combined with operational emissions and compared to appropriate thresholds, plans, etc. Once operational, the Project would generate GHG emissions from area, stationary, mobile, water/wastewater, and solid waste sources. The proposed Project's total operational GHG emissions are estimated to be 1,256 metric tons of CO_2 equivalents ($MTCO_2e$) per year (Table 6, MIG 2021a).

The Project's GHG Emissions Assessment concluded that the potential increase[7] in GHG emissions would be below both of the SCAQMD's recommended GHG emissions thresholds - the Tier 3 general land use threshold of 3,000 $MTCO_2e$ and the Tier 3 commercial use threshold of 1,400 $MTCO_2e$. In addition, the Project's GHG emissions would also be below an adjusted Project-specific GHG emissions goal of 1,800 $MTCO_2e$ per year which takes into account post 2020 GHG emissions targets towards which the state is currently working[8]. This emissions estimate is a "worst case" because it does not take into account any emission reductions associated with VMT mitigation (MM VMT-1 through VMT-6) included in the VMT memorandum prepared for the Project (Translutions 2021) as outlined in sub-section 17, Transportation. With the six recommended VMT mitigation measures, GHG emissions from the North Site (net increase of 556 $MTCO_2e$) and the South Site (net increase of 560 $MTCO_2e$) would total 1,116 $MTCO_2e$, or approximately 8% lower than the worst-case emissions estimate of 1,256 $MTCO_2e$. Therefore, the Project would not generate GHG emissions that exceed SCAQMD CEQA thresholds or otherwise result in a significant impact on the environment. Impacts are less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions. The City adopted the City of El Segundo Climate Action Plan (El Segundo CAP) in 2017 to help implement compliance with the City's GHG emissions reduction goals as well as State and federal regulations that include Assembly Bill (AB) 32 (Chapter 488, Statutes of 2006), Senate Bill (SB) 32 (Chapter 249, Statutes of 2016), and the 2017 Climate Change Scoping Plan Update GHG emission reduction goals. The El Segundo CAP was prepared in accordance with Section 15183.5(b) of the State CEQA Guidelines for qualified plans to support tiering for project level analyses, and states "Within the CEQA process, a qualified CAP framework offers the ability to streamline future CEQA greenhouse gas analyses by being able to tier off the climate action plan."

7 Net increase which takes into account "new" emissions from the Project minus emissions from the existing onsite uses

8 The 1,800 $MTCO_2e$ per year goal was developed by taking the SCAQMD's Tier 3 threshold of 3,000 $MTCO_2e$ per year, which was the threshold to reduce emissions back to 1990 levels, and reducing it by 40 percent (3,000 $MTCO_2e$/yr * (1 - 0.4) = 1,800 $MTCO_2e$/yr). This reduction is consistent with the GHG reductions required by year 2025 to meet GHG reductions required under Senate Bill 32 (to reduce GHG emissions to levels 40% below 1990 levels by 2030). This linear reduction approach oversimplifies the threshold development process. The City is not adopting nor proposing to use 1,800 $MTCO_2e$ as a CEQA GHG threshold for general use; rather, it is only intended for to provide additional context and information on the magnitude of this proposed Project's GHG emissions.

The proposed SPA would allow for a ten-foot increase in maximum permissible building heights within the SPA Sub-area. However, individual projects would still be required to comply with CEQA, federal and state laws regarding energy use and conservation (and therefore air quality and GHG), state laws and regional regulations regarding air quality, and the City's development review process. In addition, the SHSP EIR found the SHSP would not conflict with the California Air Resources Board (CARB) Scoping Plan, the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS), now called "Connect SoCal", or the City's EECAP. Therefore, the SPA will have less than significant impacts regarding consistency with applicable GHG plans and no programmatic mitigation is required.

Since the Project is a part of SHSP, its impacts would also be less than significant with implementation of the following mitigation measures from the EECAP recommended in the SHSP EIR.

EECAP 4.1 *Encourage or Require Energy Efficiency Standards Exceeding Title 24.* This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.

EECAP 5.2 *Promote Water Efficiency Standards Exceeding SB X7-7.* In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.

With implementation of Mitigation Measures EECAP 4.1 and 5.2, the Project is consistent with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases. Impacts will be less than significant.

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Cumulative Impacts. New development will result in the emission of greenhouse gases (GHGs) in the future. However, the SPA only increases building heights within the SPA Sub-area and would not result in increased FAR or total square footage of new development over that planned in the SHSP. In addition, the GHG study for the Development Project indicated it would generate less than significant levels of GHGs due to its type, size, project design and with implementation of GHG mitigation from the SHSP. The study also indicated the Project will be consistent with GHG regulatory plans. Therefore, the SPA and Development Project will not make significant contributions to regional GHG emissions and are consistent with GHG regulatory plans.

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	■	☐	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	■

The Project Site is situated in the highly urbanized Los Angeles Basin in which a vast array of hazardous materials are handled, stored, transported, and utilized on a daily basis, especially in medium and heavy industrial processes. New development must be evaluated to determine if it will affect or be affected by a variety of local hazards, including hazardous materials, either onsite or in the surrounding area. If hazards would threaten public health or safety, the development must implement appropriate measures to reduce potential risks.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

In office settings, small amounts of commercially available hazardous materials may be used for regular cleaning and maintenance activities which would neither require the storage, use, or disposal of substantial amounts of hazardous materials, nor generate significant quantities of hazardous waste. This usage would not require the storage, use, transport, or disposal of quantities of hazardous substances that would be subject to any special handling or permitting requirements.

The SHSP does not directly address hazardous materials but the City's CEQA and planning review processes for future development within the SHSP will identify any potential issues regarding hazardous materials and/or contamination and recommend appropriate site- and project-specific mitigation. Therefore, the SPA will have less than significant impacts in this regard and no programmatic mitigation is required with standard regulatory compliance.

The Project is a part of the SHSP and proposes office and commercial-related uses consistent with the SHSP. The Project will likely utilize a range of commercial-grade hazardous materials for routine maintenance, manufacturing, cleaning, etc. These are likely to include paints, cleaning agents, etc. However, local businesses and the transportation of such materials must comply with various Federal and State regulations for the safe management of such materials. Although El Segundo Boulevard just south of the site is a designated truck route in the City, it is unlikely that transportation of hazardous materials along this route would significantly impact uses on the Development Sites. The amount and type of hazardous materials that future uses on these sites would store, transport, or use would be minimal, so impacts involving the routine transport, use, or disposal of hazardous materials would be less than significant and no mitigation needed with standard regulatory compliance.

LESS THAN SIGNIFICANT IMPACT

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Based on the age of the buildings, the prior uses, and proposed construction activities, the Project has the potential to result in accidental releases of hazardous substances which are addressed in the following subsections.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but any future development would still be subject to CEQA and the City's development review process which would identify potential or past contamination on a particular development site and require remediation prior to or in concert with grading and development. Therefore, the proposed SHSPA would have less than significant impacts relative to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and no programmatic mitigation is required.

Any grading of the Development Sites may result in "upset conditions" if onsite soils contain hazardous materials. The South Site has been determined to have no past or current issues regarding contamination by hazardous materials. However, the northeastern portion of the North Site had experienced past soil and groundwater contamination by tetrachloroethene (PCE) from offsite sources and a source associated with the historical operations of the Chemical Milling International Corporation (CMIC) from 1959-89 and more recently by International Rectifier (IR) that formerly occupied a site across the street. The North Site has been subject to a variety of testing and remediation procedures for PCE contamination from 2015 to 2021. This site had soil, soil vaper, and groundwater contamination in the past and still contains a monitoring grid that will be removed as part of the proposed Project based on feedback from the State Department of Toxic Substances Control (DTSC).

According to the Technical Memorandum prepared by SCS Engineers in March 2021 (Appendix H), the North Site has been fully characterized for hazardous material contamination and has been fully remediated using Soil Vapor Extraction (SVE). As a result of a "Data Gap Investigation" in 2017-2018, remediation of the southern half of the Property was determined by the state Department of Toxic Substances Control (DTSC) to be complete and indoor air sampling was conducted to assess the potential for vapor intrusion into structures on the northern half of the North Site (SCS 2017). Four rounds of indoor air sampling (two "summer" and two "winter" events) were conducted and there was no evidence of significant vapor intrusion in those buildings (p. 6, SCS 2021).

Local groundwater was also sampled from 2017 to 2019 and the highest concentrations of PCE and its degradation compounds (trichloroethene and cis-1,2-dichloroethene) were consistently detected in an off-site, cross-gradient well installed as part of the Data Gap Investigation and which is located directly downgradient of historical PCE releases from the IR facility (SCS 2019). These releases have contaminated the groundwater beneath the Project site.

A health risk assessment (HRA) was conducted in 2020 and found that contaminants were well within their respective "risk management ranges" and the resulting cancer risk estimates were within the EPA's risk management range (SCS 2020). The North Site is currently zoned commercial/industrial use and the technical memorandum recommended recordation of a Land Use Covenant (LUC) for the property. The applicant and DTSC entered into a LUC dated November 29, 2021 (Appendix H) which specifically restricts uses of and activities that can occur on the property (e.g., no residences or residential occupants, no wells dug, etc.). To further minimize the potential for vapors to migrate from the subsurface into indoor air spaces, the technical memorandum recommended that the vertical and lateral well network for the vapor extraction system be removed and properly decommissioned and the groundwater monitoring wells and semi-permanent vapor probes on the property also be abandoned (p. 8, SCS 2021).

It should be noted that governmental database records indicate there is currently a Cortese site southwest of Grand and Kansas (IRC) but records show it (the Project site) has already been remediated. DTSC recommended several actions that still need to occur relative to the North Site which have been incorporated into **Mitigation Measures HAZ-1 and HAZ-2**.

In June 2021, the applicant contacted DTSC regarding the proposed caretaker units on the North Site in a commercial/industrial zone. In an email dated July 1, 2021, DTSC indicated they had evaluated the potential for human health risks associated with the planned caretaker units. Based on consultation with the DRSC Toxicologist, DTSC approved the

caretaker units. Nonetheless, the caretaker units were subsequently removed from the development application for unrelated reasons. However, the email also asked for a Soils Management Plan (see **MM HAZ-3** below) which would be a final condition of approval from DTSC for the Project Parcel E property (1330 E. Franklin Street).

The Phase I Environmental Site Assessments (ESAs) prepared for both Development Sites determined there may be a potential hazard for asbestos-containing materials (ACMs) which should be fully identified and remediated as appropriate prior to or in conjunction with building construction and reconstruction. The ESAs also recommended that operation and maintenance programs (O&MPs) for ACMs be put in place until demolition or interior reconstruction of the onsite buildings could occur (p. 6, A&W 2014a+b)(Appendix H). The objective of the O&EMPs was to implement a practical management approach to controlling identified ACMs within the subject properties, cleanup existing contamination, minimize future fiber release by controlling disturbance of ACMs, and monitor ACM conditions until they are removed from the two sites (see **MMM HAZ-3** below).

The following measures are recommended to implement the final stages of site characterization and remediation identified in the Data Gap Investigation for the North Site:

MM HAZ-1 Prior to issuance of a Certificate of Occupancy for the North Site (1330 E. Franklin Street), the applicant shall remove and properly decommission the vertical and lateral well network of the former vapor extraction system including abandonment of any groundwater monitoring wells and semi-permanent vapor probes on the property. This measure shall be implemented to the satisfaction of the City with input and regulatory oversight and written signoff by DTSC.

MM HAZ-2 Prior to issuance of a grading permit for the North Site (1330 E. Franklin Street), the applicant shall prepare and process a Soils Management Plan through the state Department of Toxic Substances Control (DTSC) for review and approval. Prior to issuance of a building permit, the applicant shall provide written confirmation from DTSC to the City that the Soil Management Plan has been implemented as approved.

MM HAZ-3 Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1330 E. Franklin Street), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.

With implementation of Mitigation Measures HAZ-1 through HAZ-3, the Project's impacts relative to hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be reduced to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Prior activities on the Project Site may require clean-up and remediation efforts the during the Project construction period as outlined in Section 9.b above. The potential treatment efforts would be temporary and limited to the Project site premises and therefore the risk of release and public exposure is very limited.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but any future development would still be subject to CEQA and the City's development review process which would identify potential or past contamination on a particular development site within a quarter-mile of the El Segundo Middle School and require remediation prior to or in concert with grading and development. Therefore, the proposed SHSPA would have less than significant impacts relative to hazardous emissions nears schools, and no programmatic mitigation is required.

Both Development Sites are within a quarter mile of El Segundo Middle School which is just north of E. Grand Avenue. on Center Street. The air quality assessment for the Project (MIG 2021a, Appendix B) included a health risk evaluation of Project grading and construction emissions and determined they would be well below the Local Significance Thresholds (LSTs) established by the South Coast Air Quality Management District (SCAQMD). The primary pollutants of concern during grading and any excavation of the site would be particulate matter (i.e., dust or PM) especially fine particulates ($PM_{2.5}$) which due to their small size can travel some distance away from the construction site depending on local conditions. However, standard dust control measures required by the SCAQMD under its Rule 403 are intended to limit the potential dispersion of particulates from construction sites, and the application of standard measures such as watering grading areas, covering trucks hauling soil, etc. will help reduce potential particulate dispersion from the Developments Sites as documented in Section 3, *Air Quality*.

As outlined in Section 9.b above, the North Site has experienced soil contamination in the past and Mitigation Measure HAZ-3 requires the applicant to prepare and process a Soils Management Plan through the state Department of Toxic Substances Control to assure there will be no significant on- or offsite impacts related to release of any hazardous materials during grading of that site.

Compliance with established regulatory requirements regarding remediation of the North Site and the fact the Project is only proposing office and commercial related uses means that the Project will have less than significant impacts related to emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter mile of school and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but any future development would still be subject to CEQA and the City's development review process which would identify potential or past contamination on a particular development site and require remediation prior to or in concert with grading and development. Therefore, the proposed SHSPA would have less than significant impacts relative to being on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and no programmatic mitigation is required.

Past contamination on the North Site is described in detail in sub-section 9.b above. In addition to ongoing regulatory compliance, impacts related to listed hazmat sites will be reduced to less than significant levels by implementation of **Mitigation Measures MM HAZ-1 through HAZ-3** as described in sub-section 9.b above.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

In compliance with legislative requirements, the Los Angeles County Airport Land Use Commission (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP) last revised on December 1, 2004. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also intended to provide for the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height in areas adjacent to each of the county's public airports.

The SHSP EIR indicated the SHSP was outside the Airport Influence Area (AIA) for the Los Angeles International Airport (LAX) so the SPA sites are not within the Comprehensive Land Use Plan (CLUP) for LAX. Therefore, the SPA would not interfere with any airport land use plan or otherwise create an airport-related safety hazard and thus there are no impacts and no programmatic mitigation is required.

The Project is part of the SHSP so similarly it would not interfere with any airport land use plans or activities. There will be no impacts and no mitigation is required.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The El Segundo Standardized Emergency Management System (SEMS) Emergency Operations Plan (EOP) addresses the City's planned response to extraordinary emergency situations and incorporates the Emergency Operations Center (EOC), phone systems, and other infrastructure changes that occurred since the first edition of the plan was created. The objective of the EOP is to centralize coordination of all necessary personnel and facilities of the City into an organization capable of responding to any emergency. The EOP addresses the four fundamental elements of comprehensive emergency management: Mitigation; Preparedness; Response; and Recovery.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but the SPA does not change the location of planned uses so access and emergency planning needs of future development would be similar to that under the current SHSP. The SHSP EIR stated that implementation of the SHSP would not interfere with the City's adopted Emergency Operations Plan (EOP) because SHSP projects would be reviewed to ensure that new development would not create barriers to evacuation plans. In addition, the Fire Department and Police Department would be involved in any plans to convert existing two-way roads to one-way roads and implement angled parking to ensure emergency access needs can be met. Therefore, impacts of the SPA would be less than significant and no programmatic mitigation is required.

The Development Sites are located within the SHSP with access off of El Segundo Boulevard (a major arterial) with good access from three secondary streets (Kansas Avenue, E. Franklin Avenue, and Oregon Street). The two site plans indicate they will have adequate emergency access (previous Exhibits 8 and 9). Therefore, the Project will have less than significant impacts related to emergency plans and evacuation and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The Project Site is located in a highly urbanized area where there are no wildlands, so development of the proposed Project would not expose buildings or people to wildland fire hazards. Although this is not a wildfire prone area, the El Segundo Fire Department (ESFD) reviews development project site plans regarding fire protection and emergency access.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but there are no wildland areas in or adjacent to the SHSP. The City is a highly urbanized area and no part lies within a Very High Fire Hazard Severity Zone. Therefore, the SPA will have no impacts to or from future development under the SHSPA related to wildland fires and no programmatic mitigation is required.

The two Development Sites are within the SHSP area and so they are not within a wildland fire risk area or a high or very high fire hazard severity zone, as outlined in the SHSP EIR. The ESFD has already reviewed and approved the site plans regarding fire protection and emergency access assuming compliance with their standard conditions of approval. Therefore, there would be no impacts and no mitigation is required.

NO IMPACT

Cumulative Impacts. The SHSP EIR indicated future development in the SHSP, which includes the SPA Sub-area, would have less than significant impacts relative to hazardous materials (hazmat) with regulatory compliance and remediation if necessary, based on appropriate characterization studies. Such studies on the Development Sites indicate the North Site was contaminated in the past and this Initial Study recommended appropriate mitigation with regulatory oversight from the state as necessary. With implementation of recommended mitigation and continued regulatory compliance, the Development Project will have less than significant impacts relative to hazmat issues. In these ways, the SPA and the Development Project will not make significant contributions to cumulative hazmat impacts.

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

The Project Site is near the Pacific Ocean and once contained natural drainages that are now improved and channelized. CEQA requires new development to be evaluated to determine if it would affect the quality or supply of surface or groundwater, natural drainage patterns, would be subject to flooding or erosion (that affects water quality), or be subject to other water-related hazards,

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Section 402 of the federal Clean Water Act requires National Pollutant Discharge Elimination System (NPDES) permits for stormwater discharges from storm drain systems to waters of the United States. The City is a co-permittee of the Los Angeles County storm drain system permit or "municipal permit" (Order No. R4-2012- 0175-A01; NPDES No. CAS004001), which was adopted November 8, 2012, and amended June 16, 2015, by the State Water Resources Control Board (WQ2015-0075). The proposed Project would be subject to the requirements of the Municipal NPDES Permit and the City's Municipal Code, which incorporates by reference the County of Los Angeles Low Impact Development (LID) Ordinance (Ordinance Number 2013- 0044). The Municipal Code requires application of erosion and sedimentation control Best Management Practices (BMPs) during construction for proper water quality management. Erosion control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. BMPs must be designed to prevent erosion and construction pollutants from entering the City's storm drain and receiving waters.

As part of its normal project approval and construction oversight activities, the City monitors compliance with stormwater BMP requirements. The Los Angeles County Municipal Permit also requires that stormwater pollution prevention plans (SWPPPs) be prepared for all construction projects with disturbed areas of one acre or greater. The statewide NPDES Construction General permit maintained by the State Water Resources Control Board also requires a SWPPP for construction projects that involve one or more acres of land disturbance. The SWPPP is required to outline the best management practices that would be incorporated during construction. These BMPs would minimize construction-induced water pollutants by controlling erosion and sediment, establishing waste handling/disposal requirements, and providing non-stormwater management procedures.

Further, the Los Angeles Regional Water Quality Control Board (LARWQCB) prepares and maintains a basin plan which identifies narrative and numerical water quality objectives to protect all beneficial uses of the waters of that region. The basin plan strives to achieve the identified water quality objectives through implementation of Waste Discharge Requirements (WDRs) and by employing three strategies for addressing water quality issues: control of point source pollutants, control of nonpoint source pollutants, and remediation of existing contamination. The Project site is located in the Los Angeles region and is, therefore, covered under the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan).

Future buildings under the SPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but this will not significantly increase the amount of impervious surfaces that would be constructed within the SHSP area. The City is already a highly urbanized area and new development is subject to various state and local regulations regarding surface and groundwater quality. Therefore, the SPA will have less than significant impacts related to water quality standards, waste discharge requirements, or degradation of surface or groundwater quality and no programmatic mitigation is required.

Development of the proposed Project under the SHSP would be required to comply with the federal and state laws and regulations regarding both short- and long-term water quality of both surface and groundwater sources.

All future development under the SHSP would have to be consistent with the requirements of the Los Angeles Basin Plan and the Municipal Separate Storm Sewer System (MS4) General Permit as administered by the LARWQCB. To achieve consistency with those regional water quality control plans, the City requires implementation of BMPs consistent with the Los Angeles Countywide Stormwater Quality Management Plan (SQMP) standards. Future projects within the SHSP must prepare a Storm Water Pollution Prevention Plan (SWPPP) to control short-term construction-related water quality impacts and a Water Quality Management Plan (WQMP) to control long-term operational water quality impacts.

Projects that disturb one or more acres of soil, like the proposed Project, are required to obtain coverage under the General Construction Permit. Before the City issues grading permits, an applicant must prepare a SWPPP to control common pollutants such as suspended soil in storm water runoff from leaving a project construction area. The SWPPP would include an Erosion Control Plan (ECP) and other appropriate BMPs.

The SHSP EIR concluded that construction of projects within the SHSP would have less than significant short-term impacts on surface water quality and would not significantly impact the beneficial uses of receiving waters as long as they complied with NPDES and City Municipal Code requirements.

The Project proposes office-related uses on the two Development Sites which represent a low potential for additional future contamination or degrade water quality impacts. The Project will also use available piped potable water supplies from the City rather than any direct groundwater use.

SHSP Section 3.6.3 (Stormwater Drainage) states the City will require developers to integrate Low Impact Development (LID) strategies including site designs that maximize permeable surface cover and infiltration potential. Finally, the City's planning review process requires preparation of a Water Quality Management Plan (WQMP) to demonstrate how future development will protect water quality over the long-term. Compliance with these regulatory programs will assure that the SHSP would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality. With implementation of existing regulations and SHSP policies, the Project's impacts related to water quality standards, waste discharge requirements, or degradation of surface water or groundwater quality would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Project Site is located within the jurisdiction of the West Basin Municipal Water District (West Basin). West Basin purchases imported water from the Metropolitan Water District of Southern California (MWD) and wholesales the imported water to cities and private companies in southwest Los Angeles County, including El Segundo. Water utility service to the Project site is provided by the El Segundo Public Works Department Water Division.

The groundwater supply is extracted from the West Coast Groundwater Basin, which covers approximately 140 square miles and underlies much of the West Basin service area,

including El Segundo. The average amount of water extracted from the groundwater basin is approximately 36,000 acre-feet per year. Because the basin is adjudicated (i.e., the amount to be extracted each year has been determined by a court decision), the rights to the amount of groundwater extracted each year remain virtually the same. The Water Replenishment District of Southern California (WRD) is responsible for maintaining and replenishing the basin.

Future buildings under the SPA may be up to ten feet taller than currently allowed within the SPA Sub-area. However, this will not significantly increase the amount of surface or groundwater consumed within the SHSP area because the total amount of new development in the SHSP would not increase from its current approved limit. In addition, the City is already a highly urbanized area and water supplies for new development are strictly regulated. Therefore, the SPA will not substantially decrease groundwater supplies or substantially interfere with groundwater recharge or sustainable groundwater management of the basin. Impacts would be less than significant and no programmatic mitigation is required.

The Project Site is located within the West Coast Basin portion of the Los Angeles Coastal Plain groundwater basin. Development of the proposed Project under the SHSP would be required to comply with the many federal and state laws as well as local regulations regarding water supplies. However, the SHSP EIR stated that since groundwater was not used as a water supply source for the City, development under the SHSP would not result in the use of or deplete groundwater supplies or recharge. Based on the most recent groundwater monitoring from October 2019, depth to groundwater beneath the Project Site averages 106 feet below ground surface (bgs) and ranges from 17 to 21 feet above mean sea level (SCS 2021).

The Project proposes a total of 90,172 square feet of new office uses which could generate up to 120 new employees[9] on the two Development Sites. Based on an average consumption of 100 gallons per employee per day, including landscape irrigation, the Project will consume approximately 12,000 gallons per day or 13.4 acre-feet per year of potable water. This incremental additional consumption represents a less than significant impact on local surface or groundwater supplies (see Subsection 19, Utilities-Water).

LESS THAN SIGNIFICANT IMPACT

c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

(i) result in substantial erosion or siltation on- or off-site?

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

(iv) impede or redirect flood flows?

[9] Assumes 750 square feet per office employee as a generation rate

The existing site and surrounding area are fully developed with impervious surfaces and minimal landscaping. Development projects would be required to have a stormwater management system that is designed to comply with the City of El Segundo's LID requirements, which state that the first flush (resulting from the 85th percentile annual rainstorm) would need to be infiltrated in the soils via infiltration wells, captured in a cistern and treated for on-site re-use, or filtered through bio-retention planters and released.

Future buildings under the SPA may be up to ten feet taller than currently allowed within the SPA Sub-area, but this will not significantly increase the amount of impervious surfaces that would be constructed within the SHSP area. The City is already a highly urbanized area, there are no drainage channels or other major improvements within the SHSP area, and future development is subject to various state and local regulations regarding runoff, flood control, and short- and long-term surface and groundwater quality. Therefore, the SPA will have less than significant impacts related to alter the existing drainage pattern of the site or area and no programmatic mitigation is required.

The SHSP EIR stated that all new development will occur on properties already developed, including the proposed Project. As a result, storm water and irrigation runoff will continue to drain into the City's existing curb and gutter system. Detailed hydrology/low impact development reports were prepared for both Development Sites by Brandow and Johnston (Appendix G). The proposed development will install subsurface detention basin structures or drywells as outlined below:

South Site. Based on the hydrologic analysis, the total disturbed area post-development stormwater run-off for a 25-year storm event is approximately 0.54 cubic feet per second (cfs) and will produce 4,196 cubic feet (cf) of runoff volume in a 24-hour period. The 85th percentile run-off for a 24-hour storm is approximately 0.066 cfs. This run-off will flow through a storm drain pipe system then flow through drywells (to be installed) and infiltrate down into the soil and/or eventually discharge to the streets. In order to comply with the City and County Low Impact Development (LID) standards, all of the proposed building's roof drainage will be diverted to the proposed "drywells" (B&J 2020)(Appendix G).

North Site. Based on the hydrologic analysis, the total site post-development stormwater run-off for a 25-year storm event is approximately 3.01 cfs and will produce 19,458 cf of runoff volume in a 24-hour period. The 85th percentile run-off for a 24-hour storm is approximately 0.33 cfs. This run-off will flow through a storm drain pipe system then flow through two drywells (to be installed) and infiltrates down into the soil and/or eventually discharge to the streets. In order to comply with the City and County's Low Impact Development (LID) standards, all of the proposed building's roof drainage will be diverted to the proposed drywells (B&J 2018).

The drainage studies and Preliminary WQMP also demonstrate the Project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Compliance with state and local regulations for new development would improve storm water retention and quality.

(i) The Project drainage studies demonstrate that it would not create erosion, siltation, or flooding within or outside of the SHSP.

(ii) The drainage studies demonstrate the Project would not create any new drainage facilities or alter the courses of any existing drainage infrastructure. The SHSP would not create any new drainage facilities or alter the courses of any existing drainage

infrastructure, and the EIR concluded the SHSP would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems.

The drainage studies for the Development Sites demonstrate the Project will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site (pp.2-3, B&J 2018 and pp. 2-3, B&J 2020)(Appendix G).

(iii) The drainage studies demonstrate the Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. In addition, the Project is commercial (office) in nature and so would not contribute substantial additional sources of polluted runoff.

(iv) Finally, the Development Sites are not within a 100-year flood hazard area, as documented in the GP EIR and the SHSP EIR, so future development under the SHSP would not place housing or structures within a 100-year flood hazard area. Therefore, the Project would not alter or impede flood flows since it is a part of the SHSP.

Development of the proposed Project within the SHSP would also be required to comply with the many federal and state laws and regulations regarding both short- and long-term water quality so its water quality impacts would also be less than significant and no mitigation is required. As a part of the SHSP, the Project would also not alter existing drainage patterns or infrastructure so impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

According to the Los Angeles County Tsunami Inundation Maps10, the Project Site is not located within a tsunami inundation area. There are no bodies of water located on or near the Project site, therefore, inundation caused by a seiche would not occur.

The SPA is part of the SHSP and only addresses building height limits. The SHSP EIR concluded that, due to the location and physical characteristics of the City, the SHSP would have less than significant impacts with respect to seiches, tsunamis, or mudflows. Since there are no impacts, there would be no opportunity for additional polluted runoff from these sources. Therefore, the SPA will have no impacts and no programmatic mitigation is required.

The Development Sites are located approximately 1.5 miles from the Pacific Ocean and the average elevation ranges from 98 to 136 feet above mean sea level. The County of Los Angeles Seismic Safety Element (Leighton 1990) and the State of California Tsunami Inundation Map for Emergency Planning for the Venice Quadrangle (CGS 2009), the site is not located in a tsunami inundation area and the potential for a tsunami-related impacts at the site is considered very low. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the Development Sites. Flooding from a seismically-induced seiche is considered unlikely. The site is within an area of minimal flooding (Zone X) as defined by the Federal Emergency Management Agency (FEMA 2017)(LACDPW 2017)(CGS 2009)(p.8, Geocon 2017).

10 California Emergency Management Agency, 2009. Tsunami Inundation Map for Emergency Planning, Venice Quadrangle.

Earthquake-induced flooding is inundation caused by failure of dams or other water-retaining structures due to earthquakes. Based on a review of the Los Angeles County Safety Element (Leighton 1990), the sites are not located within a potential inundation area for an earthquake-induced dam failure. Therefore, the probability of earthquake-induced flooding is considered very low (p. 8, Geocon 2017). Based on available information, these various water-related risks or potential impacts will be less than significant for the Project.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project is designed to be consistent with the LA Basin Plan, Statewide NPDES General Construction Permit and Municipal Code/LA County LID Standards for water quality control, for both construction and site improvements. As mentioned above, the West Basin Municipal Water District's 2020 Urban Water Management Plan (UWMP) states that the estimated 2020 water supply consists of: 19 percent groundwater; 52 percent imported water; 12 percent recycled water; 17 percent water conservation savings; and less than 1 percent desalinated water. The groundwater supply that serves El Segundo is extracted from the West Coast Groundwater Basin and the Water Replenishment District of Southern California (WRD) is responsible for maintaining and replenishing the basin. Limited natural replenishment of the basin's groundwater supply occurs through the underflow from the Central Groundwater Basin and local precipitation when available.

Future buildings under the SHSPA may be up to ten feet taller than currently allowed within the SPA Sub-area. However, this will not significantly increase the amount of surface or groundwater consumed within the SHSP area because the total amount of new development in the SHSP would not increase from its current approved limit. In addition, the City is already a highly urbanized area and water supplies for new development are strictly regulated. Therefore, the SPA will not substantially decrease surface water or groundwater supplies or interfere with groundwater management of the basin. Impacts are less than significant and no programmatic mitigation is required.

Water Quality Control Plans (surface water). The California legislature has assigned to the State Water Quality Control Board (SWQCB) and its nine Regional Water Quality Control Boards (RWQCBs) the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality, including the Porter–Cologne Act and portions of the Clean Water Act. The SWQCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement Basin Plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems.

The Los Angeles RWQCB is responsible for the protection of the beneficial uses of waters within the coastal watersheds of Los Angeles and Ventura counties, including the Project area. The Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura counties (**Basin Plan**) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code Sections 13240–13247). The Los Angeles RWQCB Basin Plan must conform to the policies set forth in the Porter-Cologne Act as established by the SWRCB in its state water policy. The Porter-Cologne Act also provides the RWQCBs with authority to include within their basin plan water discharge prohibitions applicable to particular conditions, areas, or types of

waste. More specifically, the Basin Plan: (i) identifies beneficial uses for surface and ground waters, (ii) includes narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (iii) describes implementation programs and other actions that are necessary to achieve the water quality objectives established in the Basin Plan. The Basin Plan is continually being updated to include amendments related to implementation of TMDLs of potential pollutants or water quality stressors, revisions of programs and policies within the Los Angeles RWQCB region, and changes to beneficial use designations and associated water quality objectives.

Surface Water. The federal Clean Water Act allows individual states to operate their own NPDES programs provided such programs meet minimum Federal requirements. The Los Angeles Regional Water Quality Control Board (LARWQCB) maintains the Los Angeles Basin Plan and issues the Municipal Stormwater National Pollutant Discharge Elimination System Permit (MS4) to implement the Basin Plan, both of which encompass the City of El Segundo. The objective of Order No. 01-182 is to protect the beneficial uses of receiving waters in Los Angeles County. To meet this objective, the Order requires that the Los Angeles Countywide Stormwater Quality Management Plan (SQMP) specify Best Management Practices (BMPs) that would be implemented to reduce the discharge of pollutants in stormwater to the maximum extent practicable. Further, Permittees are to assure that stormwater discharges from the MS4 shall neither cause nor contribute to the exceedance of water quality, standards and objectives nor create conditions of nuisance in the receiving waters, and that the discharge of non-storm water to the MS4 has been effectively prohibited.

The SHSP EIR indicated that future development under the specific plan would be consistent with the requirements of the Basin Plan and the MS4 Permit. This conclusion applies to the proposed Project as well. To achieve that consistency, the City requires implementation of BMPs consistent with the SQMP standards. The Project must comply with Municipal Code Section 5-4-9, *Construction Activity Stormwater Measures*, which include BMPs as outlined in the Project water quality studies (Appendix G). Future projects within the SHSP must prepare SWPPPs to control short-term construction-related water quality impacts and a Water Quality Management Plan (WQMP) to control long-term operational water quality impacts.

Groundwater Management. The SHSP area is underlain by the West Coast (groundwater) Basin. Groundwater storage and extraction in the West Coast Basin is governed by the basin adjudication with excess production restricted to emergencies. An amended judgment establishing water rights of 64,478 acre-feet (AF) and enjoining excess extractions was filed in 1977 and most recently amended in 1989. Total storage in the West Coast Basin is estimated to be approximately 6.5 million AF. Unused storage space is estimated to be approximately 1.1 million AF. Of the unused storage space, the amount available for groundwater storage is only 120,000 AF because the upper 75 feet cannot be used for groundwater storage due to historical contamination (USDI 2014).

The San Pedro Formation beneath the property includes both the Gage and Silverado Aquifers. Active water injection wells in the area target the lower Silverado Aquifer and are part of the West Coast Basin Seawater Barrier used to control intrusion of salt water in the usable aquifer. The Project property is located west (ocean side) of the barrier system, and shallow groundwater quality located in the Gage Aquifer is poor due to high total dissolved solids (TDS) content as a result of saltwater intrusion. Groundwater in the shallow aquifers in this area has also been impacted by contamination associated with industrial development (i.e., solvent- and/or fuel-related). On November 2, 1998, the Los Angeles

Regional Water Quality Control Board (RWQCB) adopted Resolution No. 98-18, which removed the municipal and domestic (MUN) beneficial use designation for the groundwater located in the El Segundo area due to saltwater intrusion and the groundwater contamination at the nearby Chevron refinery which is located just south of the Development Sites (SCS 2017).

The SHSP EIR stated the majority of the area was currently covered in impervious surfaces, and strategies and LID encouraged by the SHSP will eventually increase the amount of pervious surface area and thus groundwater recharge capabilities. The EIR stated that since groundwater was not used as a water supply source for the City, development under the SHSP would not result in the use of or deplete groundwater supplies or recharge. Therefore, both the SPA and the Project, which are both within the SHSP, would have no impacts on groundwater management planning or plans and no programmatic or project-specific mitigation is required.

Development of the proposed Project under the SHSP and SPA would be required to comply with the many federal and state laws and regulations regarding both short- and long-term water quality that protect both surface and groundwater sources. Additionally, this regulatory compliance would reduce potential water quality impacts of developing the Development Sites to less than significant levels so no programmatic or Project-specific mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA Sub-area, including the Development Sites, is completely urbanized and contains no natural drainages. The SPA allows increased building heights but it would not change FAR or total development square footage under the SHSP. Future development under the SPA, and the Development Project, would be required to comply with all applicable federal, state, regional, and local regulations regarding water quality, and would be required to demonstrate they would have no significant impacts on downstream properties from runoff. In these ways, the SPA and the Development Project will not contribute to significant cumulative impacts regarding hydrology or water quality.

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐

The Project area is highly urbanized with a variety of improved land uses, including existing light industrial buildings on the two Development Sites. New development must not disrupt the surrounding community and be consistent with plans established for the safe and efficient use of land within the City and region. The City of El Segundo's General Plan and Zoning Ordinance govern the land use of the Project site and surroundings; there are no other governmental authorities with land use control over this Project.

a. Would the project physically divide an established community?

Development under the proposed SPA would result in some taller buildings but would still be of the same type and overall locations outlined in the SHSP. There would be no displacement of buildings or residential structures Therefore, the SPA would have no impact regarding existing neighborhoods and no programmatic mitigation is required.

The Development Sites are already developed with buildings and surface parking. Development of the two site parcels would not interfere or divide any existing neighborhoods so there would be no impacts and no mitigation is required.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed SPA would allow for a ten-foot increase in maximum permissible building heights within the SPA Sub-area. However, development under the proposed SPA would still be of the same type and overall locations outlined in the SHSP. The SHSP EIR had already evaluated that implementation of the SHSP would eventually shift land uses from industrial to offices and related uses (DEIR Table 13-2). The SHSP EIR concluded that policies, standards, and regulations outlined in the SHSP were consistent with existing City regulations and would not conflict with existing City General Plan policies. SCAG's RTP/SCS outlines goals for guiding the development of local land uses as "smart growth". The EIR explains how the SHSP meets the SCAG goals (DEIR Table 13-3). Therefore, the SHSPA would have less than significant impacts regarding consistency with local and regional land use-related plans and no mitigation is required.

The Project is a part of the office development planned within the approved SHSP. The Project proposes a total of 90,172 square feet of office development compared to the 517,094 total new square feet proposed under the SHSP. Under the current SHSP, both the South Site and the North Site have a permitted base Floor Area Ratio (FAR) of 1.0 and may exceed the base FAR with approval of a Community Benefits Plan. Under the proposed Project, development of the North Site would result in a total of 65,061 square feet of floor area (FAR=0.95), which is within the permitted base FAR of 1.0:1. Development of the South Site would result in a total of 63,915 square feet of floor area (FAR=1.45), which is permitted with the approval of a Community Benefits Plan. Although the development of the South Site would exceed the permitted base FAR, the Project is still within and consistent with the overall growth limits allowed by the SHSP.

Under the SPA, both the South Site and the North Site have a permitted base building height of 35 feet and may exceed the base building height (up to a maximum of 60 feet) with the approval of a Community Benefits Plan. Under the Proposed Project, both the North Site and the South Site would be developed with three story buildings with a maximum height of 59 feet six inches. Therefore, with the approval of the SPA. the Project would be consistent with the SHSP.

The Project is also consistent with the SCAG goals for the reasons discussed in the SHSP EIR. (See Draft EIR, pp. 13-7 through 13-8.) In addition, Subsection 3.a, Air Quality, demonstrates that the Project is consistent with the growth assumptions of the 2016 Air Quality Management Plan (AQMP).

This analysis demonstrates the proposed Project is consistent with applicable regional and local land use plans and goals. Impacts in this regard are therefore less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA would affect building heights within the SPA Sub-area but would not affect other land use or development characteristics of the SHSP. The Development Project is also consistent with land use and planning guidelines of the SHSP other than building height which is addressed by the SPA. The SPA and Development Project are also consistent with applicable City General Plan goals and policies and the goals of SCAG's regional plans. Therefore, the SPA and the Development Project will have less than significant cumulative impacts related to local and regional land use and planning.

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	■	☐
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	■	☐

As described in the General Plan Conservation Element, the City has been associated with petroleum resource development dating back to its founding in 1911. The City is partially underlain by the El Segundo Oil Field, where over 14 million barrels of oil and condensate were produced locally between 1935 and 1992, but production has steadily declined since 1967. The Project site is not located within the El Segundo Oil Field, which is located on the south side of Mariposa Avenue, as delineated by the California Department of Conservation, Geologic Energy Management Division (CalGEM). The region also contains sand and gravel which is plentiful due to the alluvial nature of the LA Basin in general and the Development Sites in particular. However, extraction of such resources is problematic because the Project area is highly urbanized and such activities can impact surrounding land uses and human activities.

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

(a-b) The City of El Segundo General Plan EIR and the SHSP EIR both state that the entire City was once within the El Segundo Oil Field. From 1935 to 1987, 76 wells were drilled in this field, and produced over 13.6 million barrels of oil. While there are several wells still operating in the City, there are no oil wells currently in operation within the SHSP area. The City is also in the San Fernando Valley Production-Consumption Region and is classified as Mineral Resources Zone 3 (MRZ-3). This classification is defined as “areas containing mineral deposits the significance of which cannot be evaluated from available data”. The SHSP EIR noted that the City is already urbanized and does not have other known mineral resources.

The proposed SPA would modify building heights, however, there are no aspects of the SPA that are related to the presence or absence of any mineral resources within the SHSP. Therefore, the proposed SHSPA would have no impacts relative to mineral resources and no programmatic mitigation is required.

As part of the SHSP area, the Development Sites do not contain oil wells or other identified mineral resources of value or recognized at either at a state level or local level that can be reasonably extracted given existing onsite and surrounding land uses. There are also no land use or zoning designations that relate to properties within the SHSP. Therefore, impacts of the Project regarding mineral resources are less than significant and no mitigation is required

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SHSP EIR concluded that development within the SHSP would have no significant impacts related to mineral resources. The SPA Sub-area, which includes the Development Sites, does not contain any identified mineral resources and are in urban settings which would make new mineral extraction activities problematic. Therefore, the SPA and the Development Project will not make significant contributions to regional cumulative impacts regarding mineral resources.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Sound is a disturbance in the air created by a moving or vibrating source and is capable of being detected by the hearing organs. The sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted. A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). Sound pressure level (SPL or Lp) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels and abbreviated as dB.

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. The A-scale weighing is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in the noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. Because decibels are a logarithmic scale, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway), would result in a barely perceptible change in sound level.

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels. The overall noise environment of an area can be characterized by the Community Noise Equivalent Level (CNEL) which carries "penalties" for nighttime noise which is typically considered more intrusive especially in suburban and rural settings*:* The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2 – 6 wheels) and heavy truck percentage (3 axles and greater), and sound propagation conditions. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume of noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB.

Noise impacts are most severe on certain individuals or groups of persons such as the young, the old, and the sick. Land uses that house these sensitive persons are referred to as sensitive receptors (e.g., residential uses, hospitals, day care centers, etc.). Noise assessments typically identify the closest sensitive receptor to a project site and then calculate the maximum noise levels at that location (for both construction and operation) as a "worst case" or conservation assessment of potential noise impacts.

Municipal Code Section 7-2-4, Noise Standards, identifies the City's operational noise threshold for commercial and industrial properties as 8 dBA above the ambient noise level. In addition, Municipal Code Section 7-2-10, Exemptions, indicates that noise from construction activities is considered exempt (i.e., less than significant) as long as construction activities do not take place between the hours of six o'clock (6:00) P.M. and seven o'clock (7:00) A.M. Monday through Saturday, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of sixty five (65) dBA plus the limits specified in subsection 7-2-4C of this Chapter as measured on the receptor residential property line and provided any vibration created does not endanger the public health, welfare and safety.

The Project area is completely urbanized and experiences elevated noise level from a variety of human sources, including traffic, air conditioning units, industrial equipment, aircraft, etc. New development must be evaluated to assure that it will neither increase noise or vibration levels beyond accepted standards to protect human health and building integrity (for vibration), nor that its new occupants will be subject to harmful levels of noise from the existing environment.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed SPA would modify building heights but these changes would not result in any demonstrable increase traffic in and around or activities on individual building sites. This is because the height change[11] would not result in an increase in FAR or overall development

11 increase to 60 feet from the current Tier II maximum of 50 feet only within a specific sub-area of the SHSP Smoky Hollow East area

intensity. Therefore, the overall level of development and therefore overall noise impacts of the SPA would remain equivalent to that of the current SHSP and as identified in the SHSP EIR. Therefore, the proposed SHSPA would have less than significant impacts relative to permanent noise and no programmatic mitigation is required.

A detailed noise assessment was prepared for the proposed Project and the following discussion summarizes the results of that assessment (MIG 2021b). The following sections evaluate the noise sources and levels associated with the temporary construction activities and long-term operations of the proposed Project and compares increased noise levels to the applicable City standards.

Regarding noise thresholds, Section 7-2.10D of the City's Municipal Code indicate that noise and vibration associated with the construction, repair, or remodeling of any real property is exempt from City noise standards provided: 1) Activities do not take place between the hours of 6 PM and 7 AM Monday through Saturday, or any time on Sunday or a Federal holiday; 2) The noise level created by such activities does not exceed 65 dBA as measured at a residential property line (increases in this standard are permitted pursuant to Section 7-2-4C of the Municipal Code); and 3) vibration does not endanger the public health, welfare, and safety. The City's Municipal Code does not establish a specific, numeric noise standard for construction noise at commercial property lines. However, it does establish an "ambient plus 8 dBA standard for commercial/industrial areas. In addition, the City's General Plan Noise Element provides land use compatibility standards for interior and exterior noise. The City's exterior and interior compatibility standard for commercial and industrial activities is 75 DNL

Project – Construction Noise

The proposed Project involves construction activities including demolition, building construction, minor grading and paving, and architectural coating activities in an existing commercial/light industrial area of the City. A detailed noise study was prepared for the Project (MIG 2021b)(Appendix C). Construction activities are anticipated to begin at the North Site in January 2022; from January 2023 to March 2023 at the South Site. Some concurrent activities may include demolition (South Site), building construction (North and South Site), grading (North Site), paving (North Site), and architectural coating (North Site) activities may occur. Total construction activities may last up to 29 months.

Worst case hourly L_{eq} and L_{max} construction equipment noise levels are predicted to be approximately 82 and 85 dBA, respectively, at 50 feet; however, the magnitude of the proposed Project's temporary and periodic increase in ambient noise levels would depend on the nature of the construction activity (i.e., demolition, building construction, grading) and the distance between the construction activity and sensitive receptors/outdoor use areas.

Project construction activities would primarily take place adjacent to Franklin Avenue (North Site), El Segundo Boulevard and Kansas Street (South Site), and at an existing parking garage (both sites). All construction activities would occur at least 600 feet or more from any sensitive residential receptor. At this distance, potential construction noise levels would be less than 65 dBA L_{eq}. Although construction activities could generate noise levels up to approximately 82 dBA at a distance of 50 feet, such noise levels would not disrupt existing light industrial building operations or patronage because these buildings are not considered noise-sensitive and do not include sensitive outdoor use areas. Project construction also would not affect the Chevron Refinery employee park because this park is not considered noise-sensitive since it is within the refinery property and subjected to refinery noise levels. In addition, all anticipated construction will take place during work hour indicated in the Municipal Code (see below).

The proposed Project would not generate construction noise levels that exceed City standards or otherwise result in a substantial temporary increase in ambient noise levels because:

1. Construction activities would be tailored to the proposed building modifications and additions. Building construction activities would not require substantial heavy duty equipment operations, and extensive grading activities are not proposed at either the North Site or the South Site. Worst case noise levels, which would occur during demolition and grading activities, would last approximately two months at each site.
2. Construction equipment contains standard noise suppression devices such as mufflers, engine shields/covers, and engine/mechanical isolators/mounts that typically reduce engine, mechanical, and exhaust noise levels below standard reference noise levels, which are based on older equipment operations.
3. The proposed Project would comply with City of El Segundo Municipal Code Section 7.2.10D, which limits construction activities to the hours of 7 AM to 6 PM Monday through Saturday only. This code requirement generally limits construction activities to daytime hours when people are generally considered to be least sensitive to environmental noise levels.

For the reasons outlined above, the proposed Project's construction activities would not generate a substantial, temporary increase in ambient noise levels at sensitive receptor locations. Impacts would be less than significant and no mitigation is required.

Project – Operational Noise

Once constructed, the proposed Project would generate noise from the same types of sources and activities currently present at the North Site and the South Site, such as on- and off-site vehicle trips, on-site vehicle maneuvering, queueing, and parking, the operation of stationary equipment such as heating, ventilation, and air conditioning (HVAC) equipment, landscaping and maintenance activities, and waste-disposal collection, etc. The North Site also includes a small (less than 800 square feet) coffee kiosk situated next to a small pocket park.

The City's Municipal Code exempts many of these sources from the noise standards described above, including noise levels from real property maintenance, provided the maintenance activities occur between 7 AM and 8 PM Monday through Saturday and 9 AM to 8 PM on Sunday (Municipal Code Section 7-2-10E), and noise levels regulated by state or federal law (e.g., individual motor vehicle noise levels; Municipal Code Section 7-2-10F).

The proposed Project would increase the amount of vehicle trips currently accessing the North and South Site, as well as the adjacent parking garage. On-site vehicle activity would increase by a factor of approximately four (4x) most of which would occur in the existing parking garage. The noise assessment determined the proposed Project would not involve substantial on-site equipment or activities at either the North Site or the South Site that could generate noise levels that exceed City standards or otherwise result in a substantial increase in ambient noise levels.

The proposed Project would also include rooftop-mounted HVAC units that can produce noise levels up to 76 dBA at a distance of 3 feet. Based on distance attenuation, HVAC noise levels would reach 50 dBA at a distance of 60 feet. The noise assessment determined that HVAC equipment would not generate substantial noise levels at adjacent commercial

property line locations or result in more than 1 dBA change in overall ambient noise levels in the vicinity of the Project Site.

Ambient noise levels at and near the North and South Sites are dominated by traffic on E. Franklin Avenue (North Site), E. El Segundo Boulevard (South Site), the Chevron Refinery (South Site), and other local commercial/light industrial buildings (both sites). The proposed Project would generate traffic that would be distributed onto the local roadway system and potentially increase noise levels along local travel routes. Caltrans considers a doubling of total traffic volume to result in a three (3) dBA increase in traffic-related noise levels (Caltrans, 2013). If the proposed Project does not result in a doubling of traffic volumes on the local roadway system, it would not result in a substantial permanent increase in traffic-related noise levels. The proposed Project would generate 490 net new trips from the North Site (on East Franklin Avenue) and 511 net new trips from the South Site (on El Segundo Boulevard), for a total of approximately 1,000 net new trips on a daily basis (Kimley-Horn, 2021). The average daily traffic (ADT) on the segments of East Franklin Avenue and East El Segundo Boulevard that run adjacent to the North and South Site are at least 832 and 20,946, respectively (City of El Segundo, 2018, Table 15-7). The proposed Project's trip generation on East Franklin Avenue (490 net new daily trips) and East El Segundo Boulevard (up to 1,000 new net trips) would be far less than either of those roadway volumes and would result in substantially less than a doubling of daily traffic volumes on roadways used to access the site.

The noise assessment concluded that construction and operation of the proposed Project, including all stationary and mobile sources, would not result in a substantial, permanent increase in noise levels along the roadways used to access the proposed Project as compared to existing (2021) or future conditions. This impact would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures. The types of construction vibration impact include human annoyance and building/property damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between the vibration source and the receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. The following analyzes the potential vibration impacts associated with the construction and operations of the proposed Project.

The proposed SPA would modify building heights. These changes may incrementally increase traffic or other activities on individual building sites which may generate vibration. However, the overall vibration from development under the SHSP would be less than significant and no programmatic mitigation is required.

The noise assessment for the Project also included an evaluation of vibration impacts. The proposed Project would not include substantial construction or operational activities that could generate sustained groundborne vibration levels at existing commercial or residential buildings that could result in building damage or sustained human annoyance. The largest equipment operations (during grading) would occur at least 50 feet from the closest structures (parking garage, adjacent light industrial buildings). Standard construction equipment (e.g., bulldozers, trucks, jackhammers, etc.) generally does not cause vibration that could cause structural or cosmetic damage, but may be felt by nearby receptors.

The closest structure is approximately 50 feet away from potential work areas at both the North Site and the South Site. At this distance, equipment would not generate ground-borne vibration that has the potential to damage the structural integrity of any buildings near work areas. For reference, Caltrans recommends a damage threshold for modern industrial and commercial buildings of 0.5 inches/second (Caltrans 2020). The noise assessment determined that the maximum predicted groundborne vibration level at 50 feet for typical equipment is 0.042 inches/second which is substantially less than the Caltrans threshold.

Once operational, the proposed Project would not have any large equipment that would generate vibration.

For the reasons outlined above, the proposed Project would not generate excessive ground-borne vibration or noise levels during either construction or operation, and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people be residing or working in the project area to excessive noise levels?

In compliance with legislative requirements, the Los Angeles County Airport Land Use Commission (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP) last revised on December 1, 2004. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also intended to provide for the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height in areas adjacent to each of the county's public airports.

The SPA could affect building heights within the SHSP. However, the SHSP is outside the LAX Airport Influence Area (AIA) and is not addressed in its CLUP, and there are also no private airstrips within two miles of the SHSP area. Therefore, the SHSPA would not be impacted by airport noise so there are no impacts and no programmatic mitigation is required.

The proposed Project is located approximately 1.2 miles south of LAX. According to the LAX Airport Influence Area Map, the Project is not located within LAX's planning boundaries (LAWA 2021). The next closest airport, Hawthorne Municipal Airport (HMA), is located approximately 3.1 miles to the east. The Project Site is not located within the HMA planning

boundaries (Los Angeles County ALUC, 2003). Thus, the proposed Project would not expose people working in or visiting the Project area to excessive airport-related noise levels. Impacts will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA would only affect building heights in the SPA Sub-area which would increase noise levels from future development. In addition, the noise study for the Development Project concludes it will have less than significant short- and long-term noise impacts. Therefore, the SPA and Development Project will not have significant cumulative noise impacts,

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	■	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐

The Project Site is part of the LA Basin which supports millions of residents and employees in homes and businesses. New development must be evaluated to assure it will not introduce levels of growth that are unplanned and beyond the service capabilities of local jurisdictions.

The proposed Project is consistent with the City of El Segundo General Plan land use policies and the Smoky Hollow Specific Plan which designate the Project site for office uses. No housing units would be developed as part of the Project, and no new or expanded urban infrastructure would be constructed that could foster increased development intensity onsite or at surrounding properties. Similar to other construction projects in the region, the Project construction workers would be expected to be drawn from the large, available regional labor force, who would commute to the Project site during the construction stages.

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The SPA only addresses maximum building height and does not allow any additional caretaker units over that currently allowed in the SHSP. Therefore, the SPA would have no influence on population growth in the City. The SPA would be no impacts and no programmatic mitigation is required.

By comparison, the SHSP EIR stated the only new residential dwellings allowed in the SHSP would be a total of up to six new caretaker units which would only generate 18 new residents in the City. This small amount of population growth is readily accommodated under both the SCAG 2040 population and growth projection and City General Plan Buildout forecast. Implementation of the SHSP would also generate an estimated 951 additional jobs which could result in an increase in population within the City and adjoining areas as future employees and their families relocate to areas closer to their jobs. The SHSP EIR examined the potential impacts to the City-wide housing stock and indicated there were sufficient

vacant homes or multi-family units such that the SHSP would not have significant impacts on housing in the City. Since it is not residential in nature, the EIR determined the SHSP would have less than significant impacts on the City's future population and housing growth and no mitigation was required.

The Project proposes the two parcels to be used as offices with no caretaker units so there will be minimal direct growth impacts related to population or housing. The additional 90,172 square feet of office uses and 120 new employees to be developed by the Project is greater than the permitted base FAR under the SHSP (but allowed with approval of a CPB) and may result in some indirect or induced housing and/or population growth to the degree that the estimated 120 new project employees[12] choose to buy a house or rent an apartment and move into the City. The Project is not expected to result in the displacement of any existing City residents (population) or housing by its development. Therefore, potential impacts are considered to be less than significant, and no mitigation is required

LESS THAN SIGNIFICANT IMPACT

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

There is no existing housing on the Project site so construction and renovation of the proposed buildings would therefore not displace any people or housing.

Even with the SPA, the SHSP would still only propose non-residential development so it would not have any significant direct impact on population or housing in the City. The increased building height allowed under the SPA may incrementally increase the amount of development on particular sites in the future, but the SPA would not increase the overall amount of development anticipated within the SHSP and would not displace any existing residential units. Therefore, the SHSPA will not displace any existing residents or housing in the City or require the construction of replacement housing. Impacts will be less than significant and no programmatic mitigation is required.

Since the Project is part of the SHSP, and will also not add any residential uses, similar conclusions regarding the lack of displacement of persons or housing would apply as well.

The additional 90,172 square feet of office uses to be developed on the Project parcels may result in some amount of indirect or induced housing and/or population growth to the degree that some 120 new project employees[13] may choose to buy a house or rent an apartment and move into the City from some other jurisdiction. However, the Project is not expected to result in any displacement of existing City residents (population) or housing by its development. Therefore, potential impacts are considered to be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA and Development Project deal with non-residential land uses so they will have only less than significant indirect and no direct or cumulative impacts relative to population or housing.

[12] Assumes 750 square feet/office employee (90,172 square feet divided by 750 square feet/employee = 120 employees)
[13] Up to 120 new employees assuming 750 square feet/office employee and 90,172 square feet of new office uses

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1. Fire protection?	☐	☐	■	☐
2. Police protection?	☐	☐	■	☐
3. Schools?	☐	☐	■	☐
4. Parks?	☐	☐	■	☐
5. Other public facilities?	☐	☐	■	☐

The Project Site is part of the larger LA Basin whose residents and employees require a variety of public services including police, fire, schools, parks, etc. New development must be evaluated to assure it is within the service capabilities of local jurisdictions.

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered **fire protection** facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The SPA would increase the maximum permissible building heights for future development within the SPA Sub-area by ten feet. This could allow more intensive development on certain sites than under the current SHSP. This increased height of development could result in incremental increases in the need for fire protective services or specialized equipment. However, the increased development intensity on individual sites will still not exceed the overall growth expected for buildout within the SHSP. In 2018 the ratio for operational protection/EMS personnel was one fire fighter per 1,026 population. The SHSP EIR concluded the SHSP would increase the population by 18 persons which would cause a 0.1 percent increase in the service ratio. The EIR also concluded that demand for protection/EMS personnel or equipment from the SHSP would not exceed the current CFD

operation standards. The EIR also concluded that demand for protection/EMS personnel or equipment from the SHSP would not exceed the current CFD operation standards.

Similar to the impacts identified in the SHSP EIR, impacts of the SPA related to fire protection would be less than significant and no programmatic mitigation is required.

The additional office space proposed by the Project would increase office square footage and number of employees on the Development Sites and would incrementally increase in fire protection services. The El Segundo Fire Department (ESFD) provides fire protection and emergency medical services to the Project area. The City is divided into two districts (i.e., Stations) for fire response. Station 1 responds to calls west of Pacific Coast Highway and Station 2 responds east of Pacific Coast Highway. Depending on the nature or size of the alarm, units may cross over into the other district and coordinate resources to assist. When an alarm to any address with serious consequences to life or property exists, all units in the City respond (City of El Segundo Fire Department, n.d.). The Project is located in the fire response district for Station 1 which is location at 314 Main Street which is approximately 1.1 mile northwest of the Development Sites (ESFD 2021). At an average speed of 35 miles per hour, the response time from this station for an emergency call would be approximately 1.6 minutes.

The Project would be required to obtain approval from ESFD to verify that the Project complies with the 2019 California Fire Code, local amendments, and El Segundo Fire Department Regulations all applicable Fire Code requirements. In addition, adequate access for emergency vehicles to the proposed multifamily units would be provided by the proposed new road. It should be noted the El Segundo Fire Department (ESFD) has already reviewed the proposed Development Project site plans regarding fire protection and emergency access and approved them subject t to compliance with their standard conditions of approval.

Title 15 Chapter 27A of the ESMC allows for the City to impose Development Impact Fees on applicants seeking to construct development projects. The purpose of these fees is for applicants for development projects to pay their fair share of the costs of providing public services and public facilities, including fire protection services. The amount of each impact fee is calculated based upon the gross square footage of nonresidential development, number of residential dwelling units, type or density or intensity of use, vehicle trip generation, or other appropriate methodology which ensures that the fee is roughly proportional to the impacts of new development on public facilities (ESMC 15-27A-1). Therefore, the Project is not anticipated to affect fire protection demands to the extent that new or physically altered fire facilities would be required and impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered **police protection** facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The SPA would increase the maximum permissible building heights for future development within the SPA Sub-area by ten feet. This increased height of development could result in an incremental increase in the need for police protection within the SHSP. However, the increased development height on individual sites will still not exceed the overall growth

expected for buildout within the SHSP. Similar to the impacts identified in the SHSP EIR, impacts of the SHSPA related to police protection would be less than significant and no programmatic mitigation is required.

In 2018 the ratio for operational protection personnel was one sworn officer per 241 population. The SHSP EIR concluded the SHSP would incrementally increase the population but also increase the number of employees in the City which would incrementally increase in the CPD service ratio. The EIR also concluded that demand for police protection personnel or equipment from the SHSP would not exceed the current CPD operation standards.

The additional office space proposed by the Project would require an incremental increase in police protection services. The El Segundo Police Department (ESPD) provides police protection in the City. The ESPD's headquarters are located at 348 Main Street at the Civic Center Complex, approximately 1.1 mile northwest of the Project site. The City is divided into two geographic areas bisected by Pacific Coast Highway. The area west of Pacific Coast Highway is designated the West Command and the area east of Pacific Coast Highway is designated the East Command. The Project site would be located within the ESPD West Command.

In addition, Title 15 Chapter 27A of the ESMC allows for the City to impose Development Impact Fees on applicants seeking to construct development projects. The purpose of these fees is for applicants for development projects to pay their fair share of the costs of providing public services and public facilities, including law enforcement. The amount of each impact fee is calculated based upon the gross square footage of nonresidential development, number of residential dwelling units, type or density or intensity of use, vehicle trip generation, or other appropriate methodology which ensures that the fee is roughly proportional to the impacts of new development on public facilities (ESMC 15-27A-1). Therefore, the Project is not anticipated to affect police protection demands to the extent that new or physically altered police facilities would be required. Impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered **schools**, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The SPA would increase the maximum permissible building heights within the SPA Sub-area by ten feet. The additional non-residential development that could be built within the SHSP would not be expected to generate any significant number of additional students that would need to be served by the El Segundo Unified School District. There is a potential for new SHSP employees to move into the City who may have children, and state law allows students to attend schools in the districts in which their parents work. However, it is not anticipated that the SHSP would significantly affect existing school services or facilities. Future development within the SHSP would be required to pay applicable school/developer impact fees so impacts would be less than significant and no programmatic mitigation is required.

The additional office space proposed by the Project would not be expected to generate any significant number of additional students that would be served by local schools within the El

Segundo Unified School District. The SHSP EIR noted the SHSP would result in intensified commercial and industrial uses. No schools are located within the Smoky Hollow Specific Plan area boundaries. Residential uses within SHSP area are limited and the only new residential type uses allowed would be caretaker units, permitted as an accessory use only. Under state law, the payment of school impact fees is considered full project mitigation under CEQA. The EIR concluded that construction of new schools or alteration to existing school facilities would not result from with implementation of the SHSP.

The proposed Project does not include the construction of any residential dwelling units, including caretaker units or accessory dwelling units (ADUs). There is a potential for the employees to move within the vicinity of the Projects who may have children, and state law allows students to attend schools within the districts in which their parents work. However, it is not anticipated that the Project would significantly affect existing school services or facilities. The proposed Project would pay all applicable local school developer impact fees. Therefore, impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered **parks**, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The SPA would increase the maximum permissible building heights within the SPS Sub-area by ten feet. The additional non-residential development that could be built within the SHSP under the SPA would not be expected to generate any additional population or residents and thus no increased need for park facilities or programs. Therefore, impacts of the SPA on parks would be less than significant and no programmatic mitigation is required.

The Project will provide a 5,000-square foot public park (0.11-acre) within the North Site along with seating and a coffee café as a community benefit. The Project does not include any residential uses which would typically generate an increased need for additional park facilities and programs.

In addition, Title 15 Chapter 27A of the ESMC allows for the City to impose Development Impact Fees on applicants seeking to construct development projects. The purpose of these fees is for applicants for development projects to pay their fair share of the costs of providing public services and public facilities, including parks. The amount of each impact fee is calculated based upon the gross square footage of non-residential development or other appropriate methodology which ensures that the fee is roughly proportional to the impacts of new development on public facilities (ESMC 15-27A-1). Therefore, the Project is not anticipated to affect park demands to the extent that new or physically altered park facilities would be required. Impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered **public facilities**, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The SPA concerns maximum allowable building heights. The additional non-residential development that could be built under the SHSP, including if the SPA is adopted, would not be expected to generate any significant number of additional population or residents, so there would be no increased need for other public facilities. Therefore, impacts would be less than significant and no programmatic mitigation is required.

The Project does not include any residential uses which would typically generate increased population/residents or additional need for other public facilities. The SHSP EIR did not anticipate significant additional impacts on other public facilities, including the El Segundo Public Library, due to the nature of the SHSP (i.e., non-residential). The eventual adaptive reuse of existing structures and intensifying land uses could eventually lead to an increase in the local daytime (employee) population some of whom may use library services.

It should also be noted that non-residential development is not subject to the City of El Segundo Library Service fees because the fee study prepared to establish the library fee did not find a strong link between non-residential development and library service impacts.

Based on this analysis, impacts of the Project on other public facilities will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA could change building heights but no other design characteristics of new development within the SPA Sub-area. Therefore, the SPA will not affect the provision of public services in the SHSP. With approval of the SPA, the Development Project will be consistent with the SHSP and would not require levels of public services beyond what were anticipated in the SHSP and analyzed in the EIR. Therefore, the SPA and Development Project will not make significant contributions to any cumulative impacts relative to public services in the region.

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

Residents and employees in the Project area require park facilities and services for living within an urban area. New development must be evaluated to assure it is within the recreational and parkland service capabilities of local jurisdictions. There are four City parks within a mile of the Development Sites, all to the northwest, including Wyle Park, Hilltop Park, the large El Segundo Parks and Recreation complex, and Library Park, as well as Freedom Park a mile to the northeast.

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The SPA would increase maximum permissible building heights within the SPA Sub-area by ten feet. The additional non-residential development that could be built within the SHSP under the SPA would not be expected to generate any additional population or residents (which are typically associated with new housing/residential development). The SPA addresses only building height and so would not result in an increased need for park facilities or programs. Therefore, impacts would be less than significant and no programmatic mitigation is required.

In addition, Title 15 Chapter 27A of the ESMC allows for the City to impose Development Impact Fees on applicants seeking to construct development projects which represent a project's fair share costs to the City for public services and facilities, including parks. The amount of each impact fee is calculated based upon the gross square footage of non-residential development or other appropriate methodology which ensures that the fee is roughly proportional to the impacts of new development on public facilities (ESMC 15-27A-1).

The Project is part of the SHSP and proposes to construct new office uses which would only result in an incremental increase in the need for regional or local parks and recreational services. The Project will provide a 5,000-square foot public park (0.11-acre) within the North Site along with seating and a coffee café as a community benefit. The Project does not include any residential uses which would typically generate new residents who would

have increased needs for additional park facilities and programs. Therefore, the Project is not anticipated to affect park demands to the extent that new or physically altered park facilities would be required, or that substantial physical deterioration of a recreational facility would occur or be accelerated. Impacts would be less than significant and no mitigation is required

LESS THAN SIGNIFICANT IMPACT

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The SPA would increase maximum permissible building heights within the SPA Sub-area by ten feet. The additional non-residential development that could be built within the SHSP under the SPA would not be expected to generate any increased need for the construction of park facilities. Therefore, impacts would be less than significant and no programmatic mitigation is required.

Title 15 Chapter 27A of the El Segundo Municipal Code allows the City to impose Development Impact Fees on applicants seeking to construct development projects. The fees represent a project's fair contribution to the City's increased costs for public services and facilities, including parks. The amount of each impact fee is calculated based upon the gross square footage of non-residential development or other appropriate methodology which ensures that the fee is roughly proportional to the impacts of new development on public facilities (ESMC 15-27A-1).

Therefore, the Project will have not require the construction or expansion of new City recreational facilities that could have unanticipated environmental impacts. However, the proposed Project will construct new office uses which would only result in a slight incremental increase in the use of regional or local parks generated by new employees. In addition, the Project will construct a 5,000-square foot (0.11-acre) public park. Therefore, any impacts will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA and Development Project propose non-residential land uses so they will have less than significant direct or cumulative impacts relative to recreation facilities or programs.

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	■	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
d. Result in inadequate emergency access?	☐	☐	■	☐

A number of transportation modes are needed as an integral part of living and working in an urban environment. CEQA requires an evaluation of new development to determine if it will contribute to or at least not conflict with the provision of non-vehicular methods of transportation (i.e., pedestrians, bicyclists, transit riders). It must also demonstrate it will not interfere with emergency vehicle access or will create unsafe road or intersection conditions. Finally, new development must be consistent with state and local plans to reduce the number of vehicle miles traveled on a regional basis to improve the quality of life for all residents.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The SPA concerns maximum building height which would not increase the FAR, overall intensity, or total square footage of development on particular development sites within the SBA Sub-area. As of July 2020, CEQA documents were no longer required to analyze traffic impacts related to Level of Service (LOS) which is a measure of street and intersection congestion but rather impacts based on vehicle miles traveled (VMT). Increased building heights may have a programmatic effect on VMT for specific projects, but the City's development review process requires an assessment of potential VMT impacts for new projects using the City's draft VMT guidelines. This is considered regulatory compliance and not mitigation under CEQA.

It should be noted the SHSP EIR stated that, without the SHSP and any improvements, LOS impacts (i.e., congestion) at two area intersections along Pacific Coast Highway

(previously Sepulveda Boulevard) at both El Segundo Blvd. and Grand Ave. would approach or exceed City standard (LOS D or better during peak periods (DEIR Table 18-8). The SHSP proposed various road improvements to El Segundo Blvd., Franklin Ave., Grand Ave., and a number of roads and alleys to improve overall area circulation. In addition, the traffic study and SHSP EIR recommended Mitigation Measures 18-1 and 18-2 to reduce local traffic congestion impacts. However, LOS is no longer a consideration of traffic impacts under CEQA but can still be considered for planning and engineering purposes (as well as public safety). Therefore, the two "measures" 18-1 and 18-2 are no longer considered "mitigation" and are not carried forward as environmental issues in this CEQA document but will be included as conditions of approval for planning and engineering purposes.

Regarding non-vehicular transportation, the SHSP EIR determined the SHSP would not affect or impede the two transit lines (the Lunchtime Shuttle and Beach Cities Line 109) that traverse Grand Avenue since no physical changes were proposed to Grand Avenue. Additional growth that would result from SHSP implementation would likely increase ridership along these lines over time. In addition, the SHSP includes a system of bike-friendly streets that would link to other bike routes and paths currently proposed in the City as well as provide sidewalk improvements and other enhanced pedestrian facilities. Since the EIR determined impacts in this regard were less than significant for the SHSP, therefore impacts of the SPA would also be less than significant and no programmatic mitigation is required.

Development of the Project would not affect or impede the two transit lines (the Lunchtime Shuttle and Beach Cities Line 109) that traverse Grand Avenue since no physical changes are proposed to Grand Avenue. Additional growth that would result from SHSP implementation, including the proposed Project, would likely increase ridership along these lines over time. In addition, the SHSP includes a system of bike-friendly streets that would ultimately link to other bike routes and paths currently in or proposed in the City, as well as provide sidewalk improvements and other enhanced pedestrian facilities.

Therefore, the Project will not conflict with a program, plan, ordinance or policy addressing the City of SHSP circulation system. Impacts would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

SB 743 was approved by the California legislature in September 2013 and requires changes to CEQA to use an alternative metric for transportation impacts. The old metric was based on vehicular "level of service" (LOS) which measures congestion of local intersections and roadways. As of July 2020, the new CEQA metric for transportation projects will be Vehicle Miles Traveled (VMT). The SHSP EIR was adopted in 2018 and did not include a quantitative analysis of the SHSP's potential VMT impacts.

The SPA concerns maximum permissible building height which would not increase the FAR, overall intensity, or total square footage of development on particular development sites within the SPA Sub-area. The SPA may incrementally increase development intensity on certain site within the SPA Sub-area, which would only have indirect or incremental impacts on VMT conditions. The issue of VMT impacts only arises for specific developments

proposed on specific sites. The City's development review process requires an assessment of potential VMT impacts for new (specific) projects using the City's adopted VMT guidelines. This is considered regulatory compliance and not mitigation under CEQA. Therefore, program-level VMT impacts of the SPA itself will be less than significant and no programmatic mitigation is required.

A VMT Analysis was prepared for the proposed Project by Translutions Inc. in August 2021 (Appendix D) based on the Draft SB 743 Implementation Guidelines (City of El Segundo, September 16, 2020). The City recommends using Work VMT per employee for office and employment projects. Based on the Guidelines, the City has set an impact threshold based on 15% below the Southern California Association of Governments (SCAG) regional Work VMT. The 15% reduction is based on the OPR technical advisory. Therefore, a project would result in a significant VMT impact if the project's Work VMT/Employee is greater than 85% of the existing SCAG regional VMT. Therefore, an office project would have a significant impact if the project work VMT per employee is greater than 17.0 VMT/Employee (see Table 7).

The VMT analysis used the 2016 SCAG Regional Transportation Plan (RTP) model with 2020 Socio-Economic Data (SED). This is the latest model available at this time and is the same model used for the City's guidelines. The Development Sites are located in traffic analysis zone (TAZ) 21125100. Consistent with standard modeling practice to isolate project VMT, the existing land uses in the TAZ were moved to the adjacent TAZ (21125200). The Project land uses were converted to employees using a factor of 471 square feet per employee based on the SCAG Employment Densities Study.

Table 7, Project VMT Impacts, demonstrates that the Project VMT/employee is 19.3 miles, which is greater than the threshold of 17.0 miles. Therefore, the Project is required to reduce its VMT/employee to 17.0 (i.e., by 11.7%) to have a less than significant impact.

Table 7: Project VMT Impacts

Base Year Characteristics	Project Characteristics
Total Employment	209
Total Homebased Work VMT	3,910
Project VMT per Employee	**19.3**
City Threshold	**17.0**
Significant Impact?	Yes
Percentage Over Threshold	13.3%
Mitigation Reduction Required	11.7%

Source: Table A, VMT Memorandum, Standard Works Project, Translutions 2021

The VMT Assessment noted the Project's VMT is expected to be up to 35% lower than estimated in the City's model because the Project is significantly more dense than the existing TAZ and the default parameters included in the ITE Trip Generation rates. However, as a worst case condition the assessment gave the Project no "credit" for this reduction due to the Project's design.

The City's guidelines states that if a significant transportation impact is identified, feasible mitigation measures to avoid or reduce the impact must be identified. The Governors' Office of Planning and Research (OPR) provides a list of potential measures to reduce VMT but gives the lead agency full discretion in the selection of mitigation measures. **Mitigation Measures VMT-1 through MM VMT-6** are generally from the California Air Pollution Control Officers Association (CAPCOA) recommendations found in the publication Quantifying Greenhouse Gas Mitigation Measures (2010).

Mitigation Measures. The CAPCOA document provides maximum VMT reductions from various mitigation measures. Mitigation Measures MM VMT-1 through VMT-6 outlined below are recommended for the proposed Project with implementation to be documented prior to receiving a certificate of occupancy:

MM VMT-1 **Unbundle Parking Cost.** This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between 2.6% and 13%. **Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.**

MM VMT-2 **Parking Management Strategies.** Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. **The maximum reduction from this measure is 3%.**

MM VMT-3 **Mandatory Travel Behavior Change Program, Promotions & Marketing.** This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the building lobbies to enable users an easy way to access information about transit routes. **The maximum reduction due to this measure is 1%.**

MM VMT-4 **Implement Commute Trip Reduction Marketing.** This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a

complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. **For this project, a conservative reduction of 3% has been assumed.**

MM VMT-5 **Include Bike Parking in Excess of City Code.** This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and therefore, it is recommended that the project provide at least 18 spaces. **This results in a VMT reduction of 0.625%.**

MM VMT-6 **Include Secure Bike Parking and Showers.** This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. **This results in a VMT reduction of 0.625%.**

The VMT Assessment determined that implementation of Mitigation Measures MM VMT-1 through MM VMT-6 will reduce Project VMT by 13.35% or to a total of 16.85 miles which is less than the City's threshold of 17.0 miles (Table B, Translutions 2021). With implementation of the recommended mitigation, the Project is consistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding VMT impacts.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Regarding the SPA, the SHSP has a standard grid pattern of streets with a hierarchy of major, collector, and local streets, and local police and fire facilities are just west of the SHSP area. The SPA addresses building heights and has no effect on street design. The SPA deals only with maximum permissible building heights and would not increase total square footage of development, so it will not increase anticipated traffic from the SPA Sub-area. Therefore, the SPA will have less than significant impacts relative to design hazards or incompatible uses and no programmatic mitigation is required.

The proposed Project is part of the SHSP grid pattern of streets and is located along one major street (El Segundo Boulevard) and three secondary streets (E. Franklin Street, Kansas Street, and Oregon Street). The Project site plans (Exhibits 8 and 9) show the proposes buildings are on major or secondary streets and have immediate and adequate access to those streets. The site plans also show the immediate surrounding area has no identified road or intersection design hazards. In addition, the proposed office uses of the Project are consistent with planned uses under the SHSP and surrounding land uses. The

SHSP EIR stated that future development within the SHSP (like the proposed Project) would not create any localized traffic hazards due to the type and layout of planned land uses within a standard grid street system. All designs and alterations would be performed in accordance with all applicable standards relating to motorized vehicle, bicycle, and pedestrian safety.

Therefore, the Project will have less than significant traffic impacts relative to road, intersection, or site plan design hazards or incompatible uses. Impacts will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in inadequate emergency access?

The SHSP has a standard grid pattern of streets with a hierarchy of major, collector, and local streets, and local police and fire facilities are just west of the SHSP area. The SPA would not increase total square footage of development, so it will not increase anticipated traffic from the SPA Sub-area or change the need for emergency access. Therefore, the SHSPA will have less than significant impacts relative to emergency access and no programmatic mitigation is required.

The SHSP area has a grid pattern of streets with a hierarchy roadways. The proposed Project is part of the SHSP grid pattern of streets and is located along one major street (El Segundo Boulevard) and three secondary streets (E. Franklin Street, Kansas Street, and Oregon Street) which provide emergency access to both of the Development Sites. It should be noted the Project is not changing the overall onsite or offsite access to the Development Sites. The SHSP EIR stated that implementation of future projects under the SHSP (like the proposed Project) would be reviewed to ensure new development would not create barriers to emergency response vehicles. In addition, the proposed Project is not changing any public roadways or overall vehicular access to the two sites, so long-term emergency access to the site will not be affected by Project development. It should be noted the El Segundo Fire Department (ESFD) has already reviewed the proposed Development Project site plans regarding fire protection and emergency access and approved them subject to compliance with their standard conditions of approval.

For these reasons, the Project will have less than significant traffic impacts relative to emergency access and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts. The SPA would increase building heights within the SPA Sub-area but would not affect FAR or overall building square footages of new development beyond that allowed in the SHSP and evaluated in the SHSP EIR. Therefore, the SPA will not affect VMT of future development projects. The VMT study for the proposed Development Proiect indicates it will have less than significant VMT impacts with implementation of the recommended mitigation. Therefore, the SPA and Development Project will make less than significant contributions to cumulatively considerable regional VMT impacts.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	■	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

The LA Basin has been inhabited for thousands of years by various Native American tribes. CEQA requires coordination between the tribes and local governments to assure that tribal cultural resources are not being significantly impacted by new development.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence,*

to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

(a-b) The proposed SPA would increase the maximum allowable building heights on individual development sites within the SPA Sub-area by ten feet. However, future development would still be required to comply with CEQA, federal and state laws regarding archaeological and/or tribal resources, including consultation, and the City's development review process. Therefore, the SHSPA will have less than significant impacts regarding tribal cultural resources and no programmatic mitigation is required.

The City's General Plan (EIR indicates that the Tongva and Chumash Native American tribes inhabited this area for thousands of years, but it is likely that prior development has likely destroyed any artifacts if they were present. The SHSP EIR indicates the SHSP and surrounding areas have not been identified as containing significant tribal resources or are part of a cultural landscape by any local tribes. However, there is a potential for discovery of Native American tribal resources during grading and contact with such resources during construction activities could result in significant impacts. The SHSP EIR concluded that implementation of **Mitigation Measures CUL MM 8-2 and CUL MM 8-3** (in sub-section 5.b) would reduce these potential impacts to less than significant levels.

Regarding the Development Sites, AB 52 requires consultation with Native American tribes that are traditionally and culturally affiliated to the geographic area where a project is located for any project for which a Notice of Preparation, Notice of Mitigated Negative Declaration or Notice of Negative Declaration is filed on or after July 1, 2015. In order to participate in AB 52 tribal consultation, a tribe must request, in writing, to be notified by lead agencies through formal notification of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

SB 18 requires that, prior to the adoption or amendment of a city or county's general plan, the city or county conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects that are located within the city's jurisdiction. SB 18 requires the city to send a letter to each contact on the SB 18 list, extending an invitation for consultation. Native American tribes then have 90 days from receipt of the letter to request consultation. The city must also send a notice to all contacts 45 days prior to adopting an amended General Plan, as well as a third notice 10 days prior to any public hearing regarding a General Plan amendment.

The environmental document for the Project is an IS/MND. In addition, the Project includes an amendment to the SHSP and Site Plan Review. The Project would also require public hearings before both the City of El Segundo Planning Commission and City Council prior to Project approval.

One California Native American tribe, the Gabrieleño Band of Mission Indians–Kizh Nation, has notified the City of El Segundo with a request to be notified of pending projects that are being reviewed in accordance with the City's local CEQA implementation procedures. A formal notification regarding this Project proposal and the City's environmental review process was sent to the Kizh Nation on January 27, 2021, and the Kizh Nation subsequently submitted correspondence requesting further consultation.

On March 24, 2021, the City participated in a conference call with Andy Salas and Matt Teutimez, representatives of the Kizh Nation, to commence the tribal consultation process. Mr. Salas and Mr. Teutimez stated that significant tribal cultural resources have been

previously unearthed in the broader Project area and that this area was historically utilized as significant Native American trade route and community gathering place in the region. The tribal consultation is currently ongoing.

In addition, the City consulted with Robert Dorame, Tribal Chairman of the Gabrielino Tongva Indians of California (GTIC) on September 17, 2021 in compliance with AB-52 and SB-18.

As a result of the consultation with the Kizh Nation and the GTIC, **MM-TCR-1** is being proposed in the event of any discovery of unknown tribal cultural resources during earthwork. This mitigation measure can be updated prior to concluding tribal consultation with the Gabrieleño Band of Mission Indians - Kizh Nation and the Gabrielino Tongva Indians of California as appropriate.

Mitigation Measures. SHSP EIR **CUL MM 8-2 and CUL MM 8-3**, as outlined in sub-section 5.b, Cultural Resources, are applicable to development of the Development Sites, in addition, the following Mitigation Measure TCR-1 addresses impacts related to Tribal Cultural Resources:

MM-TCR-1 **Native American Monitoring.** Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain Native American Monitors approved by the Gabrieleño Band of Mission Indians-Kizh Nation and the Gabrielino Tongva Indians of California, the tribe that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.

The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes will retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and

(2). Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).

With the implementation of Mitigation Measures CUL MM 8-2, CULMM 8-3, and TCR-1, potential impacts to tribal cultural resources would be reduced to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Cumulative Impacts. The SPA addresses only building heights within the SPA Sub-area and will not increase FAR, new building footprints, or total allowable building area of new development. Therefore, it will have no impact on construction activities that could disturb previously unknown tribal cultural resources. In addition, the Development Project proposes no increase in FAR or overall square footage of development which could disturb tribal cultural resources. Therefore, the SPA and Development Project will not contribute to any cumulative impacts regarding tribal cultural resources, including the discovery of any Native American human remains.

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	■	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	■	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

Residents and employees in the Project area require a variety of utility services including water, sewer, and solid waste. New development must be evaluated to assure it is within the service capabilities of local companies and jurisdictions that provide these utilities.

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The SPA would increase maximum permissible building heights for future development within the SPA Sub-area by ten feet, but would not allow for more intensive development or more total overall square footage than under the current SHSP. This increased height of development would not result in a substantial increase in water consumed and wastewater and solid waste generated in the SHSP. The development on individual sites will still not exceed the overall growth expected for buildout within the SHSP. Impacts would be less than significant and no programmatic mitigation is required.

The Project is part of the SHSP and will construct a net of 90,172 square feet of new office uses within the SHSP area. These uses will generate approximately 120 new employees who will consume additional water and generate additional wastewater and solid waste. Specific estimates for additional water consumed, wastewater generated, and solid waste generated are provided in sub-sections 17.b, 17.c, and 17.d respectively.

The EIR estimated the SHSP would develop over 517,000 square feet of new commercial, industrial, office, and other uses and generate a total of 951 additional employees and up to 18 additional residents (max. 3 persons per caretaker unit). The office development proposed for the Project is well within the growth estimates for the SHSP as a whole, representing 18.1 percent of the new building square footage planned within the SHSP.

Since the proposed Project is part of the SHSP, it is also expected to have less than significant impacts regarding the existing storm drain system. In addition, neither the SHSP or the Project will substantially increase the need or infrastructure to provide electricity, natural gas, or telecommunications. Impacts for all utility systems are expected to be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The SPA would increase maximum permissible building heights for future development within the SPA Sub-area by ten feet, which would not allow for higher FAR, more intensive development, or more total square footage on sites than under the current SHSP. This increased height of development could result in incremental increases in water consumed in the SHSP. However, the increased development height on individual sites will still not exceed the overall growth expected for buildout within the SHSP. Impacts would be less than significant and no programmatic mitigation is required.

The SHSP EIR indicated the City's projected water supply for 2035 was 17,750 Acre-Feet Per Year (AFY) and the current (then 2018) projected demand for water supply in 2035 during a single dry year was 17,250 AFY, as shown in DEIR Table 19-4. A 500 AFY surplus was anticipated based on the projected water demands for a single dry year in 2035. Projections indicate that supply and demand from 2020 to 2035 vary and the City imports all water supplies to meet its water demands. The SHSP EIR determined the SHSP would result in a net increase in water demand of 118.38 AFY but sufficient water supplies were available to serve buildout of the SHSP area.

The proposed Project is part of the SHSP and will construct a net of 90,172 square feet of new office uses within the SHSP area which will consume approximately 12,000 gallons of water per day or 13.4 acre-feet of water per year. The Project will make connections and improvements as necessary to provide adequate water service for the 120 future Project

employees[14]. By comparison, the SHSP EIR estimated the entire SHSP would develop over 517,000 square feet of new commercial, industrial, office, and other uses and generate a total of 951 additional employees. Therefore, the development proposed for the Project is well within the growth estimates for the SHSP as a whole, representing a maximum of 18.1 percent of the new building square footage planned under the SHSP (90,172 vs. 517,000). The Project will also make connections and improvements as necessary to provide adequate utility service for the future employees.

Future development within the SHSP would have to comply with the City's Municipal Code water conservation measures such as drought-tolerant landscaping, water conservation measures to minimize water consumption, and use of recycled water which would decrease the projected water demand needs for the City. The EIR concluded that implementation of the SHSP would not increase system demands to require new facilities or result in infrastructure improvements beyond those projected by the City Public Works Department.

Based on this analysis, potential impacts of the Project on water supplies will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The SPA would increase maximum permissible building heights for future development within the SPA Sub-area by ten feet, but would not allow for higher FAR, more intensive development, or more total square footage on sites than under the current SHSP. This increased height of development would not result in incremental increases in water consumed and wastewater and solid waste generated in the SHSP. The increased development height on individual sites will still not exceed the overall growth expected for buildout within the SHSP. Impacts would be less than significant and no programmatic mitigation is required.

The Project is part of the SHSP and will construct a net of 90,172 square feet of new office uses within the SHSP area which will generate approximately 6,000 gallons pf wastewater per day. The Project will make connections and improvements as necessary to provide adequate wastewater service for the 120 future Project employees[15].

The SHSP EIR stated that implementation of the SHSP would result in an additional net wastewater generation of 42,951.2 gallons per day, which would remain consistent with the capacity of existing facilities. In 2018 the City's sewer flow was 2.66 million gallons per day (mgd) of which 1.17 mgd was conveyed to the Hyperion Plant with the remaining volume conveyed to other facilities of the Sanitation District of Los Angeles County (SDLAC). The City's capacity was 2.75 mgd so the remaining capacity on the system was 0.9 mgd. Therefore, the EIR concluded that implementation of the SHSP would not result in the need for construction of new water or wastewater facilities, or expansion of existing facilities.

Therefore, impacts with respect to projected wastewater generation and infrastructure needs would be less than significant and no mitigation is required.

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[14] 90,172 square feet of office uses divided by 750 square feet per office employee equals new 120 employees times 100 gallons per person per day of water consumed equals 12,000 gallons per day of water which equals 13.4 acre-feet.

[15] 90,172 square feet of office uses divided by 750 square feet per office employee equals new 120 employees times 50 gallons per person per day equals 6,000 gallons per day of wastewater.

LESS THAN SIGNIFICANT IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Solid Waste Infrastructure. The EIR estimated the total solid waste generated by occupants (not residents) and employees by implementation of the SHSP would be 2,216.17 cubic yards (CY) per year. Current disposal facilities include the Chiquita Canyon, Scholl Canyon, and Sunshine Canyon landfills which will continue to remain in operation. In 2018, the EIR indicated the Scholl Canyon landfill had a remaining capacity of 9.9 million CY, Sunshine Canyon landfill had a remaining capacity of 96.8 million CY, and the Chiquita Canyon landfill had a remaining capacity of 8.6 million CY. The EIR concluded the landfills serving the SHSP area had sufficient capacity to accommodate the additional solid wastes generated by the SHSP. Therefore, impacts would be less than significant and no mitigation was required assuming compliance with the City's waste reduction programs.

The SPA would increase maximum permissible building heights for future development within the SPA Sub-area by ten feet, but would not allow for higher FAR, more intensive development, or more total square footage on sites than under the current SHSP. This increased height of development would not result in increased solid wastes generated in the SHSP or the ability of the County to dispose of the additional generated wastes. Impacts would be less than significant and no programmatic mitigation is required.

The Project will construct 90,172 square feet of new office uses within the SHSP area which will generate additional solid waste. The additional 120 employees of the Project will generate approximately 1,200 pounds or 0.6 tons of solid waste per day assuming 10 pounds per person per day (CIWMB 2021). By comparison, the SHSP EIR estimated the SHSP would develop over 517,000 square feet of new commercial, industrial, office, and other uses and generate a total of 951 additional employees. The development proposed for the Project is well within the growth estimates for the SHSP as a whole, representing 18.1 percent of the total new building square footage planned under the SHSP.

Based on the preceding analysis, impacts of the Project relative to solid waste disposal will be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

f. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

New development on sites within the SHSP would still be required to comply with the City's recycling and source reduction programs. Impacts would be less than significant and no programmatic mitigation is required.

Regarding the Project, Sub-section 19.e above indicates the Project is part of the SHSP and would generate additional solid waste, but it will not create additional non-residential development to the degree that the available landfill capacity would be exceeded. The Project will be required to be consistent with existing solid waste regulations implemented by the City.

The Project would be required to comply with state regulations pertaining to solid waste as managed by the City. Therefore, the Project's impacts with respect to federal, state, and local statutes and regulations related to solid waste would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impact. The SPA would increase buildings heights within the SPA Sub-area but would not affect FAR or total building square footage of new development. Therefore, the SPA would not increase utility demand over that identified in the SHSP EIR and would have less than significant impacts on local water, sewer, and other utility systems and services. The Development Project would increase demand for utility services above current levels due to the increased amount of development proposed for the two sites. However, this Initial Study indicates that anticipated utililty demands can be met without significant impacts to utility infrastructure. Therefore, the SPA and Developent Project will incrementally increase the demand for utility services but will not contribute to regionally significant cumulative impacts on utilities or service systems.

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

Due to many physical conditions, the Los Angeles Basin, which includes the proposed Project area, has a significant risk of wildfires in areas with extensive natural vegetation and at the urban/wildland interface. CEQA new requires an assessment of new development to determine if it will exacerbate wildland fire risks or interfere with the ability to provide effective fire protection services to these areas.

a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

(a-d) The SHSP EIR stated there were no wildland areas in or adjacent to the SHSP. In addition, there are no state responsibility areas in the SHSP or the City. Therefore, there were no impacts to or from future development within the SHSP related to wildland fires (i.e., wildfires) and no programmatic mitigation is required.

Future buildings under the SHSPA may be taller than currently allowed, but there are no wildland areas in or adjacent to the SHSP. The City is a highly urbanized area and no part lies within a Very High Fire Hazard Severity Zone.

The two Development Sites are within the SHSP area and the SHSP EIR indicates the Specific Plan is not within a wildland fire risk area or a high or very high fire hazard severity zone. Therefore, the Project would have no impacts related to high fire zones and no mitigation required.

NO IMPACT

Cumulative Impacts. The SPA Sub-area, which includes the two Development Sites, is in a highly urbanized area with no open space or vacant land or areas of native vegetation nearby. Therefore, both the SPA and the Development Project would not contribute to any regional cumulative impacts related to wildfires.

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
e. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	■	☐	☐
f. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

CEQA requires an evaluation of a number of topics referred to as "mandatory findings" including: (1) impacts to listed or otherwise protected species of plants, animals, or their habitat, or important and irreplaceable historical or archaeological resources; (2) impacts that may be individually limited but significant on a cumulative basis; and (3) impacts that would significantly harm human health or safety.

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The SPA concerns maximum building heights within the SPA Sub-area and the preceding analyses (Subsections 4 and 5) determined the SPA would have no or less than significant impacts on cultural or biological resources and no programmatic mitigation was proposed.

The Project is located within a highly urbanized area with no natural habitat. The preceding analyses (Subsections 4 and 5) determined that Project impacts to the natural habitat of a fish or wildlife species will be less than significant with implementation of **Mitigation Measures BIO MM 7-1 and BIO MM 7-2** to protect nesting birds. In addition, potential adverse impacts to archaeological resources, paleontological resources, or human remains will remain less than significant with implementation of **Mitigation Measures CUL MM 8-1 through CUL MM 8-3 and MM TCR-1** to monitor grading for possible cultural or fossil materials. Although the two onsite buildings are over 50 years in age, the Development Sites and their buildings were determined not to have any association with an important example of California's history or prehistory.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The SPA concerns maximum building heights within the SPA Sub-area and the preceding analyses (Subsections 1-20) determined the SPA would have no significant individual or ay regional cumulative impacts and no programmatic mitigation is proposed.

The Project is within the SHSP and there are no residential uses or sensitive receptors adjacent to either of the Development Sites. For the Project, the preceding analyses (Subsections 1-20) did identify mitigation measures, either from the SHSP EIR or recommended in this document, for the following potential impact areas:

Biological Resources (**BIO MM 7-1 and 7-2**)

Cultural Resources (**CUL MM 8-1 through 8-3**)

Greenhouse Gas Emissions (**EECAP 4.1 and EECAP 5.2**)

Hazardous and Hazardous Materials (**MM HAZ-1 to HAZ-3**)

Geology and Soils (**MM GEO-1**)

Transportation (**MM VMT-1 to VMT-6**)

Tribal Cultural Resources (**MM TCR-1**).

However, the analyses also determined the Project would not make any significant contributions to cumulatively considerable regional impacts for any of the environmental issues evaluated, including air quality and greenhouse gas emissions, with implementation of these measures.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The SPA concerns maximum building heights within the SPA Sub-area and the preceding analysis determined the SPA would have no or less than significant impacts related to air quality, health risks, greenhouse gas emissions, hazardous materials or other hazards, or geology or soils and no programmatic mitigation is proposed for the SPA.

The Project is within the SHSP and there are no residential uses or sensitive receptors adjacent to either of the Development Sites. The preceding analyses (Subsections 3, 7-9,13, and 20) addressed the following environmental effects which have the potential to cause substantial adverse effects on human beings, either directly or indirectly:

Air Quality and Health Risks – Subsection 3 – Less Than Significant
Geology (groundshaking) – Subsection 7 – Less Than Significant with Mitigation Measure **MM GEO-1**
Hazards and Hazardous Materials – Subsection 8 – Less Than Significant with Mitigation Measures **MM HAZ-1 through HAZ-3**
Hydrology (flooding) – Sect 9 – Less Than Significant
Noise – Subsection 13- Less Than Significant
Wildfire – Subsection 20 – No Impact

The preceding analyses determined all of these potential impacts could be reduced to less than significant levels with the recommended mitigation measures.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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_____ (USHUD) 2009b. HUD Noise Guidebook, Chapter 4 Supplement: Sound Transmission Class Guidance. Prepared by the Environmental Planning Division, Office of Environment and Energy. March 2009.

List of Preparers

MIG, Inc. prepared this Initial Study under contract to the City of El Segundo. Persons involved in data gathering analysis, project management, and quality control are listed below:

City of El Segundo

Eduardo Schonborn, AICP, Principal Planner, City of El Segundo
Leila Carver, PTP, Contract Planner
Anna Choudhuri, Contract CEQA Planner

CEQA Consultants

MIG, Inc.

Bob Prasse, Env. Services Director
Kent Norton, AICP, REPA, Senior Project Manager
Chris Dugan, Director of Air Quality and Noise Assessments

Translutions, Inc. (Traffic – VMT)

Sandipan Bhattacharjee, President

Summary of Mitigation Measures

* denotes measure is from the Smoky Hollow Specific Plan EIR

Biological Resources

BIO MM 7-1* To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.

BIO MM 7-2* If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

Cultural Resources

CUL MM 8-2* Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including

contact information for the appropriate entities if archaeological or paleontological resources are discovered.

CUL MM 8-3* In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

CUL MM 8-4 If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.

Geology and Soils

MM GEO-1 Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.

Greenhouse Gas Emissions

EECAP 4.1* *Encourage or Require Energy Efficiency Standards Exceeding Title 24.* This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.

EECAP 5.2* *Promote Water Efficiency Standards Exceeding SB X7-7.* In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.

Hazards and Hazardous Materials

MM HAZ-1 Prior to issuance of a Certificate of Occupancy for the North Site (1330 E. Franklin Street), the applicant shall remove and properly decommission the vertical and lateral well network of the former vapor extraction system including abandonment of any groundwater monitoring wells and semi-permanent vapor probes on the property. This measure shall be implemented to the satisfaction of the City with input and regulatory oversight and written signoff by DTSC.

MM HAZ-2 Prior to issuance of a grading permit for the North Site (1330 E. Franklin Street), the applicant shall prepare and process a Soils Management Plan through the state Department of Toxic Substances Control (DTSC) for review and approval. Prior to issuance of a building permit, the applicant shall provide written confirmation from DTSC to the City that the Soil Management Plan has been implemented as approved.

MM HAZ-3 Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1330 E. Franklin Street), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.

Transportation (VMT)

MM VMT-1 **Unbundle Parking Cost.** This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between 2.6% and 13%. **Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.**

MM VMT-2 **Parking Management Strategies.** Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in

reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. **The maximum reduction from this measure is 3%.**

MM VMT-3 **Mandatory Travel Behavior Change Program, Promotions & Marketing.** This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the building lobbies to enable users an easy way to access information about transit routes. **The maximum reduction due to this measure is 1%.**

MM VMT-4 **Implement Commute Trip Reduction Marketing.** This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. **For this project, a conservative reduction of 3% has been assumed.**

MM VMT-5 **Include Bike Parking in Excess of City Code.** This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and therefore, it is recommended that the project provide at least 18 spaces. **This results in a VMT reduction of 0.625%.**

MM VMT-6 **Include Secure Bike Parking and Showers.** This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. **This results in a VMT reduction of 0.625%.**

Tribal Cultural Resources

MM-TCR-1 **Native American Monitoring.** Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation and the Gabrielino Tongva Indians of California, the tribes that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.

The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes shall retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).

EXHIBIT B

Mitigation Monitoring and Reporting Program

Project: ***City of El Segundo Standard Works Project IS/MND*** ***Date:*** ***January 18, 2022***

***** denotes mitigation measure is from the Smoky Hollow Specific Plan

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
Biological Resources	**BIO MM 7-1*** To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.	Any vegetation removal or ground-disturbing activity February 1 to September 1	Planning Department	Retention and monitoring by qualified biologist with final report upon completion
Biological Resources	**BIO MM 7-2*** If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to	Provide setbacks if active nests are found per BIO MM 7-1	Planning Department	Monitoring by qualified biologist if needed during grading with final report upon completion

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	construction-related activities that have the potential to disturb any active nests during the nesting season.			
Cultural Resources	**CUL MM 8-2*** Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.	Prior to grading or other ground-disturbing activities	Planning Department	Qualified archaeologist provides proof of distributing handouts or conducting training for construction staff
Cultural Resources	**CUL MM 8-3*** In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City	During grading or other ground-disturbing activities	Planning Department	Retention of and monitoring by qualified archaeologist with final report upon completion of grading

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.			
Cultural Resources	**CUL MM 8-4** If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.	During grading or other ground-disturbing activities During grading or other ground-disturbing activities	Planning Department Planning Department	County Coroner confirm contact within 24 hours regarding human remains Contact appropriate Native American tribal representatives
Geology and Soils	**MM GEO-1** Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the	Prior to issuance of any grading or building permits	Planning Department	Demonstrate that plans comply with Project Geotech report

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.			
Greenhouse Gas Emissions	**EECAP 4.1*** *Encourage or Require Energy Efficiency Standards Exceeding Title 24.* This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.	Prior to issuance of building permits	Planning Department	Demonstrate that plans exceed energy requirements of Title 24
Greenhouse Gas Emissions	**EECAP 5.2*** *Promote Water Efficiency Standards Exceeding SB X7-7.* In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.	Prior to issuance of building permits	Planning Department	Demonstrate that plans exceed established water conservation standards
Hazards and Hazardous Materials	**MM HAZ-1** Prior to issuance of a Certificate of Occupancy for the North Site (1330 E. Franklin Street), the applicant shall remove and properly decommission the vertical and lateral well network of the former vapor extraction system including abandonment of any groundwater monitoring wells and semi-permanent vapor probes on the property. This measure shall be implemented to the satisfaction of the City with input and regulatory oversight and written signoff by DTSC.	Prior to issuance of a Certificate of Occupancy related to 1330 E. Franklin Street	Planning Department	Confirmation from DTSC that vapor extraction well network has been removed to DTSC satisfaction
Hazards and Hazardous Materials	**MM HAZ-2** Prior to issuance of a grading permit for the North Site (1330 E. Franklin Street), the applicant shall prepare and process a Soils Management Plan through the state Department of Toxic Substances Control (DTSC) for review and approval.	Prior to issuance of a grading permit related to 1330 E. Franklin Street	Planning Department Planning Department	Demonstrate DTSC approval of Soils Management Plan

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	Prior to issuance of a building permit, the applicant shall provide written confirmation from DTSC to the City that the Soil Management Plan has been implemented as approved.	Prior to issuance of a building permit related to 1330 E. Franklin Street		Demonstrate Soils Management Plan has been implemented to DTSC satisfaction
Hazards and Hazardous Materials	**MM HAZ-3** Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1330 E. Franklin Street), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.	Prior to issuance of a demolition or grading permit	Planning Department	Demonstrate absence, removal, or treatment of ACMs as appropraite
Transpor-tation	**MM VMT-1** Unbundle Parking Cost. This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between 2.6% and 13%. Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate
Transpor-tation	**MM VMT-2** Parking Management Strategies. Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. The maximum reduction from this measure is 3%.			
Transpor-tation	**MM VMT-3** Mandatory Travel Behavior Change Program, Promotions & Marketing. This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the building lobbies to enable users an easy way to access information about transit routes. The maximum reduction due to this measure is 1%.	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate
Transpor-tation	**MM VMT-4** Implement Commute Trip Reduction Marketing. This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. For this project, a conservative reduction of 3% has been assumed.			
Transpor-tation	**MM VMT-5** Include Bike Parking in Excess of City Code. This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and therefore, it is recommended that the project provide at least 18 spaces. This results in a VMT reduction of 0.625%.	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate
Transpor-tation	**MM VMT-6** Include Secure Bike Parking and Showers. This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. This results in a VMT reduction of 0.625%.	Within one year of issuance of Certificates of Occupancy for the North and South Sites	Planning Department	Demonstrate achievement of VMT reduction as appropriate
Tribal Cultural Resources	**MM TCR-1** Native American Monitoring. Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation and the Gabrielino Tongva Indians of California, the tribes that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.	Prior to grading or other ground-disturbing activities	Planning Department	Qualified tribal monitor retained and agreement in place

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes shall retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be			

EXHIBIT B

Impact Category	Mitigation Measures*	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method
	treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).			

*** denotes mitigation measure is from the Smoky Hollow Specific Plan**

RESOLUTION NO. 2913

A RESOLUTION OF THE EL SEGUNDO PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE SPECIFIC PLAN AMENDMENT NO. SPA 21-02 TO MODIFY PORTIONS OF THE SMOKY HOLLOW SPECIFIC PLAN TO ALLOW FOR INCREASED BUILDING HEIGHTS WITHIN A DESIGNATED SUBAREA OF THE SMOKY HOLLOW SPECIFIC PLAN AREA SUBJECT TO THE APPROVAL OF A TIER II COMMUNITY BENEFITS PLAN.

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: The Planning Commission finds and declares that:

A. On January 6, 2021, Mark Telesz of Smoky Hollow Industries, LLC., filed an application for amendment to the Smoky Hollow Specific Plan (SPA) 21-02;

B. The City reviewed the project's environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

C. An Initial Study / Mitigated Negative Declaration (IS/MND) was prepared pursuant to the requirements of CEQA and the CEQA Guidelines;

D. The Development Services Department completed its review and scheduled a public hearing regarding the application before the Planning Commission for January 27, 2022;

E. On January 27, 2022, the Planning Commission continued the project, at the request of the project applicant, to February 10, 2022;

F. On February 10, 2022, the Planning Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the proposed amendments, including, without limitation, information provided to the Planning Commission by City staff and public testimony; and,

G. This Resolution and its findings are made based upon the evidence presented to the Commission at its February 10, 2022, hearing including, without limitation, the staff report submitted by the Development Services Department and the totality of the evidence in the administrative record.

SECTION 2: *Factual Findings and Conclusions*. The Planning Commission finds as follows:

A. The Smoky Hollow Specific Plan (hereinafter, the "Specific Plan" or "SHSP") covers approximately 120 acres located in the northwest quadrant of the

City, generally bounded by Standard Street to the west, El Segundo Boulevard to the south, Pacific Coast Highway to the east, and Grand Avenue to the north.

B. The proposed amendment to the SHSP would amend the development standards to increase the maximum permissible height of buildings within a designated subarea of the SHSP Area from 50 feet to 60 feet. Specifically, the amendment would modify the height development standard for Tier II Community Benefit Plan qualifying projects within an approximate 30-acre area, to be known as Subarea 1, located in Smoky Hollow East and Public Facility zoning districts bounded by Center Street to the west, East Franklin Avenue to the north, Pacific Coast Highway [formerly Sepulveda Blvd.] to the east, and East El Segundo Boulevard to the south.

SECTION 3: Specific Plan and *General Plan Consistency Findings*. Based on the information in the staff report and in the administrative record as a whole, the Planning Commission hereby finds that the proposed amendment to the Smoky Hollow Specific Plan will further the goals, policies and objectives of the General Plan and will not obstruct their attainment. More specifically:

A. The proposed Specific Plan Amendment would make relatively minor changes to the SHSP, allowing for buildings up to 60 feet (an increase of 10 feet above the current maximum height of 50 feet) within a 30-acre subarea of the SHSP, subject to the approval of a Tier II Community Benefits Plan (a discretionary approval). The proposed Specific Plan Amendment would be consistent with the existing Smoky Hollow Design Guidelines for enhancing building character such as conveying a sense of old and new, building upon the existing context, conserving and retaining character defining features, encouraging additions that differentiate and are secondary to the bulk and mass of existing buildings, and encouraging 360-degree architecture.

B. The Specific Plan Amendment will provide additional flexibility and options for advancing the goals and objectives of the Specific Plan itself, particularly for projects that propose to maintain the existing character of the area by preserve portions of existing buildings.

C. The proposed amendment to the SHSP will directly advance the following objectives and policies of the General Plan:

Economic Development Element

Objective ED1-2: Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

The proposed amendment is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan's goals, objectives and policies above because it promotes economic development, job creation, and improves the City's tax base through inclusion of office, and research and development land uses within the Smoky Hollow Specific Plan area.

Land Use Element

Objective LU4-4: Provide areas where development has the flexibility to mix uses, in an effort to provide synergistic relationships which have the potential to maximize economic benefit, reduce traffic impacts, and encourage pedestrian environments.

D. The proposed amendment is consistent with the General Plan's Land Use Element and directly implements and furthers the General Plan's goals, objectives and policies above because the proposed 10 feet height increase would not detract from or create an impediment to the intent and implementation of the Smoky Hollow Specific Plan. By allowing the additional height, in conjunction with a Community Benefits Plan as required, the additional height will allow more flexibility in the design of new buildings and help promote the retention of the existing buildings to be incorporated into the design of substantial additions. Each new building would be evaluated on its own merit to ensure high quality design and for compatibly with its surroundings. The allowance of the additional height would also promote new uses and building into the context of the overall Smoky Hollow Specific Plan area and will introduce new architectural styles, enliven the area, and create positive direct and indirect economic impacts consistent with Objective LU4-4.

SECTION 5: *Environmental Assessment*. An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to analyze the potential environmental effects of the proposed Specific Plan amendment. The Planning Commission has reviewed and considered the IS/MND and, by way of a separate resolution (Resolution No. 2912), has found that it complies with the California Environmental Quality Act. Accordingly, the Commission has recommended that the City Council approve the IS/MND. The findings and conclusions of Resolution No 2912 are incorporated herein as though fully set forth.

SECTION 6: *Recommendations*. The Planning Commission recommends that the City Council adopt the Ordinance attached as Exhibit A which would implement the Smoky Hollow Specific Plan Amendment.

SECTION 7: *Reliance on Record.* Each and every one of the findings and determination in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 8: *Limitations*. The Planning Commission's analysis and evaluation of the project is based on information available at the time of the decision. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. In all instances, best efforts have been made to form accurate assumptions.

SECTION 9: This Resolution will remain effective unless and until superseded by a subsequent resolution.

SECTION 10: The Commission secretary is directed to mail a copy of this Resolution to any person requesting a copy.

SECTION 11: This Resolution may be appealed within 10 calendar days after its adoption. All appeals must be in writing and filed with the City Clerk within this time period. Failure to file a timely written appeal will constitute a waiver of any right of appeal.

PASSED AND ADOPTED this ____ day of _____ 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary and
Development Services Director

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Joaquin Vazquez, Deputy City Attorney

PLANNING COMMISSION RESOLUTION NO. 2913
EXHIBIT "A"

DRAFT ORDINANCE NO. ____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF EL SEGUNDO APPROVING SPECIFIC PLAN AMENDMENT NO. 21-02 TO MODIFY PORTIONS OF THE SMOKY HOLLOW SPECIFIC PLAN TO ALLOW FOR INCREASED BUILDING HEIGHTS WITHIN A DESIGNATED SUBAREA OF THE SMOKY HOLLOW SPECIFIC PLAN AREA SUBJECT TO THE APPROVAL OF A TIER II COMMUNITY BENEFITS PLAN

The City Council of the city of El Segundo does ordain as follows:

15-23A-2: The Council finds and declares as follows:

A. On August 31, 2020, Mark Telesz of Smoky Hollow Industries, LLC., filed an application for amendment to the Smoky Hollow Specific Plan (SPA) 21-02.

B. The City reviewed the project's environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

C. An Initial Study / Mitigated Negative Declaration (IS/MND) was prepared pursuant to the requirements of CEQA and the CEQA Guidelines;

D. The Development Services Department completed its review and scheduled a public hearing regarding the application before the Planning Commission for January 27, 2022

E. On January 27, 2022, the Planning Commission continued the application to it's regularly scheduled meeting on February 10, 2022.

F. On February 10, 2022, the Planning Commission held a public hearing to receive public testimony and other evidence regarding the application including, without limitation, information provided to the Planning Commission by city staff, and adopted Resolution No. 2913 recommending that the City Council approve the proposed Specific Plan Amendment;

G. On _____, 2022, the City Council held a public hearing and considered the information provided by City staff and public testimony regarding this Ordinance; and

H. This Ordinance and its findings are made based upon the entire administrative record including, without limitation, testimony and evidence presented to the City Council at its _____, 2022 hearing and the staff report submitted by the Development Services Department.

SECTION 2*: Factual Findings and Conclusions*. The City Council finds as follows:

A. The Smoky Hollow Specific Plan (hereinafter, the "Specific Plan" or "SHSP") covers approximately 120 acres located in the northwest quadrant of the City, generally bounded by Standard Street to the west, El Segundo Boulevard to the south, Pacific Coast Highway to the east and Grand Avenue to the north;

B. The proposed amendment to the Specific Plan would amend the development standards to increase the maximum permissible height of buildings within a designated subarea of the SHSP Area from 50 feet to 60 feet. Specifically, the amendment would modify the height development standard for Tier II Community Benefit Plan qualifying projects within an approximate 30-acre area located in the Smoky Hollow East and Public Facility zoning districts bounded by Center Street to the west, E. Franklin Avenue to the north, Pacific Coast Highway [formerly Sepulveda Blvd.] to the east, and E. El Segundo Blvd. the south.

SECTION 3: *Specific Plan and General Plan Consistency Findings*. Based on the information in the staff report and in the administrative record as a whole, the City Council hereby finds that the proposed amendment to the Smoky Hollow Specific Plan will further the goals, policies and objectives of the General Plan and will not obstruct their attainment. More specifically:

A. The proposed Specific Plan Amendment would make relatively minor changes to the SHSP, allowing for buildings up to 60 feet (an increase of 10 feet above the current maximum height of 50 feet) within a 30-acre subarea of the SHSP, subject to the approval of a Tier II Community Benefits Plan (a discretionary approval). The proposed Specific Plan Amendment would be consistent with the existing Smoky Hollow Design Guidelines for enhancing building character such as conveying a sense of old and new, building upon the existing context, conserving and retaining character defining features, encouraging additions that differentiate and are secondary to the bulk and mass of existing buildings, and encouraging 360-degree architecture.

B. The Specific Plan Amendment will provide additional flexibility and options for advancing the goals and objectives of the Specific Plan itself, particularly for projects that propose to maintain the existing character of the area by preserve portions of existing buildings.

C. The proposed amendment to the SHSP will directly advance the following objectives and policies of the General Plan:

Economic Development Element

Objective ED1-2: Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

The proposed amendment is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan's goals, objectives and policies above because it promotes economic development, job creation, and improves the City's tax base through inclusion of office, and research and development land uses within the Smoky Hollow Specific Plan area.

Land Use Element

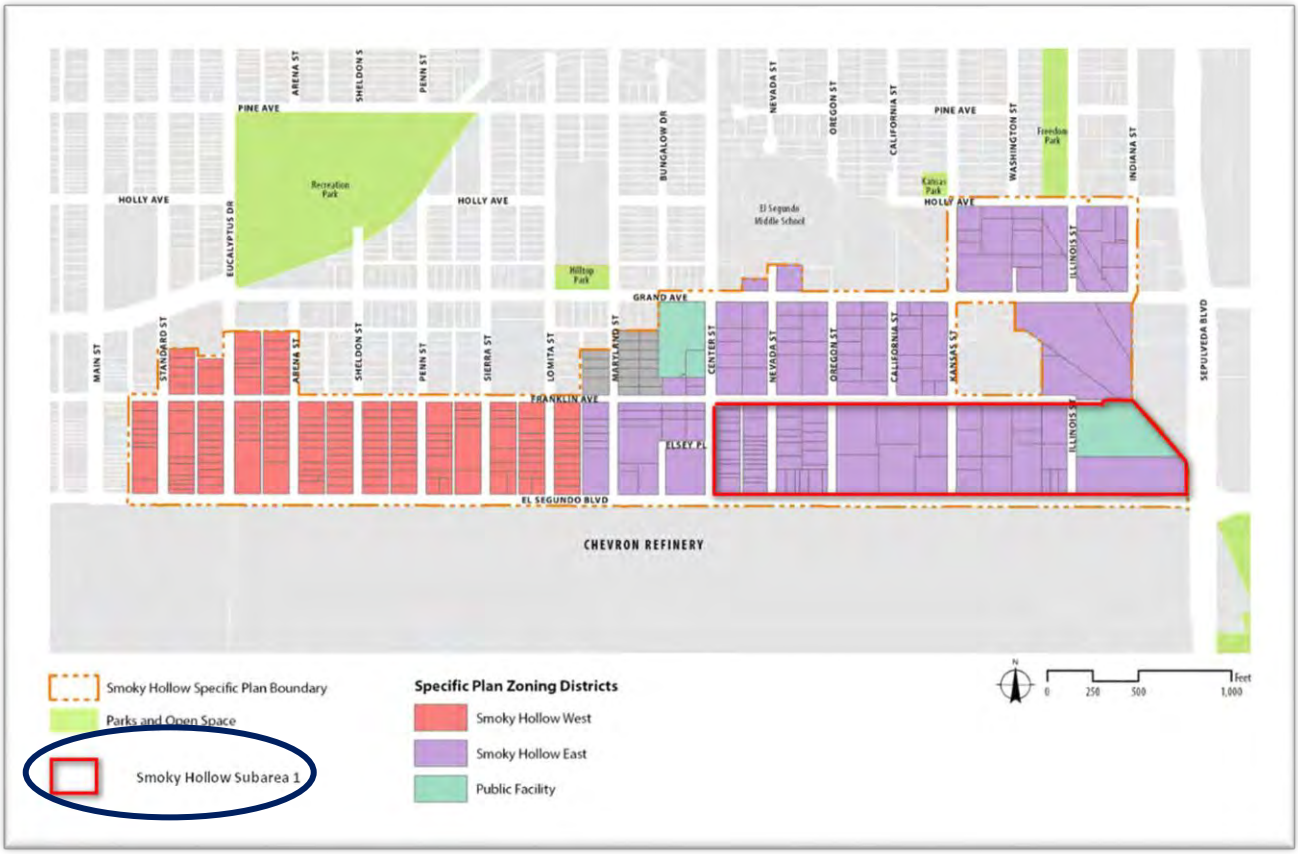
Objective LU4-4: Provide areas where development has the flexibility to mix uses, in an effort to provide synergistic relationships which have the potential to maximize economic benefit, reduce traffic impacts, and encourage pedestrian environments.

D. The proposed amendment is consistent with the General Plan's Land Use Element and directly implements and furthers the General Plan's goals, objectives and policies above because the proposed 10 feet height increase would not detract from or create an impediment to the intent and implementation of the Smoky Hollow Specific Plan. By allowing the additional height, in conjunction with a Community Benefits Plan as required, the additional height will allow more flexibility in the design of new buildings and help promote the retention of the existing buildings to be incorporated into the design of substantial additions. Each new building would be evaluated on its own merit to ensure high quality design and for compatibly with its surroundings. The allowance of the additional height would also promote new uses and building into the context of the overall Smoky Hollow Specific Plan area and will introduce new architectural styles, enliven the area, and create positive direct and indirect economic impacts consistent with Objective LU4-4.

SECTION 4*: Environmental Assessment.* An Initial Study/Mitigated Negative (IS/MND) Declaration has been prepared to analyze the potential environmental effects of the

proposed Specific Plan Amendment. On February 10, 2022, the Planning Commission adopted Resolution No. 2912 recommending that the City Council approve the IS/MND. Prior to taking action on this Ordinance, the City Council adopted Resolution No. ____ approving the IS/MND. The findings and conclusions of Resolution No. ____ are incorporated herein as though fully set forth.

Section 5: Figure 2-1 (Zoning Districts) of the SHSP is superseded and replaced with the revised Figure 2-1 below, which indicates the boundary of the newly-created Smoky Hollow Subarea 1 bounded on the west by Center St, E. Franklin Ave to the north, Pacific Coast Highway (PCH) [formerly Sepulveda Blvd.] to the east, and E. El Segundo Blvd. to the south.



Section 6: The first paragraph of SHSP Section 2.3.2 (Development Tiers and Community Benefits) is hereby amended to delete the final sentence. The resulting paragraph reads as follows:

> "The base development standards listed in Table 2-2 represent the minimum project requirements. New development that proposes to exceed the base standard for height, density, or any other development standard beyond the minor deviation threshold allowed by Section 4.5.1 Administrative Adjustment shall in return provide community benefits that enhance Smoky Hollow's character and experience."

Section 7: Table 2-2 (Building Intensity and Height Standards by Zoning District) is superseded and replaced with the revised Table 2-2 set forth below, which adds development standards for the newly-created Smoky Hollow Subarea 1.

Table 2-2: Building Intensity and Height Standards by Zoning District

Development Standard		Smoky Hollow West	Smoky Hollow East	Smoky Hollow Subarea [4]	Parking
A. FAR Standards					
1. Allowable Gross Floor Area Ratio (FAR) [1]	Base Standard	0.75	1.0		0.15 [2]
	Community Benefits Tier [3]	1.5			N/A
	Community Benefits Tier II [3]	2.5			N/A
B. Height Standards					
1. Maximum Building Height	Base Standard	35 ft			
	Community Benefits Tier II [3]	50 ft		60 ft [4]	50 ft
2. Parapet Height		May exceed maximum building height by 5 ft			

Notes:

sf = square feet; ft = feet

1. FAR shall be calculated using gross floor area of structures, as defined in Appendix A.
2. FAR in the P zone is applicable only to non-parking facility uses.
3. See 4.5.2: Community Benefits Plan.
4. See Figure 2-1: Zoning Districts for Subarea delineation.

Section 8: Table 2-6 (Parking Standards by Zoning District) is superseded and replaced with the revised Table 2-6 below, which replaces the reference to the "2016 California Green Building Standards Code" in subsection H.4 (Bicycle Parking) with a reference to "the most recent California Green Building Code."

Table 2-6: Parking Standards by Zoning District

Development Standard	Smoky Hollow West	Smoky Hollow East	Parking
H. Private Parking Standards			
1. New Construction and Change of Occupancy[1]	2.5 spaces per 1,000 sf gross floor area. Shall be on-site, off-site per covenanted agreement, or addressed through payment of in-lieu fees, per ESMC Section 15-15-6D.		
2. Additions to Buildings	2.5 spaces per 1,000 sf gross floor area (addition only). Shall be on-site, off-site per covenanted agreement, or addressed through payment of in-lieu fees, per ESMC Section 15-15-6D.		
3. Tandem Parking	Tandem spaces shall have a maximum length of 40 feet (parking for 2 vehicles maximum).		
4. Bicycle Parking[2]	Consistent with Section 5.106.4 of the most current California Green Building Standards Code: New projects anticipated to generate visitor traffic shall provide one 2-bike capacity rack for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one 2-bike capacity rack. Additions or alterations that add 9 or fewer visitor vehicle parking spaces are excluded. New buildings with 10 or more tenant-occupants or additions or alterations that add 10 or more tenant vehicle parking spaces shall provide secure bicycle parking for 5% of the tenant vehicle parking spaces being added, with a minimum of one secure bicycle parking space. Acceptable parking facilities shall be convenient from the street and shall meet one of the following: a. Covered, lockable enclosures with permanently anchored racks for bicycles; b. Lockable bicycle rooms with permanently anchored racks; or c. Lockable, permanently anchored bicycle lockers.		
5. Other Parking Area Development Standards[1]	Refer to ESMC Sections 15-15-1 through 15-15-5.		

Notes:
1. Parking requirements in the Parking Zoning District apply only to non-parking uses.
2. Bicycle parking standards shall apply to new construction, additions, and alterations, but shall not apply to change of occupancy or use.

Section 9: Table 4-1 (Community Benefits Plan) of Section 4.5.2 of SHSP is superseded and replaced with the revised Table 4-1 below, which modifies the "Applicable Projects" and "Findings" columns for Tier II Community Benefits to indicate that a building height deviation of up to 60 feet is available within the newly-added SHSP Subarea 1.

Table 4-1: Community Benefits Plan

Community Benefits Tiers	Review/Approval Authority	Applicable Projects	Findings
Community Benefits Tier I	Planning Commission	Projects that include any of the following components shall be considered under the Tier I review process: **A.** FAR deviation up to 1.5 **B.** One or more deviations to standards that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment	A Community Benefits Plan for Tier I may be approved if the following findings are made: **A.** The proposed additional building intensity or deviation from development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity; and **B.** The proposed community benefit provides exemplary project and/or streetscape design; and **C.** The proposed community benefit directly implements objectives of the Specific Plan.
Community Benefits Tier II	City Council	Projects that include any of the following components shall be considered under the Tier II review process: **A.** Building height deviation up to 50 feet (or 60 feet in Subarea as delineated in Figure 2-1, Zoning Districts) **B.** FAR > 1.5 **C.** Three or more deviations to standards that exceed the minor deviation threshold (10%) allowed by Section 4.5.1 Administrative Adjustment	A Community Benefits Plan for Tier II may be approved if the following findings are made: **A.** All findings in Tier I; and **B.** The proposed additional building height, intensity, or deviation from development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity; **C.** The value of the community benefits bear a relationship to the value generated by the project; and **D.** The community benefits proposed do not principally benefit the project or occupants of the project, but rather provide a district or area-wide benefit to the larger Smoky Hollow Plan area.

SECTION 10: A complete copy of the Smoky Hollow Specific Plan as amended herein is attached hereto as Exhibit B.

SECTION 11: *CONSTRUCTION*. This Ordinance must be broadly construed in order to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 12: *ENFORCEABILITY*. Repeal of any provision of the SHSP does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 13: *VALIDITY OF PREVIOUS CODE SECTIONS*. If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the SHSP or other city ordinance by this Ordinance will be rendered void and cause such previous SHSP provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 14*: SEVERABILITY.* If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 15: The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of El Segundo's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause a summary thereof to be published or posted in accordance with California law.

SECTION 18: This Ordinance shall take effect 30 days after its passage and adoption.

PASSED AND ADOPTED this ___ day of _____, 2022.

_____
Drew Boyles, Mayor

APPROVED AS TO FORM:

By: _____
Mark D. Hensley, City Attorney

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF EL SEGUNDO)

I, Tracy Weaver, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Ordinance No. _____ was duly introduced by said City Council at a regular meeting held on the ___ day of _____ 2022, and was duly passed and adopted by said City Council, approved and signed by the Mayor, and attested to by the City Clerk, all at a regular meeting of said Council held on the ___ day of _____, 2022, and the same was so passed and adopted by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Tracy Weaver, City Clerk

RESOLUTION NO. 2914

A RESOLUTION OF THE EL SEGUNDO PLANNING COMMISSION RECOMMENDING CITY COUNCIL APPROVAL OF COMMUNITY BENEFIT PLAN (CBP) NO. 19-02, SITE PLAN REVIEW (SPR) NO. 21-03, MASTER SIGN PROGRAM (MSP) 21-01, ENVIRONMENTAL ASSESSMENT EA-1281, AND OFF-SITE PARKING COVENANT FOR THE SOUTH SITE OF THE STANDARD WORKS PROJECT AT 1475 E. EL SEGUNDO BLVD.

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: Recitals.

A. On August 31, 2020, Mark Telesz, of Smoky Hollow Industries, LLC filed an application for Community Benefit Plan (CBP) No. 19-02, Site Plan Review (SPR) No. 21-03, and Environmental Assessment (EA) No. 1281 for a Tier II Community Benefits Plan and Site Plan Review of the proposed South Site of the Standard Works project at 1475 E. El Segundo Blvd.

B. On January 6, 2021, Mr. Telesz applied for an amendment to the Smoky Hollow Specific Plan which, if approved, would allow for a maximum building height of 60 feet within a designated subarea of the Smoky Hollow Specific Plan ("SHSP"), subject to the approval of a Tier II Community Benefits Plan. On the same date, a Master Sign Program was submitted for review.

C. Approval of the proposed Project is a subsequent discretionary action in furtherance of the SHSP; and

D. The application was reviewed by the City's Development Services Department for, in part, consistency with the General Plan, and conformity with the El Segundo Municipal Code ("ESMC") and the SHSP; and

E. On January 27, 2022, the Planning Commission continued the duly noticed public hearing to February 10, 2022.

F. On February 10, 2022, the Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the application including, without limitation, information set forth in the staff report and information provided by the applicant and the public.

G. At the February 10, 2022 meeting, the Commission recommended that the City Council approve the Smoky Hollow Specific Plan Amendment requested by the applicant.

H. The Commission considered all of the evidence presented at the February 10, 2022 public hearing, together with all other information in the administrative record. This Resolution, and its findings, are made based upon the totality of the evidence in the

administrative record before the Commission at its February 10, 2022 public hearing.

SECTION 2: *Factual Findings and Conclusions*. The Commission finds as follows:

A. The proposed project would develop a 1.01-acre property located at 1475 E. El Segundo Boulevard. The existing 19,311 square-foot, one-story brick building on the site would be preserved with two new levels totaling 44,604 square feet added above it. This would result in a total floor area of 63,915 square feet (FAR=1.45) for R&D and office use. The new three-story building would have a maximum height of 59 feet and 6 inches from the average grade to the top of the building.

B. The project site is located within a subarea of the Smoky Hollow Specific Plan that would be created upon the City Council's approval of the aforementioned Specific Plan Amendment. Said Amendment would allow for a maximum building height of 60 feet on the project site, subject to the approval of a Tier II Community Benefits Plan. The proposed building with a total of 63,915 square feet will be compliant with the Tier II floor area ratio, will be consistent with the Smoky Hollow Specific Plan design guidelines, open space and landscape requirements, will meet parking requirements with a recorded off-site parking agreement, and signage will be compliant with a Master Sign Program. Directional signage is proposed at the site access to provide direction and location for additional parking made available at the off-site parking structure located at 1310 E. Franklin Ave.

C. The subject site has entered into agreement to provide additional 123 off-site parking through an offsite parking covenant with the property at 1310 E. Franklin Avenue. (Exhibit D)

SECTION 3: *Environmental Assessment.* An Initial Study/Mitigated Negative (IS/MND) Declaration has been prepared to analyze the potential environmental effects of the proposed project. The Planning Commission has reviewed and considered the IS/MND and, by way of a separate resolution (Resolution No. 2912), has found that it complies with the California Environmental Quality Act. Accordingly, the Commission has recommended that the City Council approve the IS/MND. The findings and conclusions of Resolution No. 2912 are incorporated herein as though fully set forth.

SECTION 4: *Community Benefits Plan Findings.* Based upon the findings of fact set forth above, and on the evidence in the administrative record as a whole, the Planning Commission finds as follows:

A. **The proposed additional building height, intensity, or deviation from the development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity.**

The proposed building height for the project is compatible with the neighborhood in that two-story buildings, tall petroleum storage drums, and 200-foot-tall distillation

columns from the Chevron oil refinery are located in the immediate vicinity. The additional 25-foot building height from base height standard is not anticipated to be detrimental, as the project is consistent with development directly adjacent (for example, the recently approved development at 140 Oregon was approved at 55 feet) and is consistent with the vision for Smoky Hollow to allow for creative and exemplary office space.

The project is located in a developed area which contains all utilities and public infrastructure. Additionally, before the City issues building permits for the project, the applicant will submit detailed plans to the City for review for compliance with all applicable Building and Fire safety codes. Therefore, the project overall is not anticipated to be detrimental to the public health, safety, or welfare.

B. **The proposed community benefit provides exemplary project and/or streetscape design.**

The Specific Plan contains 32 specific design guidelines in five categories including, building character, open space, landscaping, connectivity, and signage and art. Compliance with at least 17 of the guidelines is required to consider a project exemplary in building and/or streetscape design. The proposed project incorporates 28 of the 32 guidelines as indicated and detailed on project plans dated reviewed by Planning Commission on February 10, 2022, incorporated herein by this reference.

C. **The proposed community benefits directly implements objectives of the Specific Plan.**

1. Part of the proposed community benefit consists of compliance with the Smoky Hollow design guidelines. Compliance with the guidelines directly implements the Smoky Hollow Design Objectives in Specific Plan Section 2.4.1 as follows:

    a. The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character.

    b. The projects incorporate sidewalk-oriented entries for both projects as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. In addition, the project will make use of drought tolerant plant species in the landscaped areas, which will reduce the use of water for landscaping.

    c. The entries are directly access from the public sidewalk and serves to activate both Franklin Avenue and E. El Segundo Boulevard street frontages and therefore create a vibrant atmosphere.

2. The proposed community benefit plan implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly

accessible open spaces. The proposed community benefits plan includes public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish.

D. **The value of the proposed community benefits bear a relationship to the value generated by the project.**

The City retained Kosmont and Associates, Inc. (Kosmont) to prepare a comprehensive financial report of the proposed Tier II Community Benefits Plan for the project. The analysis indicates the value of the community benefits being offered and the financial gain by allowing an additional 10 feet of building height above the Tier II Community Benefit height limit of 50 feet. This height increase is an additional 25 feet in height above base standard, or 35 feet in height with the adoption of the Specific Plan Amendment. In compliance with the Smoky Hollow Specific Plan Tier II Community Benefit Plan requirements, the community benefits provided and incorporated into the project plans reviewed by Planning Commission on February 10, 2022, have been evaluated to quantify the total value of all community benefits. In this instance, the total value of the added 10 feet is shown to be $1.77 million while the total of the community benefits are estimated to be $3.52 million. Therefore, the value of the proposed community benefits bear a relationship to the value generated by the project.

E. **The proposed community benefits do not principally benefit the project or the occupants of the project, but rather provide a district or area-wide benefit to the larger Smoky Hollow Plan area.**

1. The project incorporates a range of community benefits in compliance with the prescribed Community Benefit categories of the Smoky Hollow Specific Plan. The following list of items benefit the public and not principally the occupants of the project:
   a. Transformative projects - significant investment for an architecturally expressive design that rehabilitates the original 1950s mid-century buildings for both the North and South sites, rather than demolishing. The unique design incorporates architectural elements such as exposed structural steel, large scale balconies and exterior decks, large mid-century like steel windows, and other period materials. The design will build upon the character of the smoky hollow neighborhood and help promote new designs by other developers.
   b. Preservation and rehabilitation - preservation and rehabilitation of the existing brick facades on both the North and South sites.
   c. Streetscape improvements – new landscaping located directly along the frontage of each building on the North and South sites.
   d. Utility improvements - removal of existing overhead utility lines along project frontage on East El Segundo Boulevard and Kansas Street will be removed and placed underground to beautify the streetscape views.

e. Lighting and wayfinding - period appropriate exterior lighting and directional signage for the project will be provided adjacent to the sidewalks facing Franklin Avenue.

This information was provided in support of Finding B in Tier II that requires the evaluation of these values. The proposed benefits are deemed by Staff to be adequate and therefore it is recommended that the Commission review and consider Finding B in Tier II to be met.

SECTION 5: *Site Plan Review Findings.* Pursuant to ESMC § 15-30 and based upon the findings of fact set forth above, and on the evidence in the administrative record as a whole, the Commission finds as follows:

A. **The proposed development is consistent with the goals, policies, and objectives of the El Segundo General Plan, the Smoky Hollow Specific Plan, and the El Segundo Zoning Code.**

As previously indicated, the applicant has simultaneously applied for an amendment to the Smoky Hollow Specific Plan that would create a new subarea within which the maximum building height would be increased to 60 feet (from 50 feet), subject to the approval of a Tier II Community Benefits Plan. By way of a separate resolution (Resolution No. 2913), the Commission has recommended that the City Council approve the requested amendment to the Specific Plan. The project site is located within that proposed subarea.

The proposed Project complies with the Smoky Hollow Specific Plan as amended. The SHSP permits a mix of office, research and development, light industrial, and warehouse uses. Further, the SHSP sets standards to achieve high quality development, which includes design guidelines and development standards with criteria for site design, architecture, orientation and massing, parking and loading, landscaping, lighting, and connectivity. The proposed development has been evaluated in the context of the goals, policies and objectives from the SHSP. The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character. The project incorporates sidewalk-oriented entries for the project as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. The proposed Project implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly accessible open spaces. The proposed Project includes public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish.

Economic Development Element

General Plan Economic Development Element Goal ED1 outlines the City's objectives to create a strong, healthy economic community in which all diverse stakeholders may benefit.

The City's Economic Development Element of the General Plan specifies the following:

Objective ED1-1.1*:* To build support and cooperation among the City of El Segundo and its business and residential communities for the mutual benefits derived from the maintenance and expansion of El Segundo's economic base.

Policy ED1-1.1: Maintain economic development as one of the City's and the business and residential communities' top priorities, diversifying the City's economic base to meet quality of life goals, and results in job creation and growth potential.

Objective ED1-2*:* Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Policy ED1-2.2: Maintain and promote land uses that improve the City's tax base, balancing economic development and quality of life goals.

The proposed project is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan's goals, objectives and policies above because the project promotes economic development and improves the City's tax base through inclusion of office, research and development, and retail land uses within the Smoky Hollow Specific Plan area. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Economic Development Element.

Land Use Element

General Plan Land Use Element Goal LU2 outlines the City's objectives to preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance.

The City's Land Use Element of the General Plan specifies the following:

> Objective LU2-1: Maintain the distinct character of the existing areas of the City.

The proposed project is consistent with the General Plan's Land Use Element and directly implements and furthers the General Plan's goals, objectives and policies above because the proposed project design preserves the existing red brick building, to maintain the character of the post-war period architecture found within Smoky Hollow. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Land Use Element.

Circulation Element

The City's Circulation Element of the General Plan specifies the following:

> Objective C1-1: Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.
>
> Policy C 1-1.14: Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development.

The proposed project is consistent with the General Plan's Circulation Element and directly implements and furthers the General Plan's goals, objectives, and policies above because the project would not disturb or impact the existing roadway network immediately surrounding the project sites. Access to and from the projects are well established by Franklin Avenue, Kansas Street, Oregon Street, and El Segundo Boulevard. In compliance with SHSP EIR Mitigation Measure 18-1, a Traffic Impact Analysis was conducted to analyze any new impacts to the local street network from the Project, based on LOS standards per the General Plan, and calculate a fair share contribution for project traffic impacts. Based on the traffic impact analysis conducted, the proposed Project will not create traffic impacts greater than those identified in the TIA conducted for the SHSP EIR. The project applicant will be required to pay fair share for the improvements to the roadway network as identified in the SHSP EIR. The SHSP was adopted in 2018 and was found to be consistent with the City's General Plan. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Circulation Element. Additionally, the project is consistent with the design and zoning standards as required by the SHSP. Specifically, with the approval of the proposed SHSP amendment to allow 60 feet for projects within Subarea 1, the project would be compliant with all zoning standards including height, floor area ratio, setbacks, design standards, and landscape and open space standards. Parking for the project would be both on-site and located off-site within the adjacent existing 398 space parking garage located at 1310 E. Franklin Avenue. While this parking is technically off-site, the garage is approximately 200 feet away from the project site and a

parking covenant will be recorded with the County of Los Angeles to ensure that the required parking is provide for the life of the project.

B. **The proposed project is functionally compatible with the area in which it is located.**

The City of El Segundo has distinctive land use patterns, which are divided into four quadrants by the intersection of Pacific Coast Highway and El Segundo Boulevard. Compatibility of an individual land use is determined mainly by its relationship to other uses within its quadrant. The SHSP area is located in the northwestern quadrant of the City of El Segundo which is west of Pacific Coast Highway and north of El Segundo Boulevard. The design and implementation of the Specific Plan relates directly to the goals and objectives of the Specific Plan and would be functionally compatible with other uses within the Specific Plan area. The SHSP includes a range of commercial and industrial uses that will contribute to job creation opportunities and balance growth with local resources and infrastructure capacity.

The proposed building height for the project is compatible with the area in that two-story buildings, tall petroleum storage drums, and 200-foot-tall distillation columns from the Chevron oil refinery are located in the immediate vicinity. The project is located in a developed area which contains all utilities and public infrastructure.

The project is within the Smoky Hollow East (SH-E) zoning district, which provides a transitional land use area between higher-intensity office uses east of PCH and the smaller, single-parcel industrial and creative businesses of the western portion of Smoky Hollow area. The SH-E zoning district accommodates development of incubator industrial, research, and technology uses; medium-sized light industrial and manufacturing; and creative office activities. The Standard Works development project is compatible and consistent with the types of development desired by the Smoky Hollow Specific Plan within the SH-E zoning district.

C. **The proposed development will not adversely affect the general welfare of the City.**

The SHSP development standards ensure that the Projects are developed in an orderly fashion with high quality architecture, building materials, and urban design. The Project's consistency with these standards, its design, and configuration result in a project that will not adversely affect the general welfare of the City. Before the City issues building permits for the project, the applicant will submit detailed plans to the City to review for compliance with all applicable Building and Fire safety codes. Further, the proposed project will promote the orderly development of property, the preservation of property values and preservation of the distinct character of Smoky Hollow. The project will be consistent with surrounding development and will not adversely affect the value of neighboring properties. The proposed project is compatible with the neighborhood, and therefore is not anticipated to be detrimental to the public health, safety, or welfare.

SECTION 6: *Master Sign Program Findings*. Pursuant to ESMC § 15-18, a Master Sign Program (MSP) is required for multi-tenant developments of three of more commercial tenants. This MSP:

A. Meets the provisions of the ESZC Chapter 15-18-1 through 8 in all regards including size, type, locations, prohibited signs, exempt signs, general sign standards, applications, permits, nonconforming conditions, substitutions, enforcement and maintenance.
B. Provides all Tenants a guideline for Tenant signage that is architecturally compatible with the campus wide architectural esthetic for the purposes of a unified campus standard in design, installation and otherwise as approved by the authorities having jurisdiction with the original construction of the project.
C. Provides the appropriate process for review, submittal, approval, installation, maintenance and removal of all signage on the Standard Works campus.

SECTION 7: *Recommendation.* Subject to the conditions listed on Exhibit A of this Resolution, the Planning Commission recommends that the City Council approve the Community Benefit Plan (CBP) No. 19-02, Site Plan Review (SPR) No. 21-03, Master Sign Program (MSP) 21-01 and EA 1281 for the development of 1475 E. El Segundo Blvd.

SECTION 8: *Reliance on Record.* Each and every one of the findings and determination in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 9: This Resolution will remain effective unless superseded by a subsequent resolution.

SECTION 10: The Commission Secretary is directed to mail a copy of this Resolution to Mark Telesz, of Smoky Hollow Industries LLC., and to any other person requesting a copy.

PASSED, APPROVED AND ADOPTED this 10th DAY of FEBRUARY, 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary

Baldino -
Newman -
Hoeschler -
Keldorf -
Maggay -

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2914

Exhibit A

CONDITIONS OF APPROVAL

In addition to all applicable provisions of the El Segundo Municipal Code ("ESMC") and all provisions of the Smoky Hollow Specific Plan, Mark Telesz and Smoky Hollow Industries, LLC (the "Applicant" or "Owner") agrees to comply with the following provisions as conditions for the City of El Segundo's approval of Community Benefit Plan CBP 19-03, Site Plan Review (SPR 21-03), and Environmental Assessment (EA) No. 1281 for a Tier II Community Benefits Plan and Site Plan Review of the proposed South Site of the Standard Works project at 1475 E. El Segundo Blvd. ("Project Conditions"):

Zoning Conditions

1. This approval is for the project as shown on the plans presented to and reviewed by the Planning Commission on February 10, 2022 and approved by City Council on _____, and on file with the Development Services Department.

2. Prior to issuance of any permit for the project, the applicant must submit plans, showing that the project substantially complies with the plans and conditions of approval on file with the Development Services Department. The Development Services Director is authorized to approve minor modifications to the approved plans or any of the conditions if such modifications achieve substantially the same results as would strict compliance with said plans and conditions. Any subsequent modification must be referred to the Development Services Director for a determination regarding the need for Planning Commission and/or City Council review and approval of the proposed modification.

3. This approval allows for construction of a new office facility at 1475 E. El Segundo Blvd. Specifically, the approved construction on the north site includes the following:

   a. Construction of a 44,604-square foot addition to the existing building that would be structurally preserved in place, resulting in a total gross floor area of 63,915 square feet.
   b. The maximum height of the resulting three-story building is limited to 59'-6" as measured from average grade to the rooftop of the building. Per the Smoky Hollow Specific Plan, building height does not include additional parapet height of 5', or additional structures allowed per the CBC and ESMC Section 15-2-3.

   A change in uses or changes in the allocation of square footages specified above must be referred to the Development Director for a determination regarding the need for Planning Commission and/or City Council review and approval of the proposed changes.

4. Signs proposed for the project, including monument signs, shall be designed in conformance with the approved Master Sign Program (MSP 21-01), which is included as Exhibit C of this Resolution. Any revisions to the Master Sign Program must be submitted and approved by the Development Services Director or designee prior to final building permit approval.

5. This approval shall not become effective unless and until the City Council adopts an ordinance approving the associated Smoky Hollow Specific Plan Amendment and said ordinance takes effect.

6. Before any building permits are issued, the applicant will be required to pay fair-share contribution to the City of El Segundo in compliance with Smoky Hollow Specific Plan EIR Mitigation Measure 18-1. The fair share contribution has been determined as follows:

   a. 4.7% for PCH/Grand Avenue for a new right-turn overlap signal phase on all approaches. The total cost estimate for the improvement is $80,788.00, in which $3,797.04 is the project's fair share contribution.

   b. 5.3% for PCH/El Segundo Boulevard for a Second eastbound left-turn lane, and new right-turn overlap signal phase at the northbound approach. The total cost estimate for improvements is $2,553,500.00 in which $135,335.50 is the project's fair share contribution.

7. All rooftop mechanical equipment shall be architecturally screened in accordance with ESMC Section 15-2-8(C). Prior to permit final, the equipment shall be adequately screened to the satisfaction of the Development Services Director.

8. All building and drainage gutters, down spouts, vents and other protrusions shall be concealed from view within the exterior walls. Ladders for roof access shall be mounted on the inside of the building.

9. Mandatory solid waste disposal services shall be provided by a City approved waste hauler to all parcels/lots or uses affected by approval of this project.

10. The Applicant shall provide receptacles (bins) for the collection of refuse and recyclable materials, as well as a hose bib for washing collection areas. Prior to the issuance of building permits, the applicant shall provide documentation from a City approved waste hauler stating that the number and size of bins provided for the collection of refuse and recyclable materials generated by the project is adequate.

11. Prior to the issuance of building permits, the Applicant shall provide documentation from a City approved waste hauler stating that the dimensions of the refuse storage enclosure are of adequate size to accommodate containers consistent with the current methods of collection, are designed with a walk-in access component, and located and designed to facilitate trash truck access and pickup.

12. Trash enclosures on the property shall be either fully enclosed within the building or must be adequately screened by a trash enclosure per the ESMC. Further, the gates shall include architectural paneling or finishing that is consistent with the paneling or finishing of the building. Lastly, trash enclosure areas for the project shall have a non-combustible decorative cover that matches the building's architecture.

13. All mitigation measures and conditions of approval must be listed on the plans submitted for plan check and the plans for which a building permit is issued.

Community Benefits Plan

14. The applicant must provide all the community benefits as stated in Exhibit B (Community Benefits Plan). If the project does not provide a benefit or ceases to provide one, the owner must submit a revised CBP including equivalent replacement benefit of an equal value to the Development Services Director for review and approval. The Director may at his discretion refer the revised CBP to the Planning Commission and City Council for review and approval.

15. The applicant must construct the public improvements indicated in the Community Benefits Plan, including, but not limited to, sidewalk, streetscape, landscaping, parking, open space, and other improvements within the public right-of-way.

IS/MND / CEQA

16. Applicant must comply with all mitigation measures identified in the Final Environmental Impact Report prepared for the Smoky Hollow Specific Plan. All mitigation measures and conditions of approval must be listed on the plans submitted for plan check and the plans for which a building permit is issued.

17. Prior to issuance of any demolition, grading or building permit or as otherwise appropriate, a matrix/spreadsheet shall be submitted to the City, as applicable, for review and compliance with:

    a) The SHSP 2018 EIR (EA-1101) Mitigation Monitoring and Reporting Program (MMRP) as adopted by the City Council on October 2, 2018.

    b) The Project IS/MND MMRP as adopted as part of Planning Commission Resolution No. 2912.

    c) All project conditions of approval.

18. Prior to Certificate of Occupancy, the project shall demonstrate compliance with all applicable mitigation measures in the MMRP for the SHSP EIR and project COA. A final mitigation and COA monitoring matrix/spreadsheet shall be submitted to the City.

19. All mitigation measures listed in Mitigation Monitoring and Reporting Program adopted as part of Planning Commission Resolution No. 2912 shall be complied with. This shall include:

*Denotes mitigation measure carried over from the Smoky Hollow Specific Plan EIR

Biological Resources

20. **BIO MM 7-1*** To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.

21. **BIO MM 7-2*** If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

Cultural Resources

22. **CUL MM 8-2*** Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

23. **CUL MM 8-3*** In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies

the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

24. **CUL MM 8-4** If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.

Geology and Soils

25. **MM GEO-1** Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.

Greenhouse Gas Emissions

26. **EECAP 4.1*** Encourage or Require Energy Efficiency Standards Exceeding Title 24. This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.

27. **EECAP 5.2*** Promote Water Efficiency Standards Exceeding SB X7-7. In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.

Hazards and Hazardous Materials

28. **MM HAZ-3** Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1330 E. Franklin Street), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.

Transportation (VMT)

29. **MM VMT-1 Unbundle Parking Cost.** This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between 2.6% and 13%. Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.

30. **MM VMT-2 Parking Management Strategies**. Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. The maximum reduction from this measure is 3%.

31. **MM VMT-3 Mandatory Travel Behavior Change Program, Promotions & Marketing.** This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the

building lobbies to enable users an easy way to access information about transit routes. The maximum reduction due to this measure is 1%.

32. **MM VMT-4 Implement Commute Trip Reduction Marketing.** This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. For this project, a conservative reduction of 3% has been assumed.

33. **MM VMT-5 Include Bike Parking in Excess of City Code.** This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and therefore, it is recommended that the project provide at least 18 spaces. This results in a VMT reduction of 0.625%.

34. **MM VMT-6 Include Secure Bike Parking and Showers.** This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. This results in a VMT reduction of 0.625%.

<u>Tribal Cultural Resources</u>

35. **MM-TCR-1 Native American Monitoring.** Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation and the Gabrielino Tongva Indians of California, the tribes that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.

    The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the

Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes shall retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).

General Conditions

36. The project is subject to the Public Art or In-Lieu Fee Requirement (Cultural Development Program) established by City Council Ordinance 1594, which requires placement of public art on-site or payment of in-lieu fees to the Cultural Development Fund. Prior to issuance of a building permit, the applicant shall submit an application to the Community Services Department and shall either: a) enter into an agreement with the City of El Segundo to provide public art onsite; or, b) in-lieu of commissioning public art onsite, pay a fee equal to 1% of the project cost to the City's Cultural Development Fund.

37. A positive balance shall be always maintained in all project Reimbursement Accounts. If the balance of the Reimbursement Account(s) associated with the project becomes negative at any time, all work on the project shall be suspended, including the issuance of permits and project inspections, until such time as the sufficient funds are deposited to return the account(s) to a positive balance.

38. A weatherproof notice/sign to report dust, noise, or other construction-related impacts shall be posted and prominently displayed on the construction fencing clearly visible to the public from along the abutting street(s). The notice/sign shall set forth the name of

the person(s) responsible for the construction site and a phone number(s) to be called in the event that a construction-related impact occurs.

39. Reclaimed water must be utilized for all landscaped areas.

40. Prior to issuance of any permit, landscaping plans must be submitted to the Development Services Department that conform to the City's Water Conservation in Landscaping requirements as set forth in ESMC Chapter 15.

41. All utilities lines installed to serve the new construction shall be placed underground.

42. The developer shall be responsible for the relocation of any existing utility necessary as a result of the development.

43. Pedestrian walkways within the project must include admixture colored concrete and/or design that enhance and complement the project.

44. The project site shall be fenced and screened during construction.

45. All areas within the project site shall be maintained free of trash and debris.

46. Prior to issuance of any permit, an erosion control plan shall be reviewed and approved by the Building Official and the Public Works Director.

47. Water spraying or other approved methods shall be used during grading operations to control fugitive dust. Recycled water shall be used for grading operations whenever available.

48. During the grading phase and as needed during the remainder of the construction phase, the owner or contractor must conduct daily street sweeping along the streets abutting the project site(s).

49. In the event that a Planning, Building, Public Works, Fire Department or Police Department requirement are in conflict, the stricter standard shall apply.

Impact Fee Conditions

50. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time library services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

51. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time fire services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

52. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit new Building C, the applicant must pay a one-time police services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

53. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time park services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

54. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time traffic mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

Building Safety Conditions

55. All projects shall comply with the El Segundo Municipal Code, and the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, and the California Green Building Standards Code in effect at the time of the plan submittal to Building and Safety Division for plan review.

56. All projects shall comply with the El Segundo Municipal Code, and the 2019 editions of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, and the California Green Building Standards Code.

57. Construction projects must comply with Best Management Practices for construction and storm-water runoff requirements of the National Pollutant Discharge Elimination System MS4 Permit. Construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale must obtain the (SWPPP) Construction Activities Storm Water General Permit.

58. A site-specific soils and geotechnical report must be submitted to Building and Safety Division for review and approval. The report shall comply with the minimum requirements of Chapter 18 of the CBC and shall address the possible sulfate content of the soils.

59. A stamped setback certification by a Licensed Surveyor will be required to certify the location of the new construction in relation to the setbacks prior to the first foundation inspection and stamped setback certification by a Licensed Surveyor will be required to certify the height of the structures prior to issuance of Certificate of Occupancy.

60. The applicant shall obtain a building, grading, mechanical, plumbing, electrical, demolition permit for the project.

61. Plans submitted for plan check must be stamped by a State-licensed architect or engineer and shall include:

a. Complete structural calculations, details, notes and material specifications.

b. Complete Accessibility Plan with a statement from a California Certified Access Specialist (CASp) indicating that a plan review has been performed and that it complies with the requirements of Chapter 11A &11B of the CBC.

c. A stamped and signed Boundary and Topographic survey by a California licensed Land Surveyor.

d. A complete grading and drainage plan showing compliance with the Los Angeles Regional Water Quality Control Board (LARWQCB) Low Impact Development (LID) requirement. The Los Angeles County LID Manual may be used as a guideline for preparing the LID report.

e. Hydrology report along with hydraulic calculations.

f. Complete energy calculations, details, notes, and material specifications.

62. Applicant shall submit a site-wide New Address Issuance request to the Building Division. Approved building addresses to be shown on the submitted plans.

63. Applicant shall pay all development fees, including school district developer fees, prior to issuance of building permits.

Fire Department Conditions

64. The applicant must comply with the applicable requirements of the 2019 California Building and Fire Codes and the 2018 International Fire Code as adopted by the City of El Segundo and El Segundo Fire Department Regulations.

65. The applicant must submit and have approved by the Fire Department a Fire/Life Safety Plan, identifying fire safety precautions during demolition and construction, emergency site access during construction, permanent fire department access, fire hydrant locations and any existing or proposed fire sprinkler systems and fire alarm systems prior to issuance of the building permit.

Public Works Conditions

"City Engineer" = City Engineer or his/her designee throughout this document.

General

66. All work in the City's right-of-way or on City-owned and maintained facilities shall require review and approval of the City Engineer or his/her designee.

67. The applicant shall ensure that encroachment permits are secured from the Public Works Department/Engineering Division before commencing any and all work in the City's public right-of-way (ROW), including lane closures.

68. Construction inspection shall be coordinated with the Public Works Inspector and no construction shall deviate from the approved plans without approval of the City Engineer. If plan deviations are necessary, the applicant shall provide a revised plan or details of the proposed change for review and approval of the City Engineer prior to construction.

69. Prior to issuing of the Certificate of Occupancy, the applicant shall ensure installation of all improvements required by the Public Works Department are inspected and approved by the City Engineer.

70. All construction-related parking shall be accommodated on-site. No construction related parking shall be permitted off-site.

71. A grading and drainage plan shall be provided and stamped by a California (CA) State-licensed civil engineer as part of the Building Permit process.

72. A utility plan shall be provided that shows all existing and proposed utility lines and their sizes (sewer, water, gas, storm drain, electrical, etc.), including easements, within 200 feet of the project site boundary.

73. Easements shall be granted for all public utilities installed outside the public-right-way with 15 ft. wide minimum up to entering the public right-of-way.

Street Improvements & Traffic Control

74. All existing sidewalk, curb & gutter, driveway approaches, and curb ramps that are broken or not in conformance with the latest SPPWC or City standards shall be removed and constructed per the latest SPPWC and City standards.

75. PG-64-10 tack coat and hot mix asphalt shall be used for all slot paving required next to new concrete installations. Slot paving shall be 3 feet wide and 1 foot deep, consisting of 6 inches of asphalt over 6 inches of base.

76. The applicant shall coldmill 2" Asphalt Concrete (AC) pavement surface and overlay with 2" AC PG-64-10 the curb-to-centerline half street width of Kansas Street and El Segundo Boulevard fronting the property. AC mix specification shall conform to Standard Specifications for Public Works Construction (SSPWC) "Greenbook", section 203-1.

77. Once the ROW improvements are accepted by the City Engineer, they are not to be used for staging building construction activities, including but not limited to, storage of construction materials and equipment. The street and sidewalks shall be kept free of

construction debris, mud and other obstacles and shall remain open to traffic at all times. The applicant shall bear the entire cost of replacement or repair to any damage to improvements caused by its use, or its Contractors' and Subcontractors' use, of the improvements after acceptance by the City Engineer.

78. The proposed ingress/egress into the project sit requires a traffic study to be prepared by a State-licensed Traffic Engineer to demonstrate the driveways will be in compliance with the requirements of the General Plan, subject to the review and approval of the Public Works Director or his designee.

Water

79. Any existing water meters, potable water service connections, fire backflow devices and potable water backflow devices must be upgraded to current City Water Division standards. These devices shall be placed or relocated onto private property.

Sewer

80. The proposed improvement will impact the capacity of the existing City owned sewer main lines. The applicant must submit a sewer study to determine if there is a capacity deficiency in the affected sewer main lines and if so, sewer upgrades will be required. The sewer study shall be reviewed and approved by the City Engineer.

81. Prior to issuance of a Certificate of Occupancy, a $60,551.30 sewer connection fee for this project must be paid to the City of El Segundo Public Works Department.

82. Any unused sanitary sewer laterals shall be abandoned and properly capped at the City main. The Contractor is to obtain necessary permits and licenses, and provide traffic control plans and shoring plans.

Storm Drain

83. Hydrologic and hydraulic calculations shall be submitted to size appropriate storm drain facilities to control on-site drainage and mitigate off-site impacts. Refer to the most recent Los Angeles County Hydrology Manual. Instructions and the manual are available at the County website at http://dpw.lacounty.gov/wrd/Publication/index.cfm. Calculations shall be signed by a registered civil engineer.

84. The project shall comply with the National Pollutant Discharge Elimination System (NPDES) requirements and shall provide Best Management Practices (BMPs) for sediment control, construction material control and erosion control.

Miscellaneous Conditions

85. Approval of this permit shall not be construed as a waiver of applicable and appropriate zoning regulations, or any Federal, State, County and/or City laws and regulations. Unless otherwise expressly specified, all other requirements of the ESMC shall apply.

86. Failure to comply with and adhere to all of these conditions of approval may be cause to revoke the approval of the project by the Planning Commission, or City Council, pursuant to the provisions of the ESMC.

87. In the event that any of these conditions conflict with the recommendations and/or requirements of another permitting agency or City Department, the stricter standard shall apply.

88. The applicant and its successors in interest shall indemnify, protect, defend (with legal counsel reasonably acceptable to the City), and hold harmless, the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes of action, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including reasonable attorney's fees and disbursements (collectively "Claims") arising out of or in any way relating this project, any discretionary approvals granted by the City related to the development of the project, or the environmental review conducted under California Environmental Quality Act, Public Resources Code Section 21000 et seq., for the project. If the City Attorney is required to enforce any conditions of approval, all costs, including attorney's fees, shall be paid for by the applicant. The Applicant agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise. For purposes of this section "the City" includes the City of El Segundo's elected officials, appointed officials, officers, and employees.

By signing this document, _____, on behalf of Smoky Hollow Industries, LLC, certifies that he/she has read, understands, and agrees to the Project Conditions listed in this document.

_____
Name, Title
(Smoky Hollow Industries, LLC)

{If Corporation or similar entity, needs two officer signatures or evidence that one signature binds the company}

PLANNING COMMISSION RESOLUTION NO. 2914

Exhibit B

Community Benefits Plan
1475 E. El Segundo Blvd. and 1320-1330 E. Franklin Ave

Project description:

The development project at 1320-1330 E. Franklin Ave and 1475 E. El Segundo Blvd is subject to the following applications: Community Benefits Plan No. CBP 19-03 and CBP 19-04, Site Plan Review No. SPA 21-03 and SPA 21-04 and Environmental Assessment No. EA 1281 and EA 1282.

The proposed Project for the South Site would develop a 1.01-acre property located at 1475 E. El Segundo Boulevard within the SHSP. The existing 19,311 sf, one-story brick building, located at 1475 E. El Segundo Boulevard would be preserved with two new levels added above it. This results in a total floor area of 63,915 square feet for the South Site (FAR = 1.45) for R&D and office use. The proposed construction activities on the South Site would include:

- Construction of a 44,604-square foot addition to the existing building that would be structurally preserved in place for a total building floor area of 63,915 square feet.
- The three-story building would have a maximum height of 59 feet and 6 inches from average grade to the top of the building.

The development project deviates from the following Smoky Hollow Specific Plan (Specific Plan) development standards in Section 2.3:

1. **Building Height.**
   The permitted building height is 35 feet. The proposed building height is up to 60 feet to the top of the roofline.
2. **Allowable gross floor area ratio (FAR).**
   The permitted FAR is 1.5. The proposed FAR is up to 1.45.

Community benefits:

In exchange for the above deviations, the applicant offers the following community benefits and improvements, at the applicant's expense, as stated in pursuant to Smoky Hollow Specific Plan Section 4.5.2:

Community Benefits Plan

The project is proposed as a campus, with multiple sites to be developed. The design of the building proposed on the North site exceeds the current base standard for building

height in the SHSP, and the design of the building proposed on the South site exceeds the current base standards for building height and allowable Gross Floor Area Ratio (FAR). Projects within the SHSP area are allowed to request deviations from current City development standards with the approval of a Tier I or Tier II Community Benefits Plan. The proposed project would amend the SHSP to allow for an increase in the maximum permissible height for CBP Tier II qualifying projects. Allowable heights would increase to 60 feet from the current Tier II maximum of 50 feet. Approval of the SPA is required before the Development Sites can be permitted at a maximum height of 59.5 feet.

The Project requests the following deviations from the current development standards which require a Tier II Community Benefits Plan:

1. **Additional Building Height.** Proposed building heights of up to 59.5 feet on both Project sites would exceed the SHSP Base Standard height of 35 feet.
2. **Additional Building FAR.** Proposed 1.45 floor area ratio (FAR) (an additional 21,983 square feet) on the South site exceeds the SHSP Base Standard FAR of 1.0.

In exchange for the above deviations allowed by Tier II CBP, the applicant is proposing the following community benefits and improvements, at the applicant's expense, pursuant to Smoky Hollow Specific Plan Section 4.5.2. The following Community Benefits are based on objectives and suggestions directly identified as development standards in the SHSP with the objective of benefiting the Smoky Hollow Specific Plan area. Additionally, the Specific Plan contains 32 design guidelines in five categories: building character, open space, landscaping, connectivity, signage and public art and Public Realm. Compliance with at least 17 of the guidelines is required to be considered as an exemplary project; the proposed Project incorporates 29 of the 32 design guidelines, far exceeding the minimum threshold for exemplary projects. A summary of the main community benefits that are proposed for the Project include the following:

1. **Underground Utilities**. The Project proposes to underground all electric power and low voltage phone and data lines that currently serve the buildings on East El Segundo Blvd and Kansas Street.
2. **Public Seating**. Proposed architectural seating will be provided along the sidewalk area within the public right-of-way (ROW) facing E. Franklin Avenue and Kansas Street.
3. **Coffee Pavilion/Public Café**. The proposed Project would also include a 276-square foot public café (Coffee Pavilion) and associated outdoor dining area immediately adjacent to the E Franklin sidewalk, in order to active the street and provide a convenient break location for local neighbors. The café is part of the proposed 5,000-square foot public park that will be a landscaped focal point of the Project and of the surrounding area as well.
4. **Architecture that enhances building character.** See below under "Group A".
5. **Open space that facilitates gathering.** See below under "Group B".
6. **Landscaping and environmental design. "**See below under "Group C".

In addition, the Development Project will provide the following specific community benefits as summarized from the CBP Tier II application scoring sheets:

Group A – Enhance Building Character

1. *Build on the quality industrial character:* Project has exposed steel beams and large industrial-style windows.
2. *Convey a sense of the old and new:* Project will preserve ground floor red brick exterior while adding two setback floors of a modern industrial building
3. *Build upon existing context:* Project stays within existing footprint but adds 2 floors with roof decks.
4. *Conserve and retain the character-defining features:* Project preserves ground floor red brick exterior and three historical building entrances.
5. *Encourage additions that complement the character-defining features:* Project has large industrial windows with exposed steel beams characteristic of mid-century architecture but stacked blond block with exposed aggregate and stain coloring to enhance the industrial appearance.
6. *Incorporate small, medium, and large scales:* Project includes several interlocking design elements of different scales for visual interest including large to small "nested" windows and balconies to break up the building facade into different sized elements.
7. *Enhance design at the pedestrian level:* Project will have extensive landscaping along all street frontages with pedestrian scale seating.
8. *Specify 360º architecture:* Project will have enhanced architecture on all four sides of each building.
9. *Enhance entry expression:* Project has new landscaping and a double high entry portal at the southwest corner.
10. *Encourage the use of roll-up doors and sliding walls at street frontage:* Roll-up doors are used in several main entrance locations.
11. *Orient secondary entries to alleys:* Some secondary access points are oriented toward local alleys.
12. *Incorporate different materials, colors, and textures:* Project includes a variety of materials, colors, and textures, including red brick, medium grey block, black steel, corten, architectural board formed concrete, and glass.

Group B – Facilitate Gathering

13. *Form an active street wall:* Project has a new two-story entry portal with enhanced landscaping along street frontages and distinctive entrances.
14. *Develop outdoor gathering spaces:* Project will have a pocket park with outdoor seating.
15. *Provide ease of access:* The Project will have multiple pedestrian and vehicular access points and ground floor tenants will have direct access to adjacent streets.
16. *Enhance surface parking:* Project will have shade coverings for surface parking lots plus stacked parking using current technology.
17. *Use enduring quality paving materials:* Project will have special paving materials to demarcate pedestrian walkways with integral color and crystal aggregate.

18. *Provide street furniture:* Project will provide street furniture for seating at the pocket park.
19. *Use exterior lighting to accentuate safety and design:* Project will provide period lighting on all sides of buildings for pedestrian safety.

Group C – Incorporate Landscaping and Environmental Design

20. *Design layered and lush landscaping:* Project will have extensive landscaping per landscaping plan.
21. *Select drought-tolerant and native plants:* Project landscape plan has drought-tolerant and native plants throughout.
22. *Utilize planters and pots to provide greenery:* Project has planters and pots on Level 2 and 3 decks and balconies and on the rooftop.
23. *Improve landscaping in parking areas:* Parking areas include landscaping on at least two sides (those facing the buildings).
24. *Use fences and walls as an extension of the architecture:* Project includes monument signs for both buildings that compliment and extend the building architecture.
25. *Use natural light:* Project has large windows for 2-story spaces with mezzanines to allow natural light in all interior spaces.

Group D – Encourage Connectivity

26. *Install bike facilities:* Two bike racks will be installed at each Project building.

Group E – Signage, Way Finding, and Public Art

27. *Design signs as an integral component:* Project includes integrated tenant signage.
28. *Incorporate way-finding through integral design:* Project has architecturally integrated signage for both pedestrians and vehicles.
29. *Encourage public art:* Project will have a large scale art wall on the west side of the north building.

Public Realm

30. *Underground utilities:* The incoming power and low voltage cables for data and phone will be consolidated into one location and undergrounded.

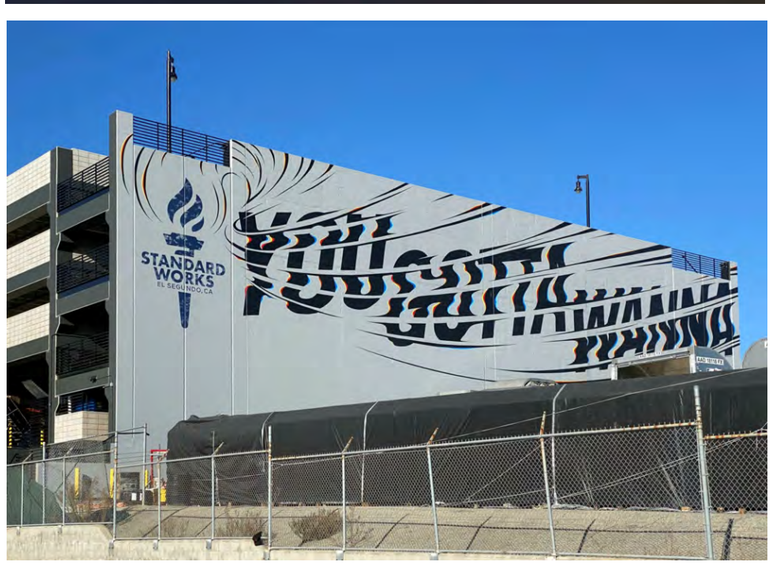
PLANNING COMMISSION RESOLUTION NO. 2914

Exhibit C

MASTER SIGN PROGRAM 21-01 FOR STANDARD WORKS PROJECT









BALIAN

ARCHITECTS

STANDARD WORKS - MASTER SIGN PROGRAM

001

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APRIL 19, 2021

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004 BRANDING ELEMENTS

005 SITE PLAN

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007 IDENTIFICATION SIGN TYPE C & D

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016 PARCEL D - LEVEL 1 AND LEVEL 2 FLOOR PLAN

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018 PARCEL D - LEVEL 3 MEZZANINE AND ROOF FLOOR PLAN

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020 PARCEL D - BUILDING ELEVATION

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025 PARCEL A - BUILDING ELEVATION

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027 PARCEL E - LEVEL 2 MEZZ AND LEVEL 3 FLOOR PLAN

028 PARCEL E - LEVEL 3 MEZZANINE AND ROOF FLOOR PLAN

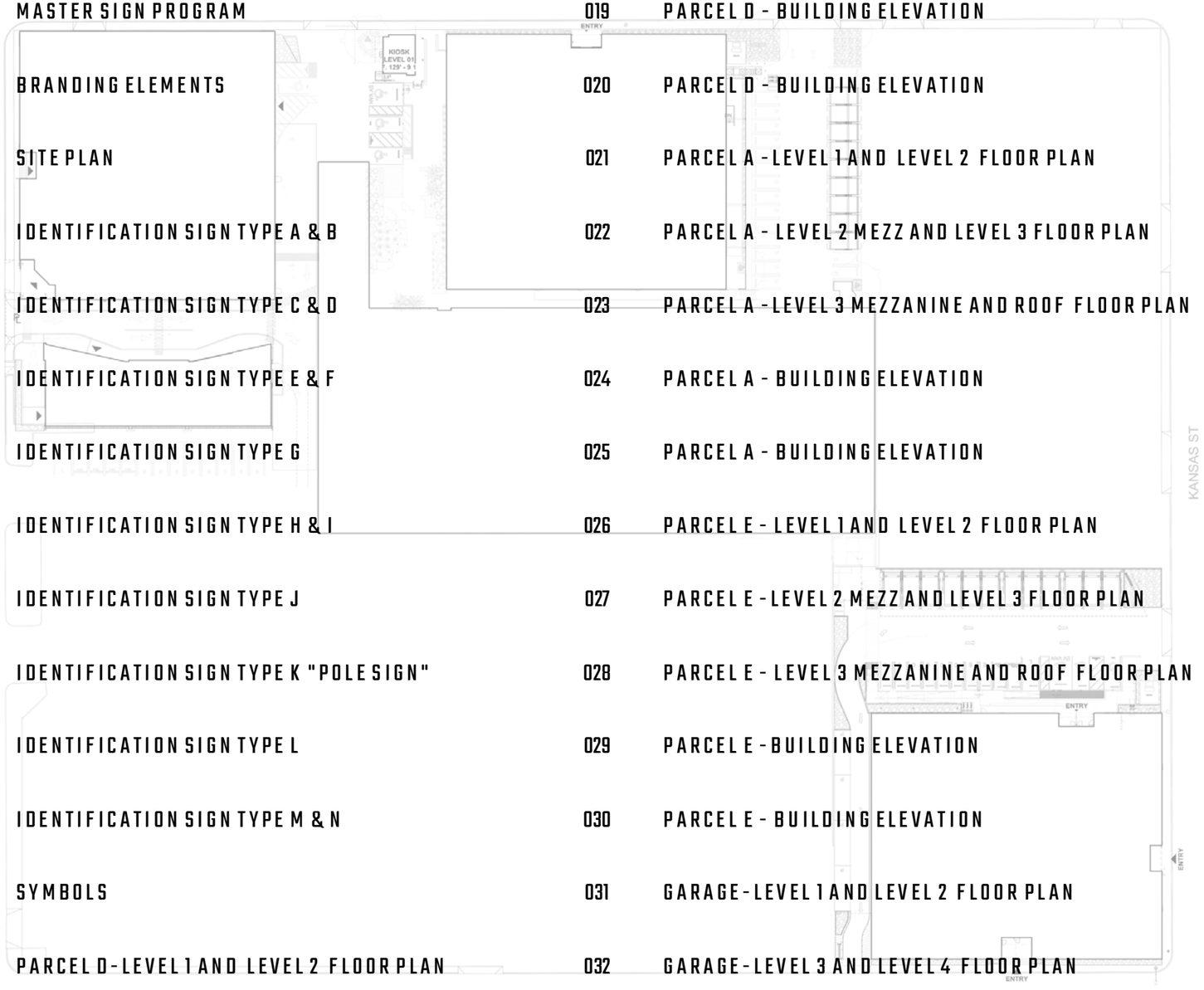
029 PARCEL E - BUILDING ELEVATION

030 PARCEL E - BUILDING ELEVATION

031 GARAGE - LEVEL 1 AND LEVEL 2 FLOOR PLAN

032 GARAGE - LEVEL 3 AND LEVEL 4 FLOOR PLAN

033 GARAGE - BUILDING ELEVATION







BALIAN ARCHITECTS

STANDARD WORKS - MASTER SIGN PROGRAM

SHEET INDEX 002

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APRIL 19, 2021

STANDARD WORKS

INTRODUCTION

The Standard Works Master Sign Program's (MSP) intent is to develop a campus wide signage program that:

a. Meets the provisions of the ESZC Chapter 15-18-1 through 8 in all regards including size, type, locations, prohibited signs, exempt signs, general sign standards, applications, permits, nonconforming conditions, substitutions, enforcement and maintenance.
b. Provides all Tenants a guideline for Tenant signage that is architecturally compatible with the campus wide architectural esthetic for the purposes of a unified campus standard in design, installation and otherwise as approved by the authorities having jurisdiction with the original construction of the project.
c. Provides the appropriate process for review, submittal, approval, installation, maintenance and removal of all signage on the Standard Works campus.
d. Clearly provide all Tenants prescribed locations, size and quantities of Tenant signage that is "pre-approved" in concept only (not approved for construction) by the Owner (Smoky Hollow Industries) and the City in the MSP. However the City's standards may vary from those prescribed in the MSP. -If a Tenant proposes signage that is not consistent with the MSP but consistent with the City standards in the zoning code the Owner will review such designs and only with the Owner's written approval the Tenant may submit an alternative design to the City for its approval.

GENERAL ITEMS

a. All proposed Tenant signage shall comply with the provisions in the MSP relating to:
    a. Size
    b. Location
    c. Materiality
    d. Lighting
    e. Font (in some locations/sign types)
    f. Quantity per Tenant
    g. Quantity per building elevation
    h. Any discrepancy of the standards provided in the MSP are subject to Article d above.

PROCESS FOR DESIGN AND REVIEW

All building, directional and campus identification signage shall be designed by the Owner's Architect and Sign Vendor and submitted by the Sign Vendor (that has all the necessary licenses to perform the work) for approval by the jurisdiction having the appropriate authority (planning and building as required by the El Segundo Code of Regulations) and shall be installed at the completion of the primary building construction.

All Tenant identification signage shall either:

1. Be designed in concept by the Tenant's Architect/Sign Vendor and be submitted to the Owner for approval or
2. Be design in concept by the Owner's Architect/Sign Vendor, submitted to the Tenant for approval.
3. The Owner shall provide written approval and or corrections to the conceptual signage and shall request a full set of Shop Drawings to be submitted for the Owner's review and approval. The Shop Drawings shall include general information such as wording/font/size but shall also include attachment methodology, lighting and construction of the signage in detail.

In either case the Sign Vendor shall submit a complete "signage package" to the City for review and approval prior to installation. The signage package prepared by the Sign Vendor shall be formatted on any common size paper (such as 8.5x11 or 11x17 or 24x26 or 30x42 et cetera) and shall include dimensions, material call outs, lighting, installation technique et cetera as normally required for this type of submittal including Tenant's information and vendor's contact.

OWNER'S RIGHTS

a. Prior to City submittal all signage packages prepared by the Tenants forces shall be submitted to the Owner for review and approval. Such approval shall be provided by the Owner in writing.
b. The Owner's period of review shall be a reasonable amount of time and shall not be unreasonably extended.
c. The Owner shall have final authority, along with the City inspectors, to demand Tenant to correct any and all deficiencies with the signage and its associated installation to the satisfaction of the Owner and City officials.
d. The Owner shall also reserve the right to demand the Tenant to correct any deficiencies of the signage as a result of weathering or failure or any other deficiency for the entire length of the tenancy.
e. The Owner has full authority to deny any signage that it deems inappropriate for any reason whatsoever. – The Owner shall not be unreasonable however, lude or inappropriate wording or depictions may cause the Owner to deny proposed signage. The Owner may also deny signage that is incompatible with the campus in design, color et cetera.

TENANTS RESPONSIBILITY

a. It is the responsibility of the Tenant that is proposing the signage to confirm that it's proposed signage is not in violation of any trademark or copyright that it doesn't have Ownership of. For the avoidance of any doubt, it is NOT the responsibility of the Owner to verify Ownership of any trademark or copyright of the Tenant's proposed signage.
b. The Tenant shall be responsible for any and all design, City and permit fees associated with the installation and approval of its proposed signage.
c. Post installation the Owner shall receive a copy of the final City sign off paperwork.

SIGN VENDOR'S RESPONSIBILITY

a. The Sign Vendor shall have all the appropriate business, state and processional licenses (such as a valid C-45 Sign Contractor's license) required for signage production and installation including but not limited to worker's comp and commercial liability insurance.
b. All signs shall be installed with no visible attachments (other than those that are specifically designed in the MSP to be exposed fasteners).
c. All wording and artwork shall be fabricated using quality materials and techniques without any possibility of failure or fading.
d. Signage installed on glazing shall be double sided with no visible method of attachments from the opposite side.

ALTERNATE DESIGNS

a. The proposed signage must meet the Standard Works MSP guidelines including font, materials, lighting et cetera. Alternate designs may be proposed for the Owner's review however it is within the Owner's rights to deny alternate designs it deems incompatible for any reasons, in addition the Owner's approval does not supersede the City's review and approval of the alternate design in relation to City standards (ESZC Chapter 15-18-1 through 8) or the previously approved MSP standards.

MISCELLANEOUS PROVISION

a. All other zoning code standards that may apply shall be enforceable by the City. Compliance with the MSP does not preclude compliance with any other provision of the El Segundo Zoning Code.
b. Signage that is deemed by the Owner or the City officials in any way faulty (weathered, sun damaged, dimensionally unstable et cetera) shall be removed and replaced or repaired as needed at the expense of the Tenant to the satisfaction of the Owner and City officials.
c. Proposed signage shall only depict a business entity's name and or DBA and or logo and shall not include any commercial wording/slogan. Any signage that the Owner deems too controversial may also be denied by the Owner.
d. All signs may be internally or externally illuminated however no visible lighting sources shall be allowed such as wall sconces that are not already installed on the building facades. Proposed lighting shall be micro LED type and a campus wide consistent color temperature of 3500K with any remote drivers completely hidden from view.

"Where the Master Sign Program conflicts with the Zoning Code, the Zoning Code shall control."

TEXTURES



M1
PAINTED BRICK
BENJAMIN MOORE
"JET BLACK - 2120-10"



M2
"MILL FINISH" STEEL

M3
ALUMINUM
KYNAR
POWDERCOATED
"BRIGHT WHITE - UC55026 SRI 95"



M4
ALUMINUM
KYNAR
POWDERCOATED
"BRICK RED - UC43355 SRI 31"



M5
ALUMINUM
KYNAR
POWDERCOATED
"BLACK - UC40577 SRI 3"

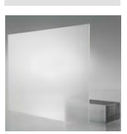


M6
1/4" CLEAR PLEXIGLASS
FLAT POLISHED EDGES



M7
BRANDING BLUE
R:17
G:16
B:44

M8
BRANDING GREY
R:225
G:225
B:226



M9
MILKY WHITE
1/4" PLEXIGLASS
FLAT POLISHED EDGES



M10
CHEMETAL
613 EMBER ALUMINUM

TYPOGRAPHY

INDUSTRIAL

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

0123456789

INDUSTRIAL BOLD

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

0123456789

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- SIGN TYPE M
- DIRECTION TO PARKING LEVEL 01 (SIGN TYPE A)
- R1 WATCH FOR PEDESTRIANS
- STOP SIGN
- R1 WATCH FOR PEDESTRIANS
- STOP SIGN
- R1 WATCH FOR PEDESTRIANS
- WATCH FOR VEHICLES
- ONE WAY DO NOT ENTER
- SIGN TYPE G.1
- STOP SIGN
- R1 WATCH FOR PEDESTRIANS
- ONE WAY (RIGHT ONLY)
- DIRECTION TO BUILDINGS "140 OREGON, 1330 E FRANKLIN 1475 EL SEGUNDO" (SIGN TYPE B)
- SIGN TYPE K "POLE SIGN"

- SIGN TYPE K "POLE SIGN"
- SIGN TYPE G.2
- ONE WAY (LEFT ONLY)
- R1 WATCH FOR PEDESTRIANS
- DIRECTION TO PARKING LEVEL 01 (SIGN TYPE A)
- DIRECTION TO PARKING LEVEL 01 (SIGN TYPE A)
- R1 WATCH FOR PEDESTRIANS
- STOP SIGN
- ONE WAY DO NOT ENTER
- SIGN TYPE G.3

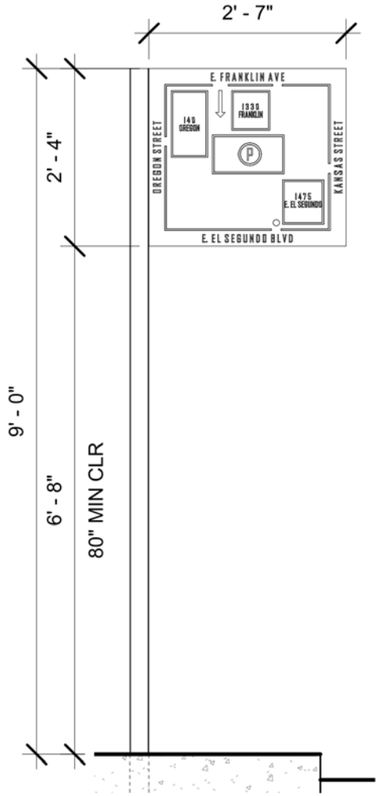
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STANDARD WORKS - MASTER SIGN PROGRAM

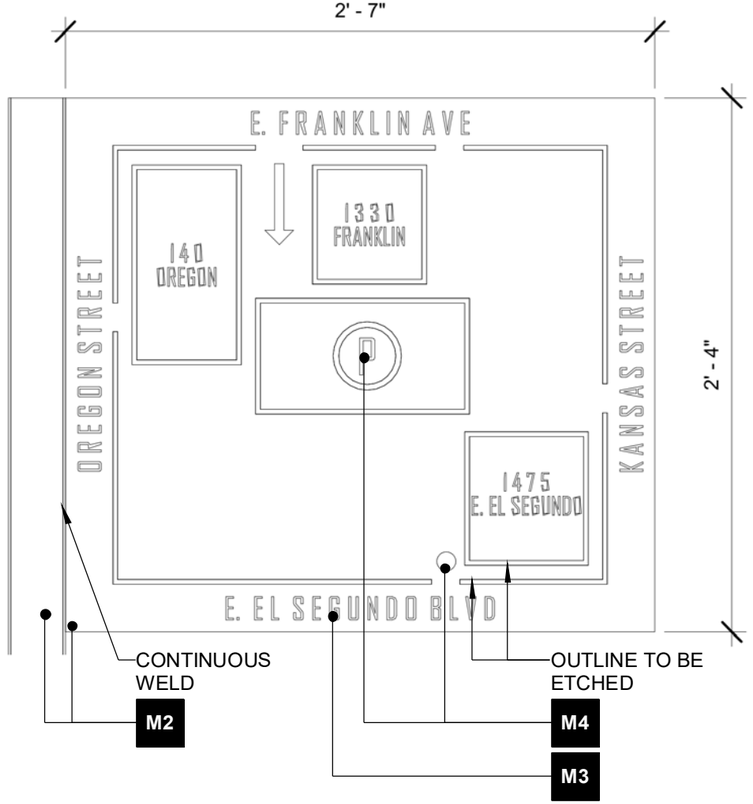
SITE PLAN 005

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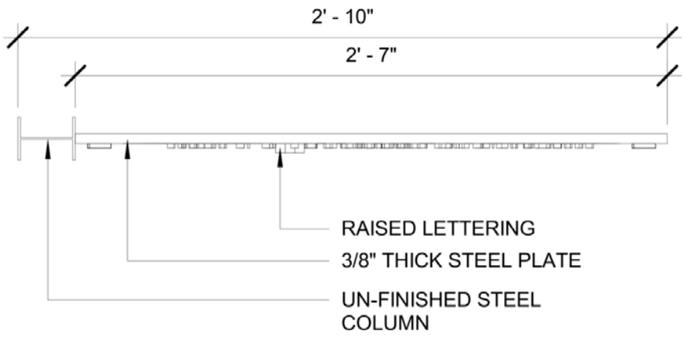
APRIL 19, 2021



ELEVATION

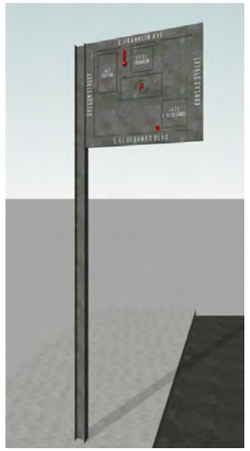


ENLARGED ELEVATION

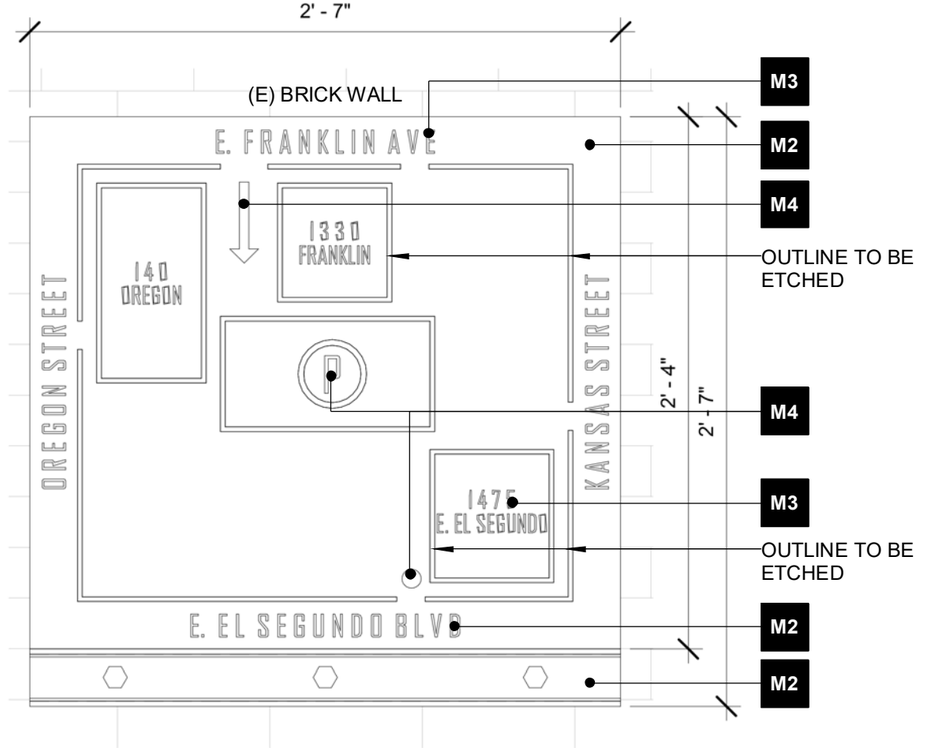


PLAN

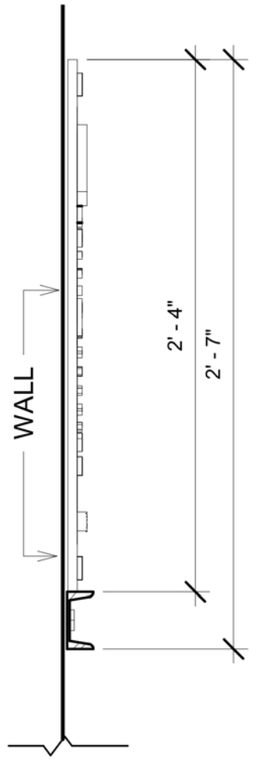
SIGN TYPE A



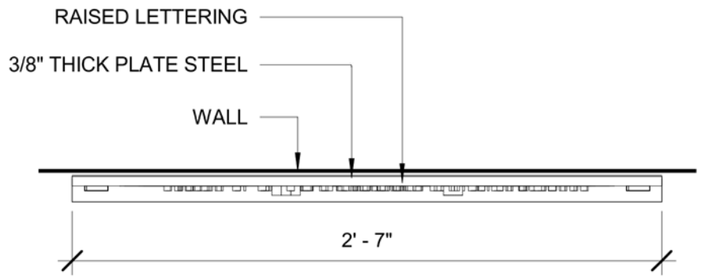
NOTES	
1. OVERALL SIZE:	31" W x 28" H
2. TOTAL AREA:	6 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT



ELEVATION

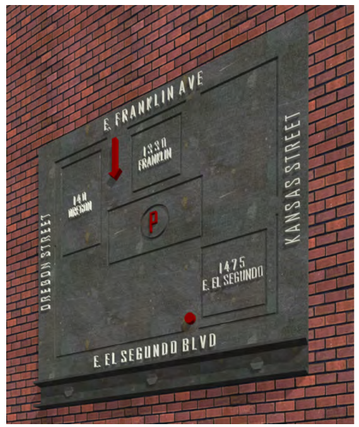


SECTION



PLAN

SIGN TYPE B



NOTES	
1. OVERALL SIZE:	31" W x 28" H
2. TOTAL AREA:	6 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT

BALIAN ARCHITECTS

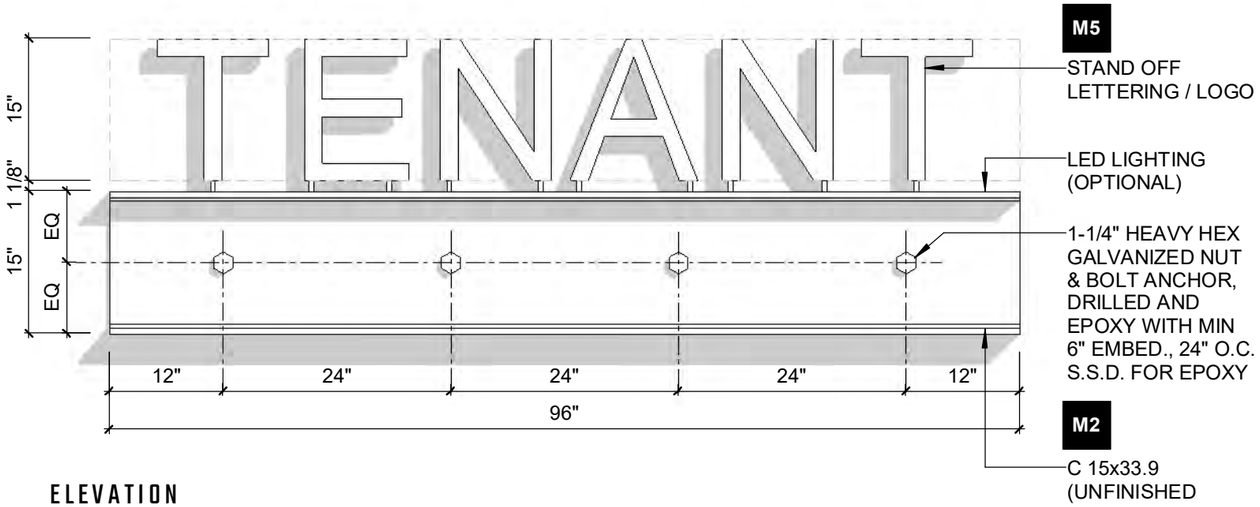
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APRIL 19, 2021

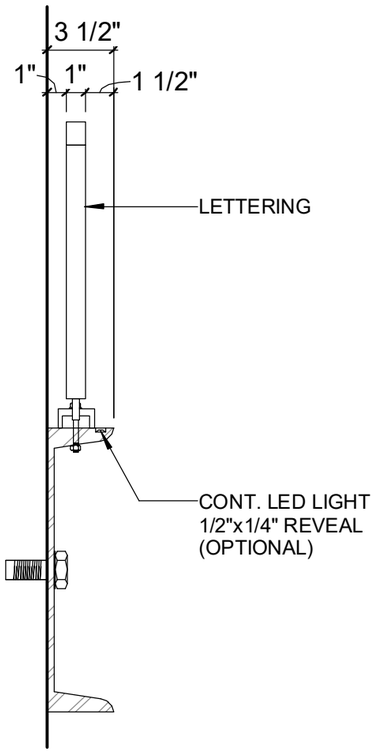
STANDARD WORKS - MASTER SIGN PROGRAM

ONSITE DIRECTIONAL SIGN TYPE A & B 006

STANDARD WORKS



ELEVATION

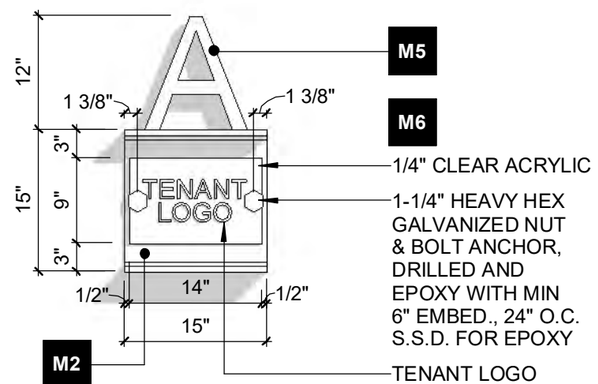




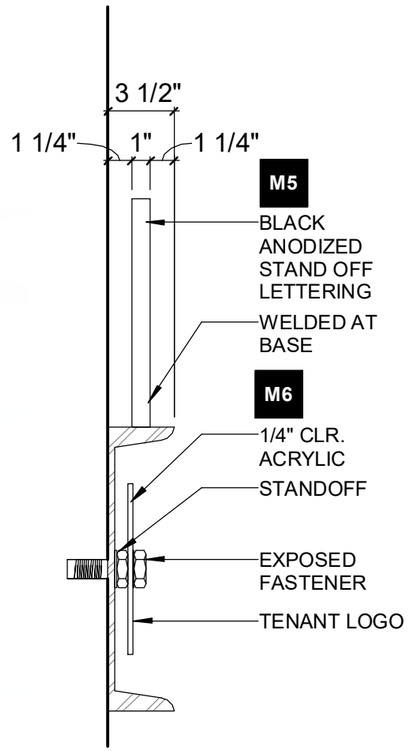
SECTION

SIGN TYPE C

NOTES	
1. OVERALL SIZE:	96" W x 15" H
2. TOTAL AREA:	10 SQ FT
3. TYPOGRAPHY:	TENANT TYPOGRAPHY
4. LIGHTING:	OPTIONAL LED STRIP LIGHTING



ELEVATION





SECTION

SIGN TYPE D

NOTES	
1. OVERALL SIZE:	14" W x 9" H
2. TOTAL AREA:	0.875 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT AMBIENT

BALIAN ARCHITECTS

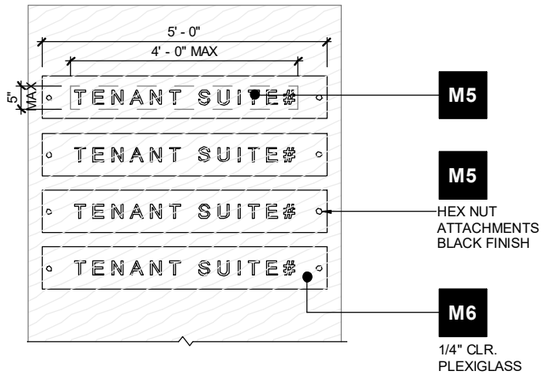
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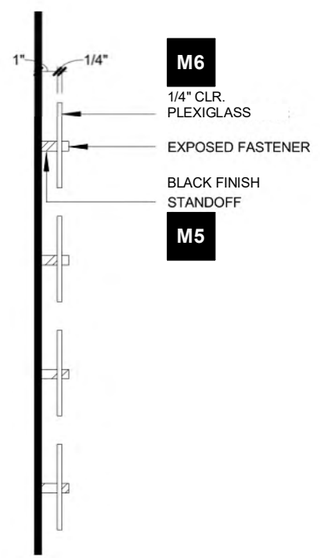
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE C & D



ELEVATION

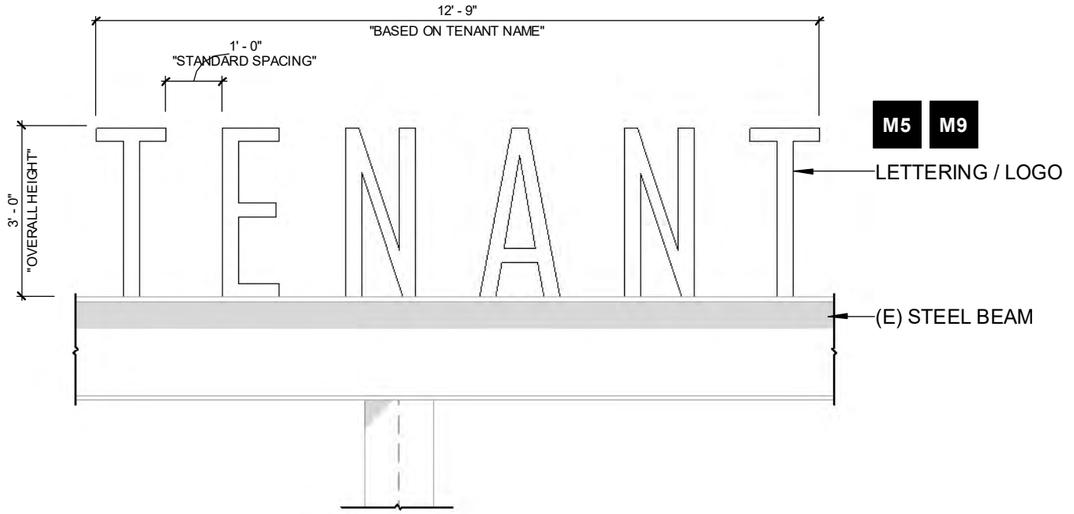


SECTION

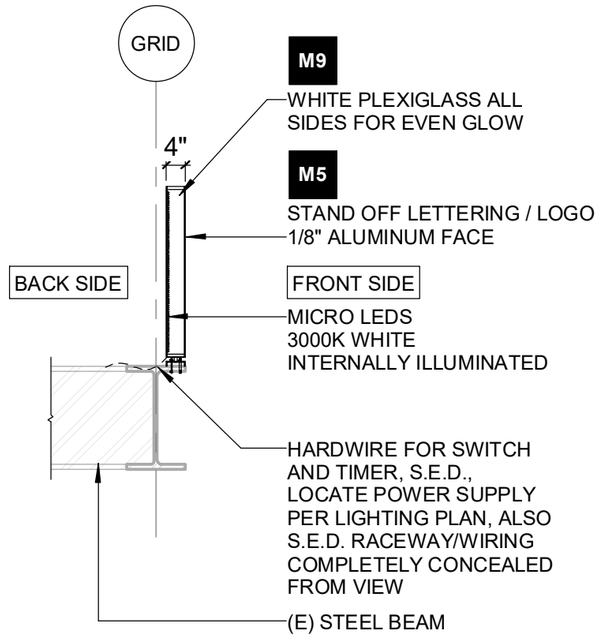
SIGN TYPE E



NOTES	
1. OVERALL SIZE:	48" W x 5" H / EACH
2. TOTAL AREA:	1.667 SQ FT / EACH
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT / AMBIENT

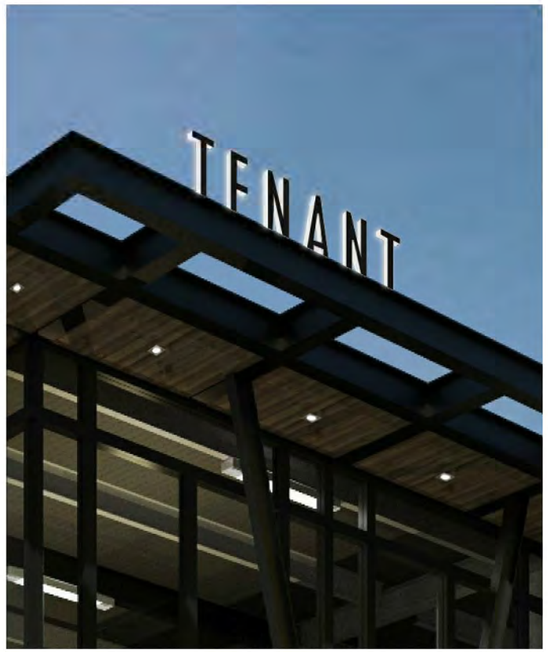


ELEVATION



SECTION

SIGN TYPE F



NOTES	
1. OVERALL SIZE:	153" W x 36" H
2. TOTAL AREA:	38.25 SQ FT
3. TYPOGRAPHY:	TENANT TYPOGRAPHY
4. LIGHTING:	INTERNALLY ILLUMINATED

BALIAN ARCHITECTS

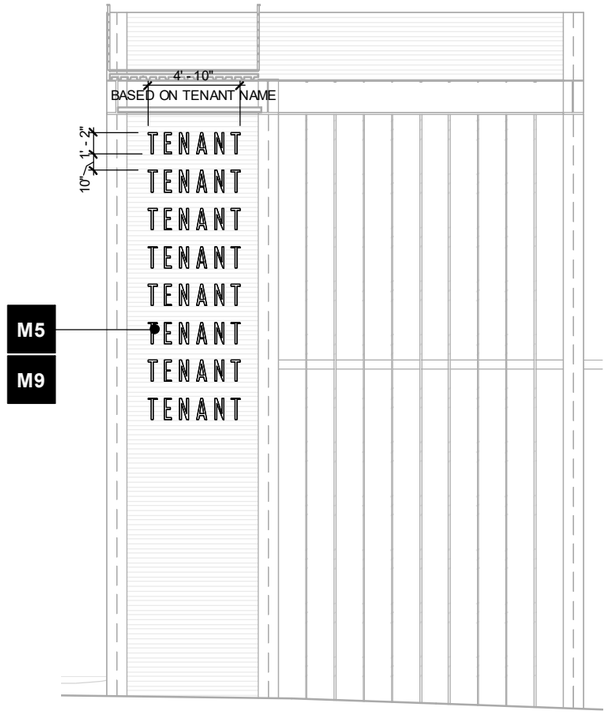
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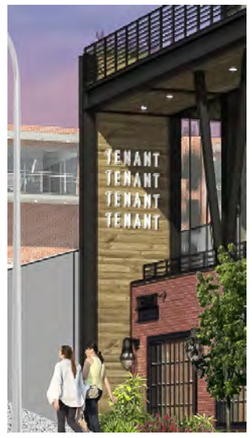
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE E & F 008

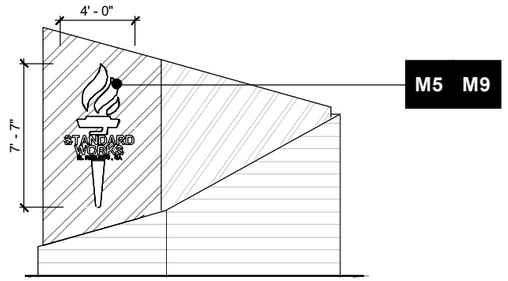


ELEVATION

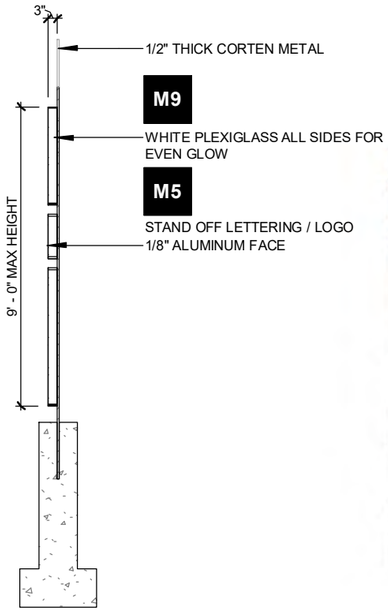


SIGN TYPE G.3

NOTES	
1. OVERALL SIZE:	58" W x 14" H / EACH
2. TOTAL AREA:	5.6 SQ FT
3. TYPOGRAPHY:	TENANT TYPOGRAPHY
4. LIGHTING:	INTERNALLY ILLUMINATED



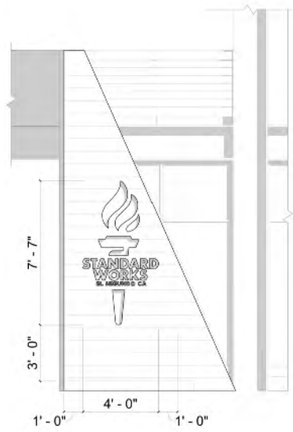
ELEVATION





SIGN TYPE G.2

NOTES	
1. OVERALL SIZE:	48" W x 91" H
2. TOTAL AREA:	30 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT



ELEVATION



SIGN TYPE G.1

NOTES	
1. OVERALL SIZE:	48" W x 91" H
2. TOTAL AREA:	30 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	

BALIAN ARCHITECTS

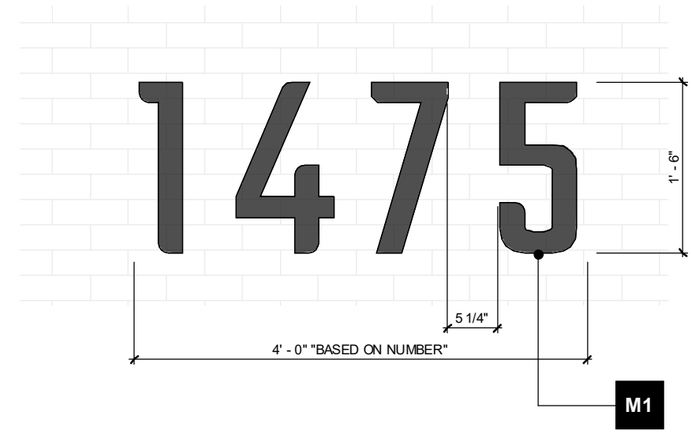
STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE G 009

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APRIL 19, 2021



ELEVATION

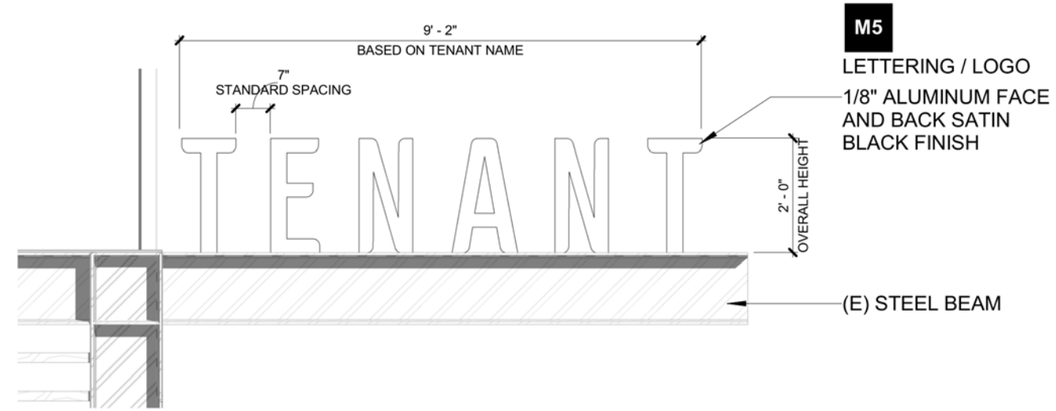




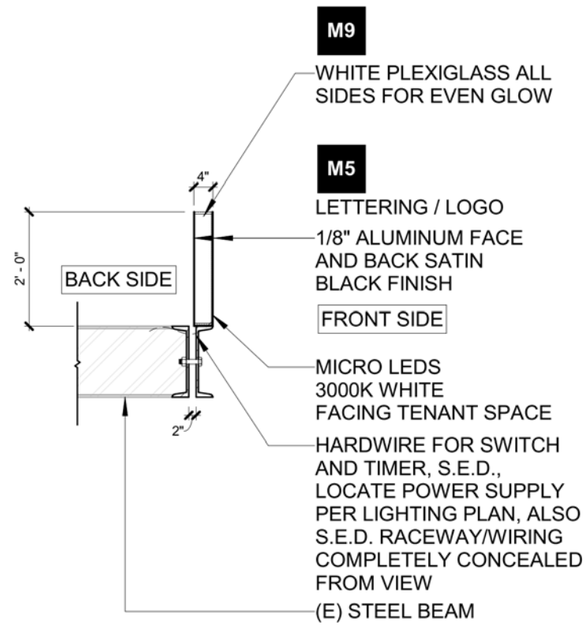


NOTES	
1. OVERALL SIZE:	48" W x 18" H
2. TOTAL AREA:	6 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT

SIGN TYPE H



ELEVATION



SECTION

SIGN TYPE I



NOTES	
1. OVERALL SIZE:	110" W x 24" H
2. TOTAL AREA:	18.33 SQ FT
3. TYPOGRAPHY:	TENANT TYPOGRAPHY
4. LIGHTING:	INTERNALLY ILLUMINATED

BALIAN ARCHITECTS

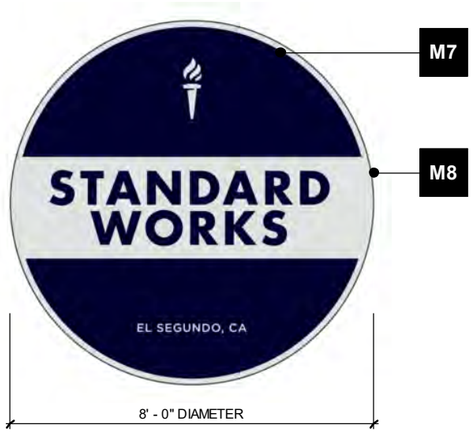
STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE H & I 010

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APRIL 19, 2021



ELEVATION

M7

PAINTED DECAL



NOTES	
1. OVERALL SIZE:	VARIES
2. TOTAL AREA:	VARIES
3. TYPOGRAPHY:	
4. LIGHTING:	AMBIENT

SIGN TYPE J.2

ELEVATION

M7 M8

PAINTED DECAL



NOTES	
1. OVERALL SIZE:	96" DIAMETER
2. TOTAL AREA:	50 SQ FT
3. TYPOGRAPHY:	
4. LIGHTING:	AMBIENT

SIGN TYPE J.1

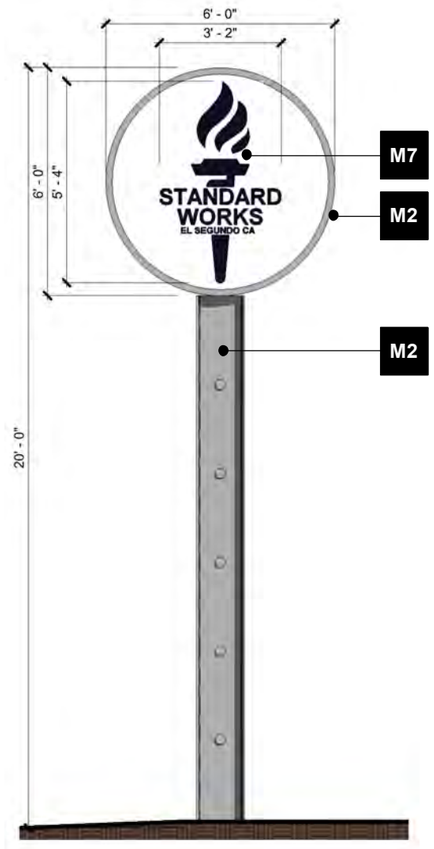
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APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE J 011



ELEVATION



PERSPECTIVE



NOTES	
1. OVERALL SIZE:	72" DIAMETER
2. TOTAL AREA:	36 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INTERNALLY ILLUMINATED

SIGN TYPE K "POLE SIGN"

BALIAN ARCHITECTS

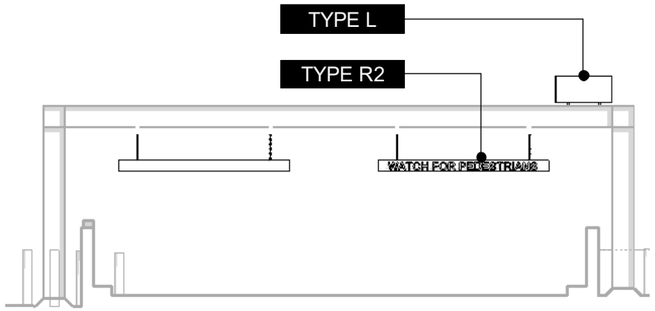
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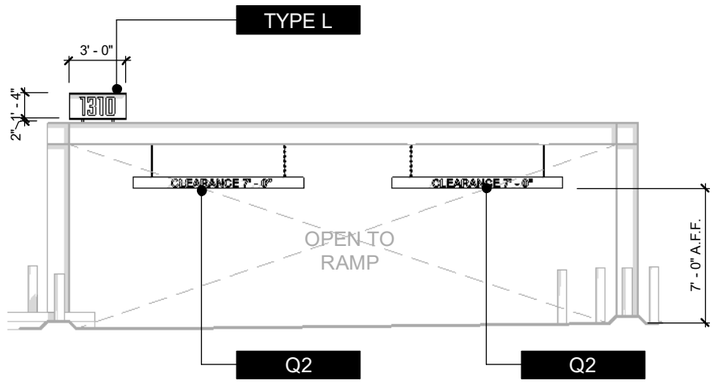
RM 360/14755 E Segundo Blvd/14755 E EL SEGUNDO - CLOUD.rvt

APRIL 19, 2021

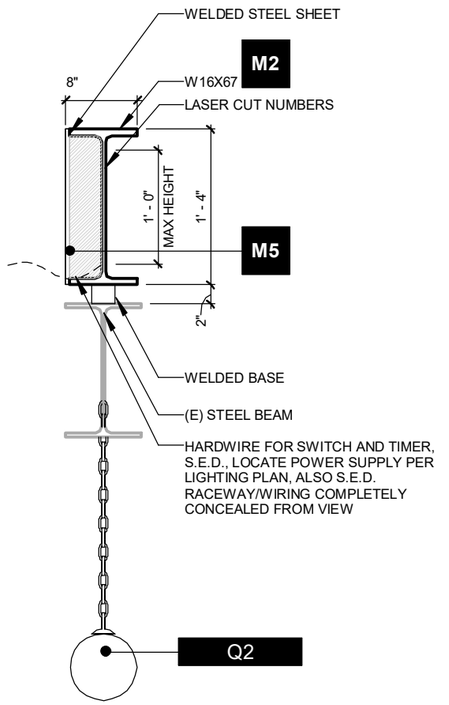
STANDARD WORKS - MASTER SIGN PROGRAM

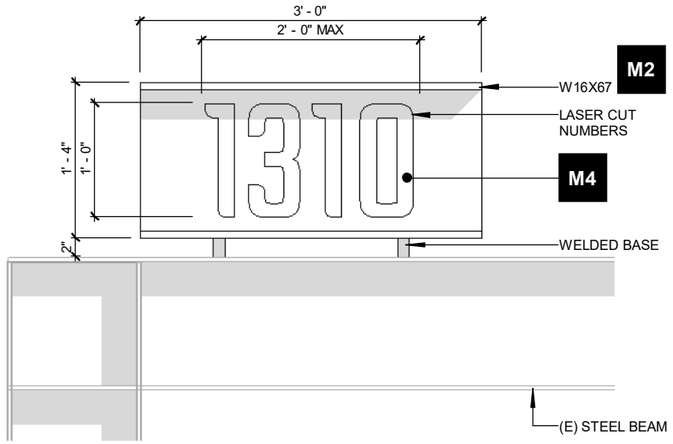
IDENTIFICATION SIGN TYPE K "POLE SIGN" 012





ELEVATIONS





ENLARGED ELEVATION



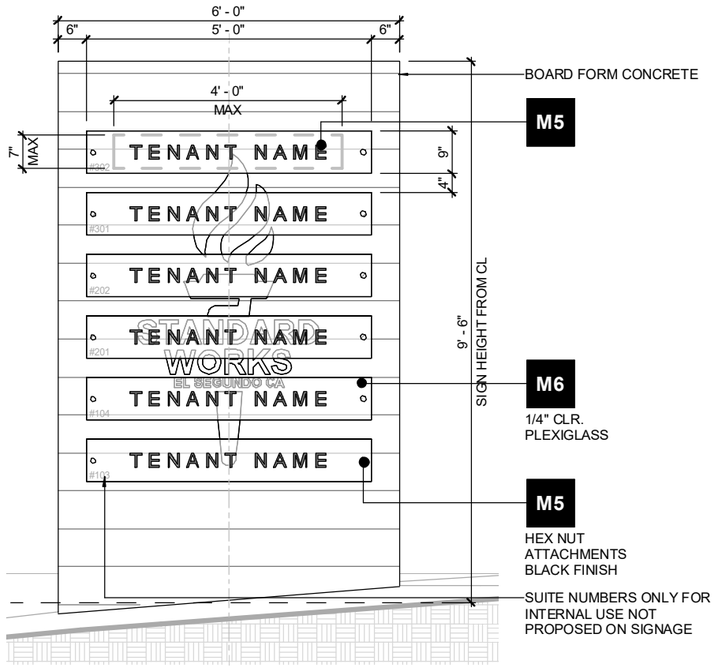
NOTES	
1. OVERALL SIZE:	24" W x 12" H
2. TOTAL AREA:	2 SQ FT
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INTERNALLY ILLUMINATED

SECTION

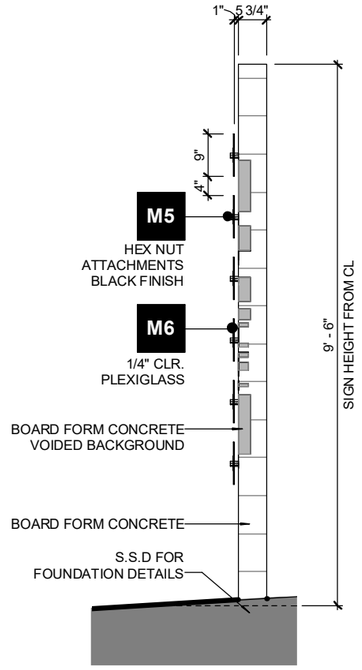
SIGN TYPE L

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ELEVATION

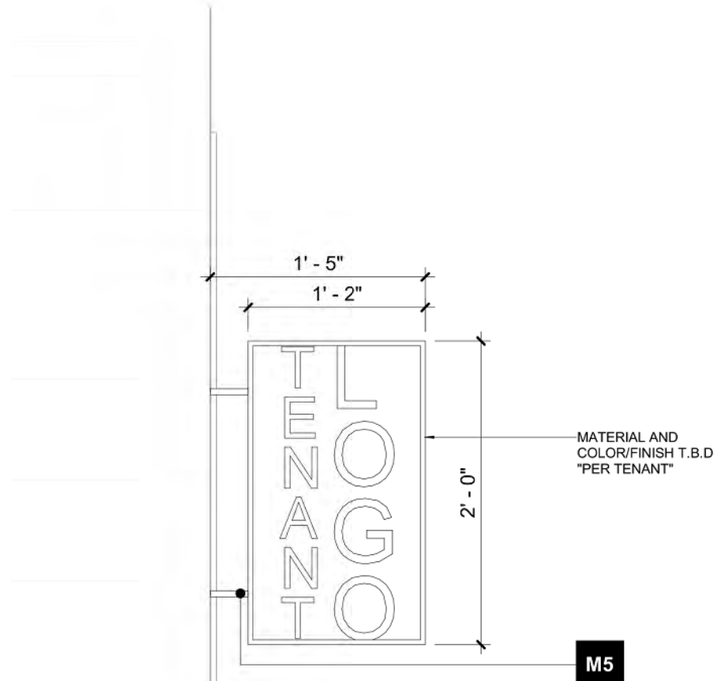


SECTION

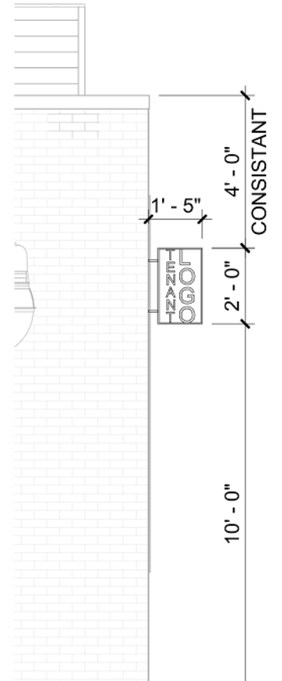


NOTES	
1. OVERALL SIZE:	48" W x 7" H / EACH
2. TOTAL AREA:	2.33 SQ FT / EACH
3. TYPOGRAPHY:	INDUSTRIAL
4. LIGHTING:	INDIRECT / AMBIENT

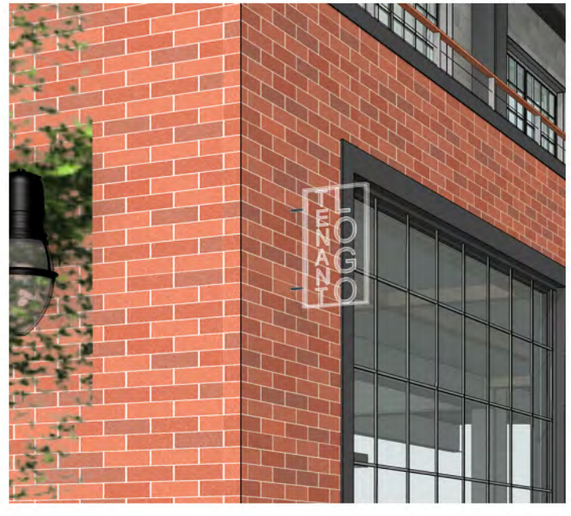
SIGN TYPE M



ENLARGED ELEVATION



ELEVATION



NOTES	
1. OVERALL SIZE:	14" W x 24" H
2. TOTAL AREA:	2.33 SQ FT
3. TYPOGRAPHY:	N/A
4. LIGHTING:	N/A

SIGN TYPE N

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MASTER SIGN PROGRAM
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

IDENTIFICATION SIGN TYPE M & N 014

SYMBOLS



E2
STAIR DOWN



D2
EXIT ROUTE



D1
EXIT



D3
NOT AN EXIT



P4
VAN ACCESSIBLE PARKING



H1
ELEVATOR



L1
IN CASE OF FIRE



M2
STAR OF LIFE

M1
FLOOR NUMBER



B1
ALL-GENDER RESTROOM (DOOR)



B2 ALL-GENDER RESTROOM



B3 ALL-GENDER SHOWER



F1
ROOM CAPACITY



A3
ELECTRICAL ROOM



P3
ACCESSIBLE PARKING

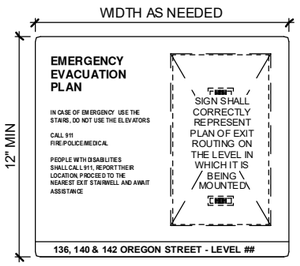
C1
ACCESSIBLE (DECAL)



S1
FIRE EXTINGUISHER



E1
STAIR IDENTIFICATION



A1
EMERGENCY EVACUATION PLAN



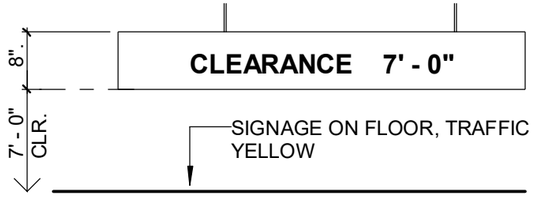
K2
(FAPB)



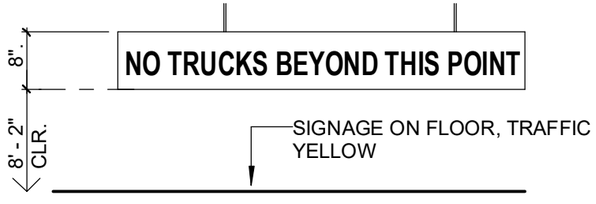
R1
WATCH FOR PEDESTRIANS



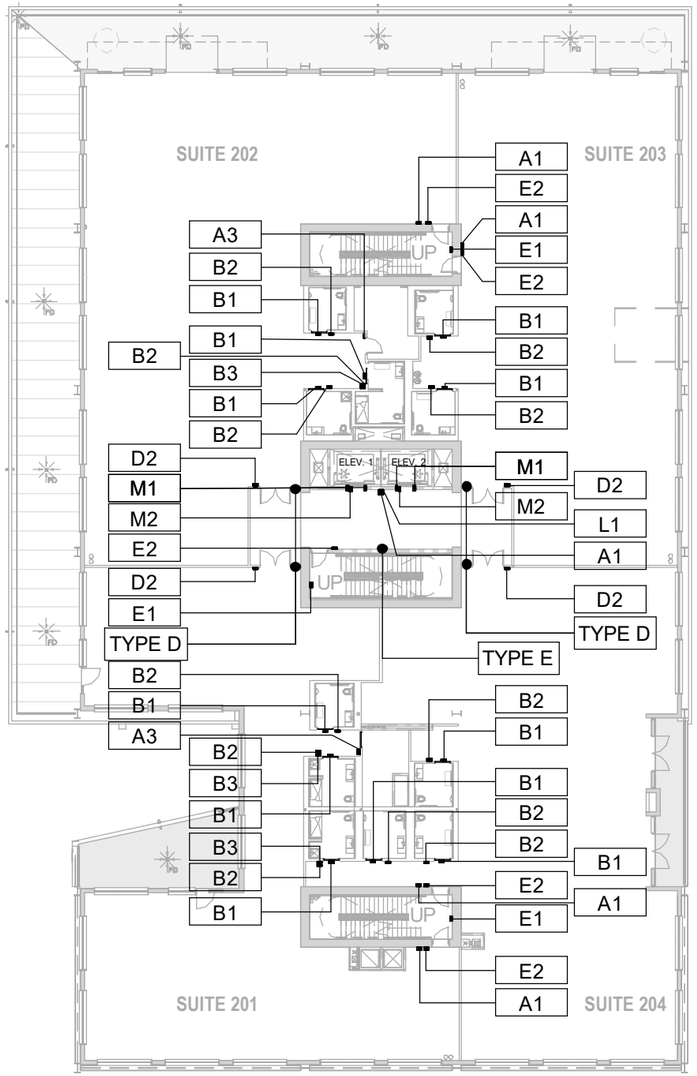
R2
WATCH FOR PEDESTRIANS



Q2
CLEARANCE

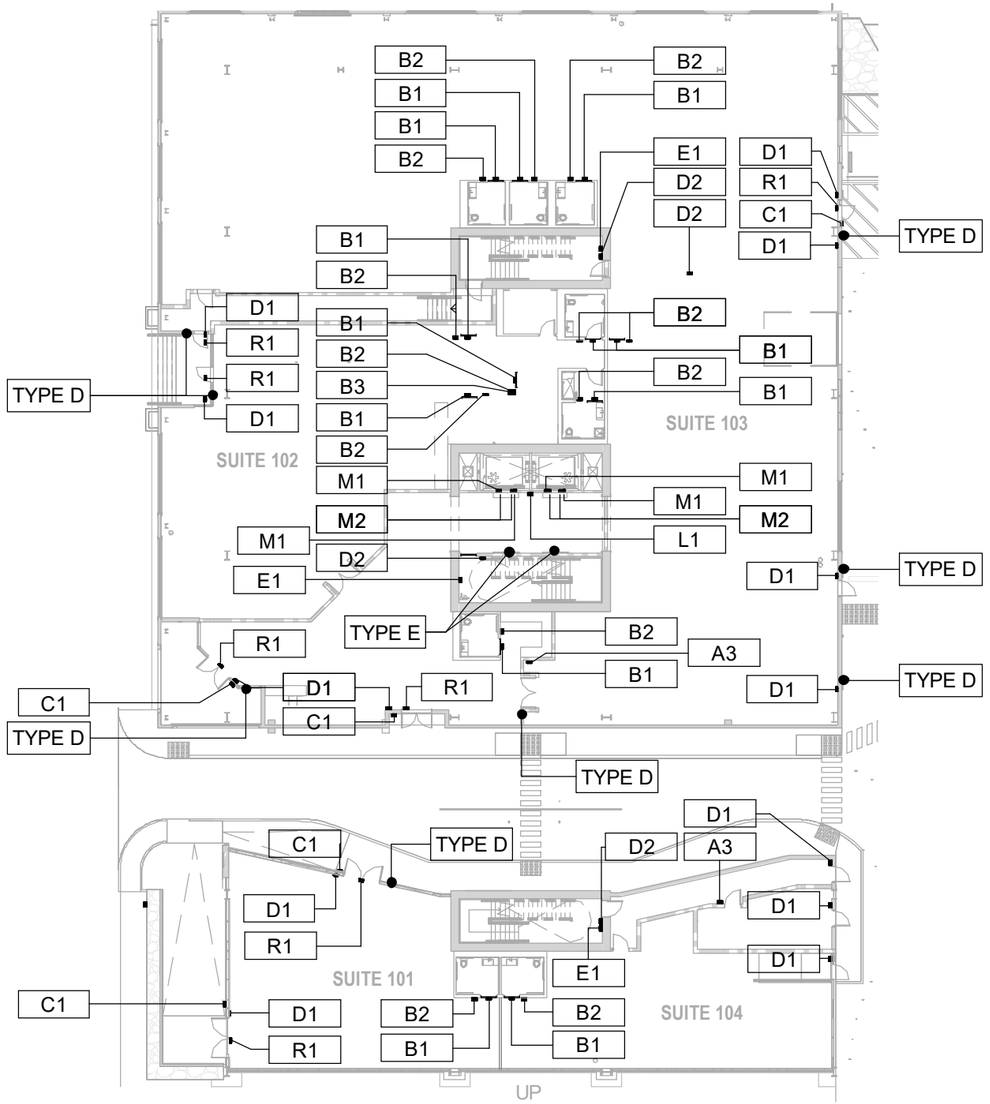


N1
NO TRUCKS BEYOND THIS POINT



LEVEL 2 - FLOOR PLAN

140 OREGON



LEVEL 1 - FLOOR PLAN

140 OREGON

BALIAN

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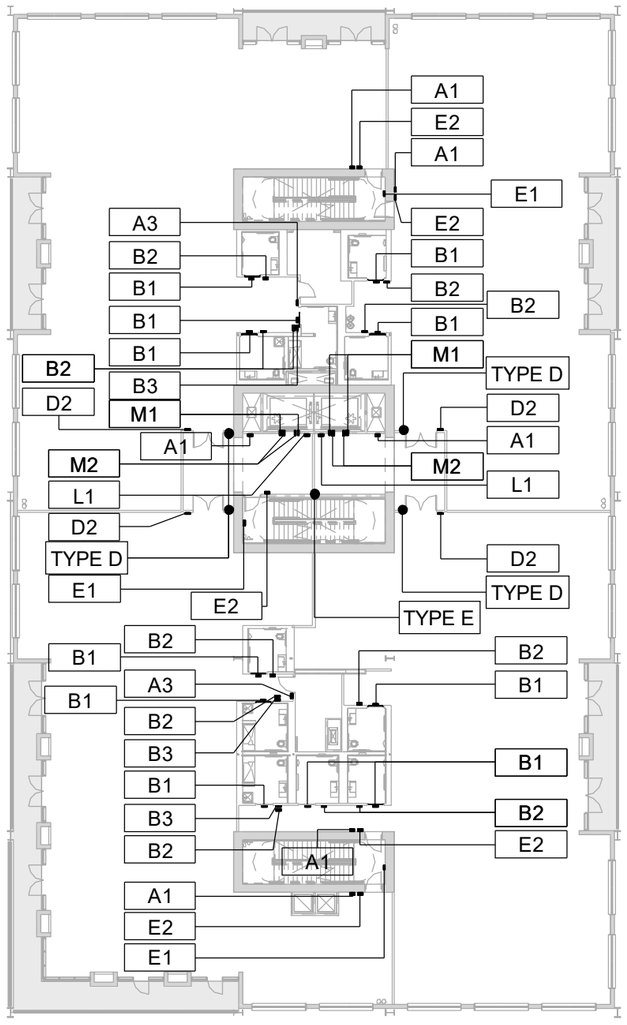
STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL D - LEVEL 1 AND LEVEL 2 FLOOR PLAN

016

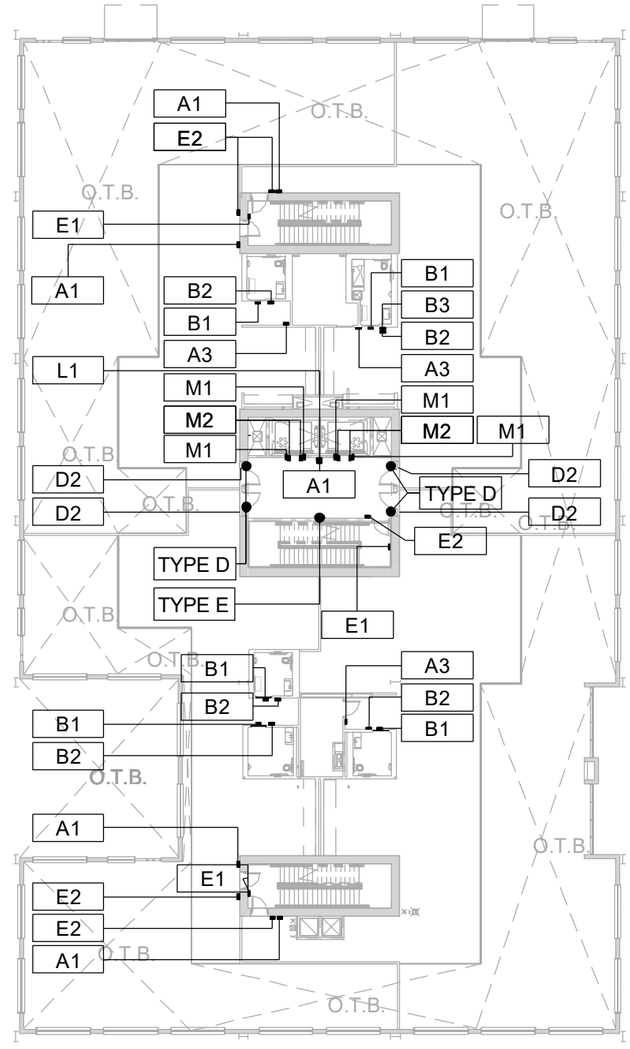
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APRIL 19, 2021



LEVEL 3 - FLOOR PLAN

140 OREGON



LEVEL 2 MEZZANINE - FLOOR PLAN

140 OREGON

BALIAN

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BIM 360://140 Oregon/140 OREGON_CLOUD.rvt

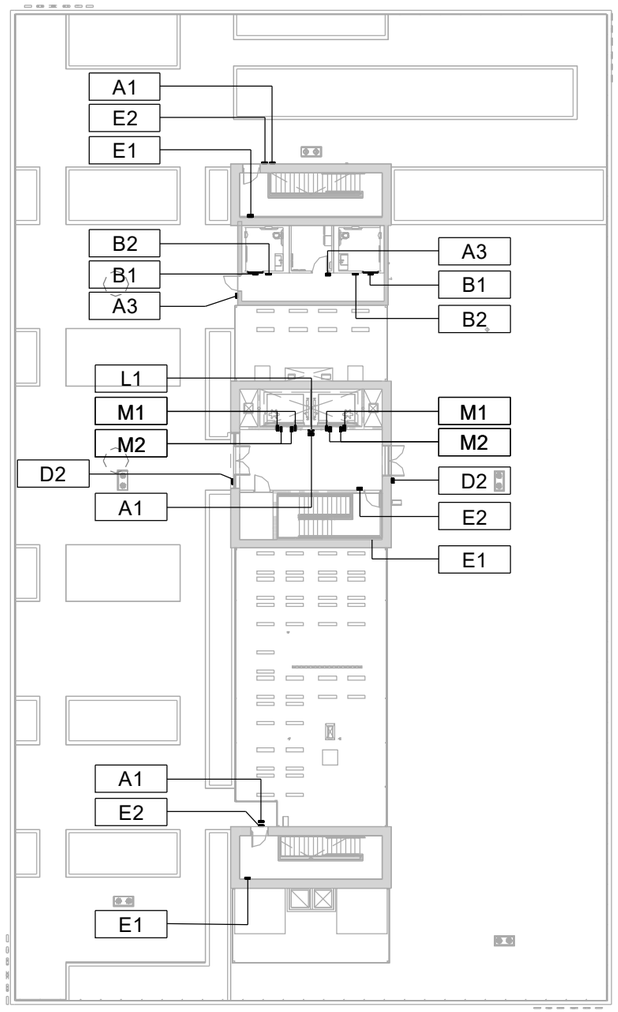
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL D - LEVEL 2 MEZZ AND LEVEL 3 FLOOR PLAN

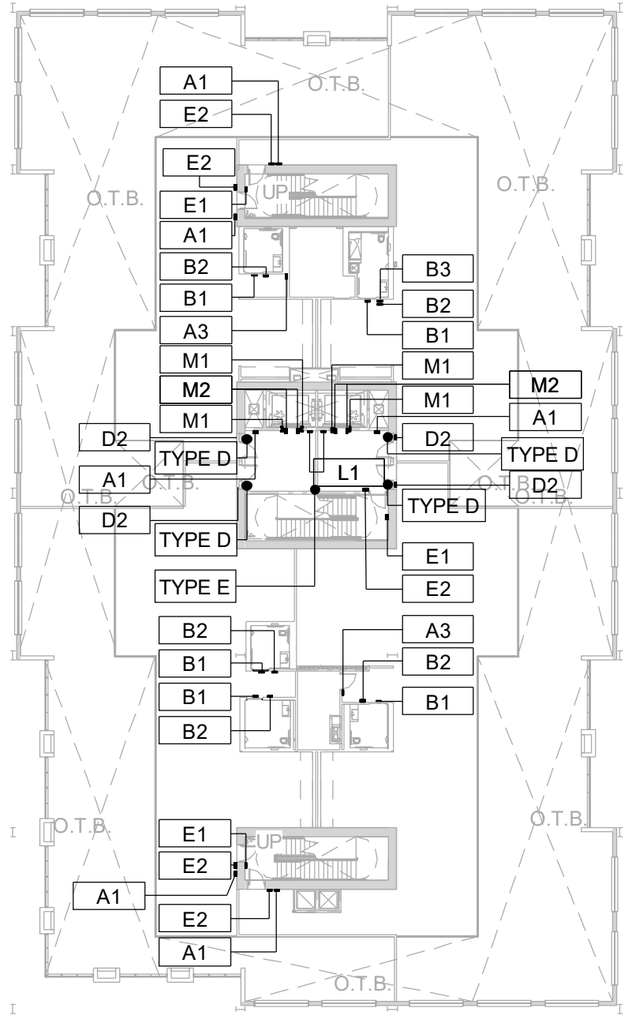
017

STANDARD WORKS



ROOF-FLOOR PLAN

140 OREGON



LEVEL 3MEZZANINE-FLOOR PLAN

140 OREGON

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BALIAN #17.Oregon.140.DRAWING.Update

APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL D-LEVEL 3 MEZZANINE AND ROOF FLOOR PLAN



NORTH ELEVATION

140 OREGON

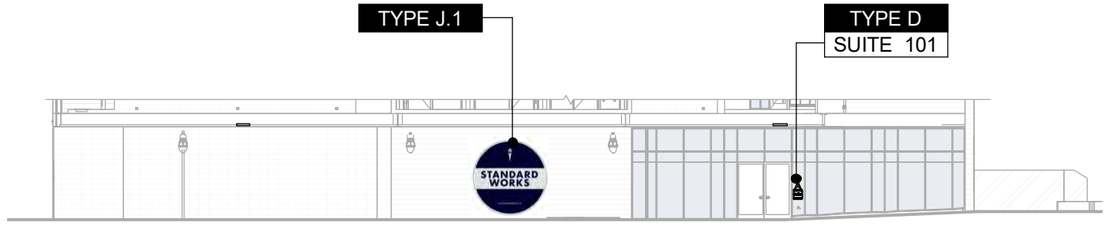
PROPOSED SIGN TYPES	TYPE F	38.25 SQ.FT.
	TYPE N	2.33 SQ FT
TOTAL AREA		40.58 SQ FT
NORTH FACADE		7,165 SQ FT
ALLOWABLE		5% = (7,165 x 0.05) = 358.25 SQ FT 358.25 SQ FT > 40.58 SQ FT



SOUTH ELEVATION

140 OREGON

PROPOSED SIGN TYPES	TYPE F	38.25 SQ FT
TOTAL AREA		10 SQ FT
SOUTH FACADE		TOTAL AREA = 6,460 SQ FT
ALLOWABLE		5% = (6,460 x 0.05) = 323 SQ FT 323 SQ FT > 38.25 SQ FT



SOUTH FACE PASSAGEWAY

140 OREGON

BALIAN

ARCHITECTS

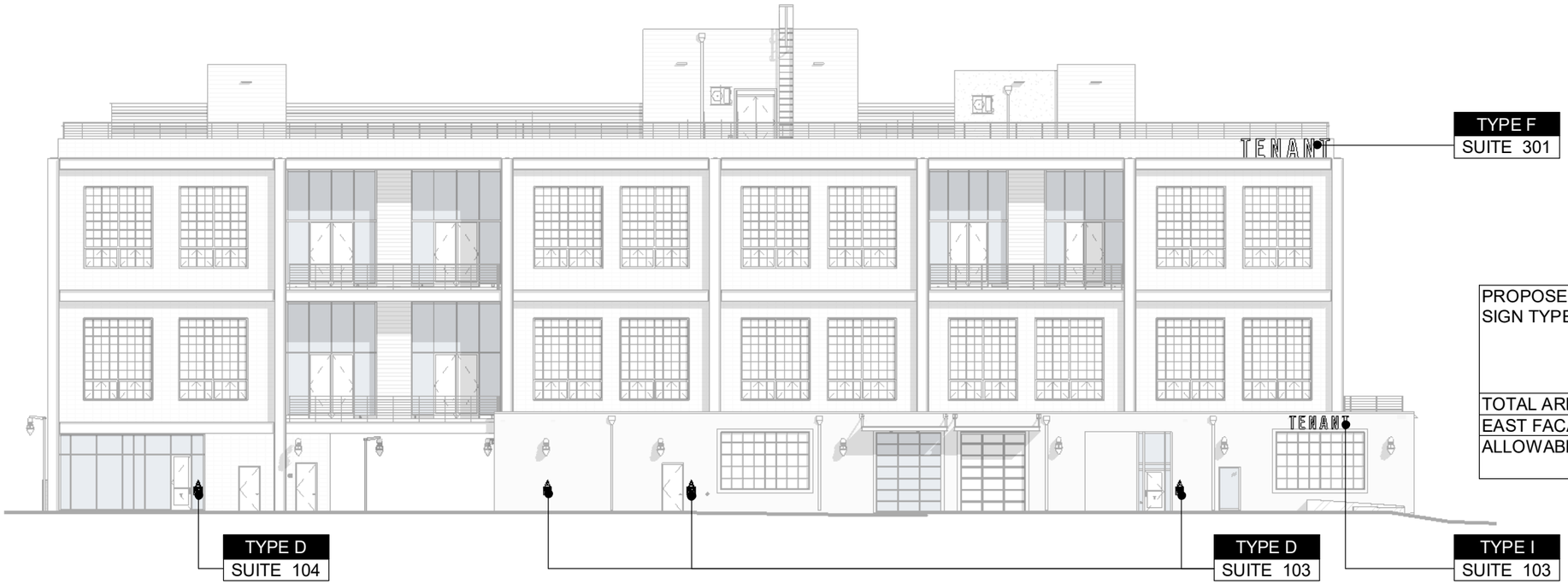
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RM19420 RS Oregon140 OREGON, OR

APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

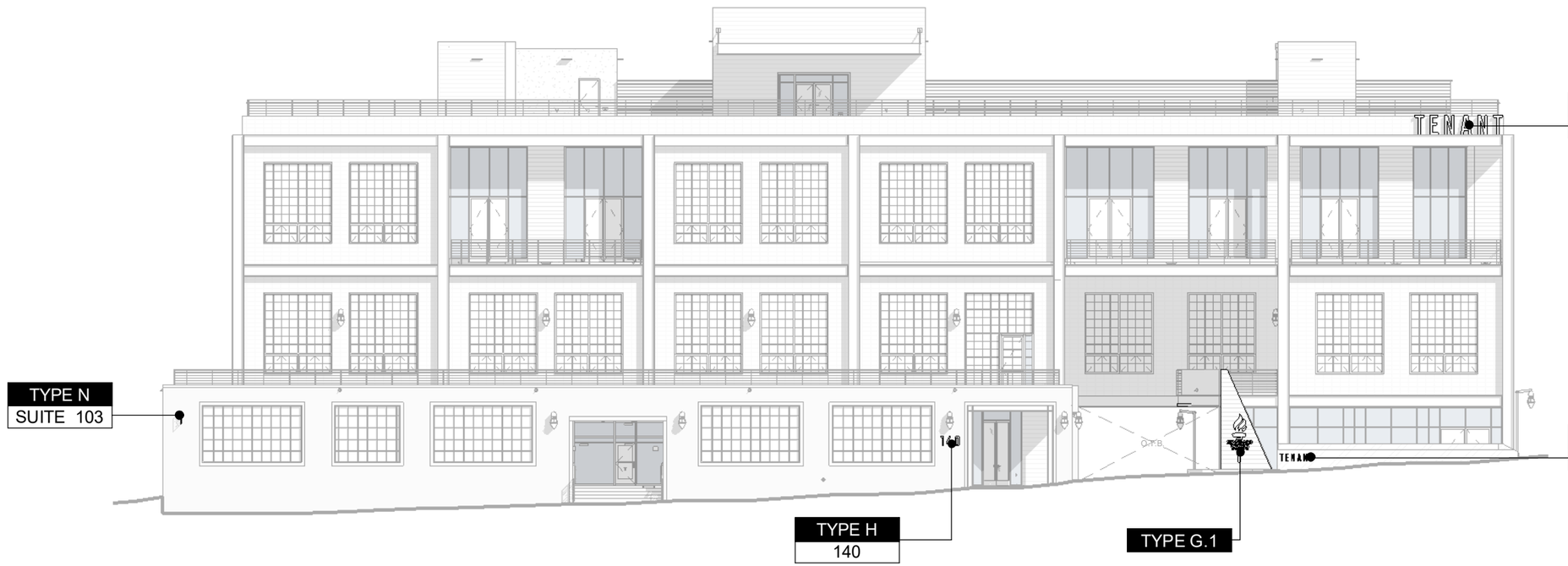
PARCEL D - BUILDING ELEVATION 019



PROPOSED SIGN TYPES	TYPE D (4)	(4 x 0.875) = 3.5 SQ FT
	TYPE F	10 SQ FT
	TYPE I	18.33 SQ FT
TOTAL AREA		31.83 SQ FT
EAST FACADE		11,688 SQ FT
ALLOWABLE		5% = (11,688 x 0.05) = 584 SQ FT 584 SQ FT > 31.83 SQ FT

EAST ELEVATION

140 OREGON



PROPOSED SIGN TYPES	TYPE F	38.25 SQ FT
	TYPE G.1	30 SQ FT
	TYPE G.3	5.6 SQ FT
	TYPE H	4.5 SQ FT
	TYPE N	2.33 SQ FT
TOTAL AREA		80.68 SQ FT
WEST FACADE		11,878 SQ FT
ALLOWABLE		5% = (11,878 x 0.05) = 594 SQ FT 594 SQ FT > 80.68 SQ FT

WEST ELEVATION

140 OREGON

BALIAN

ARCHITECTS

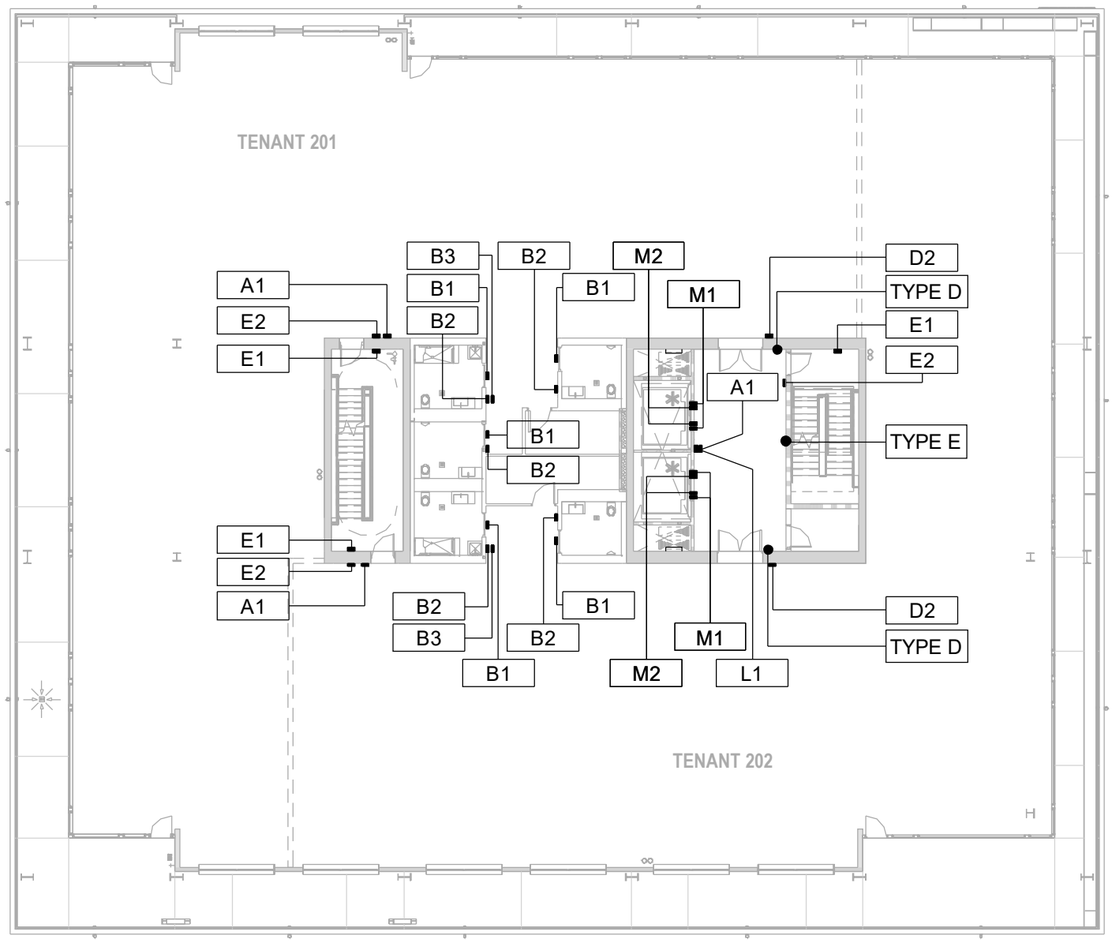
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APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

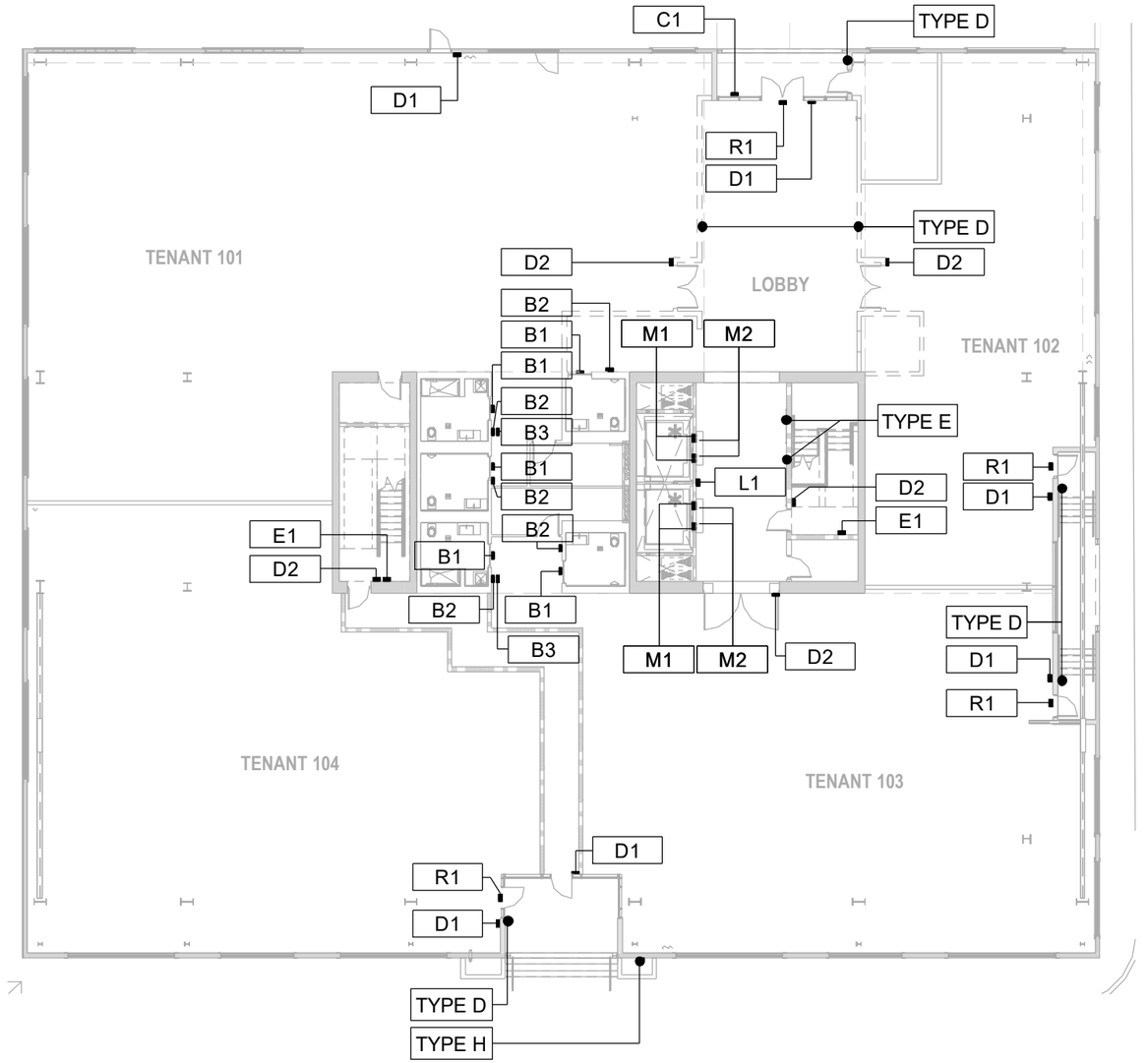
PARCEL D - BUILDING ELEVATION 020

STANDARD WORKS



LEVEL 2 - FLOOR PLAN

1475 E EL SEGUNDO



LEVEL 1 - FLOOR PLAN

1475 E EL SEGUNDO

BALIAN ARCHITECTS

STANDARD WORKS - MASTER SIGN PROGRAM

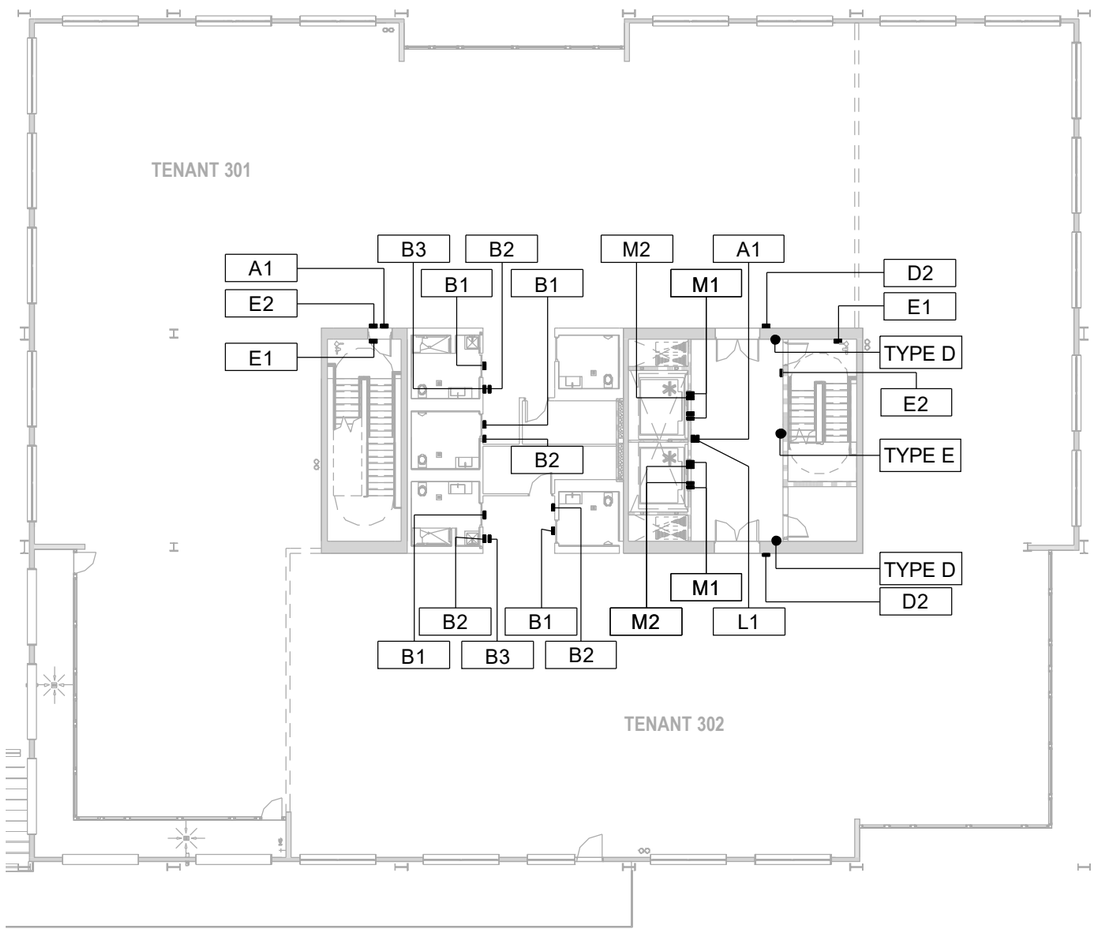
PARCEL A - LEVEL 1 AND LEVEL 2 FLOOR PLAN

021

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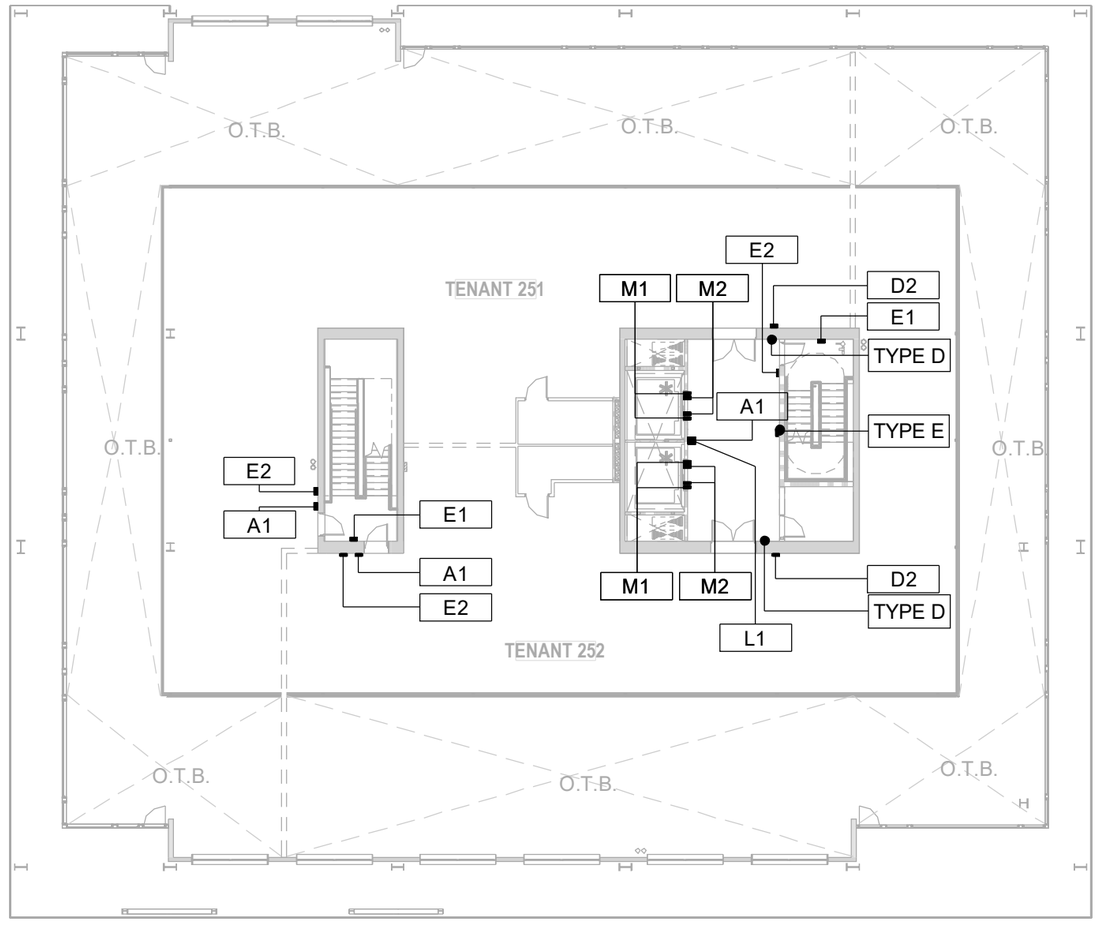
BIM 360://1475 E El Segundo/Bw01-1475 E EL SEGUNDO - CLOUD.rvt

APRIL 19, 2021



LEVEL 3 - FLOOR PLAN

1475 E EL SEGUNDO



LEVEL 2 MEZZANINE - FLOOR PLAN

1475 E EL SEGUNDO

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BIM360:1475 E El Segundo\Rvt\1475 E EL SEGUNDO - CLOUD.rvt

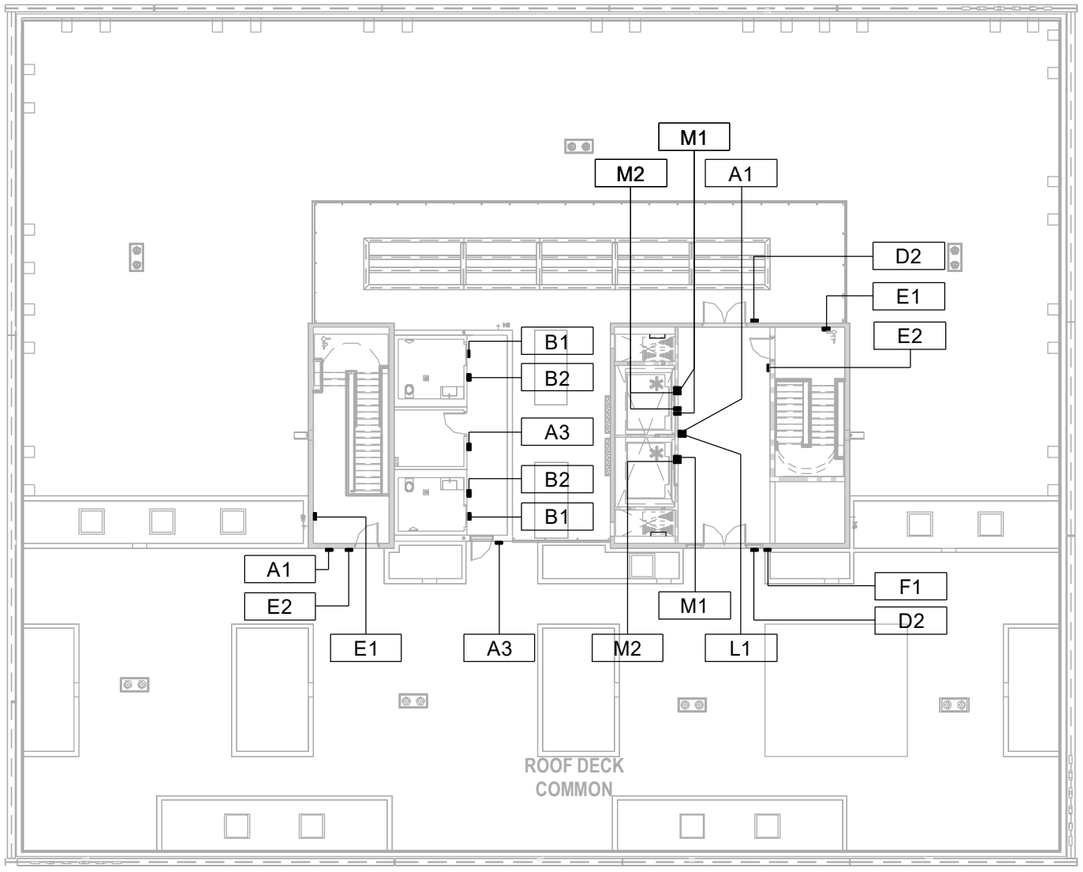
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL A - LEVEL 2 MEZZANINE AND LEVEL 3 FLOOR PLAN

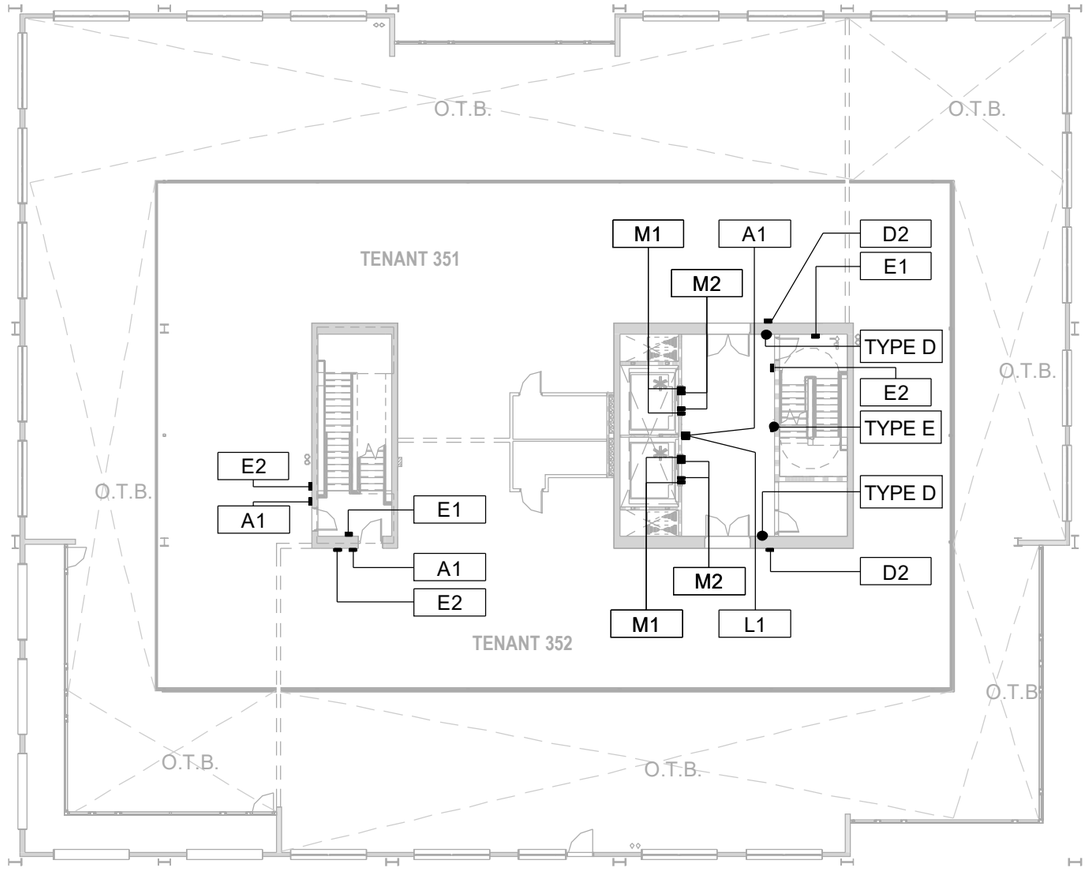
022

STANDARD WORKS



ROOF-FLOOR PLAN

1475 E EL SEGUNDO



LEVEL 3 MEZZANINE-FLOOR PLAN

1475 E EL SEGUNDO

BALIAN ARCHITECTS

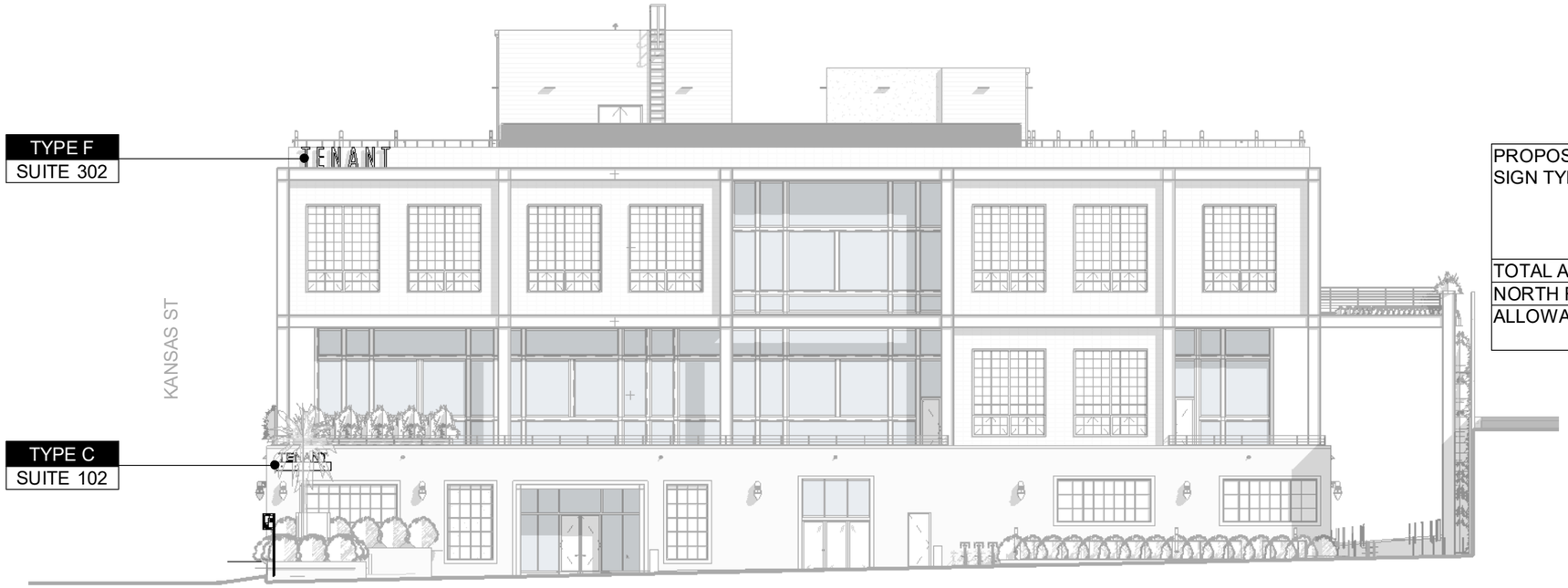
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APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL A - LEVEL 3 MEZZANINE AND ROOF FLOOR PLAN 023



PROPOSED SIGN TYPES	TYPE C	10 SQ FT
	TYPE F	38.25 SQ FT
TOTAL AREA		48.25 SQ FT
NORTH FACADE		9,280 SQ FT
ALLOWABLE		5% = (9,280 x 0.05) = 464 SQ FT 464 SQ FT > 48.25 SQ FT

NORTH ELEVATION

1475 E EL SEGUNDO



PROPOSED SIGN TYPES	TYPE C	10 SQ FT
	TYPE F	38.25 SQ FT
	TYPE H	6 SQ FT
TOTAL AREA		54.25 SQ FT
SOUTH FACADE		9,425 SQ FT
ALLOWABLE		5% = (9,425 x 0.05) = 471.25 SQ FT 471.25 SQ FT > 54.25 SQ FT

SOUTH ELEVATION

1475 E EL SEGUNDO

BALIAN

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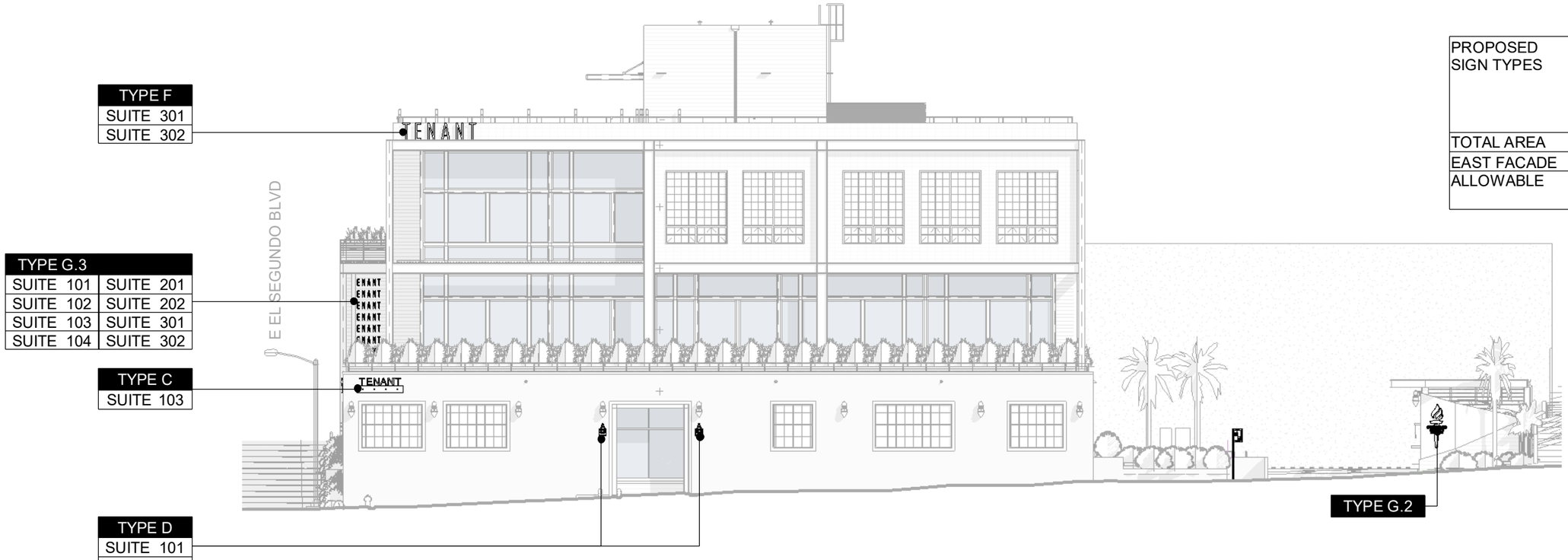
APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL A - BUILDING ELEVATION 024

STANDARD WORKS

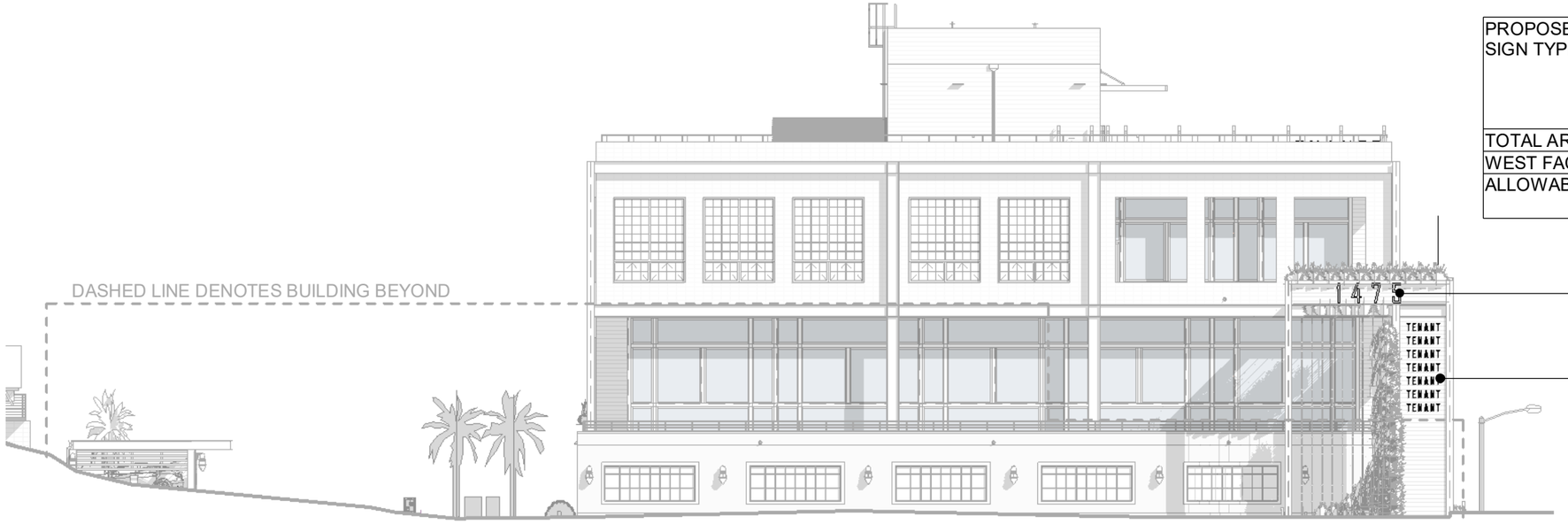
PROPOSED SIGN TYPES	TYPE C	10 SQ FT
	TYPE D (2) (2 x 0.875)	= 1.75 SQ FT
	TYPE F	38.25 SQ FT
	TYPE G.3 (8) (8 x 5.6)	= 44.8 SQ FT
	TYPE G.2	30 SQ FT
TOTAL AREA		124.8 SQ FT
EAST FACADE		7,967 SQ FT
ALLOWABLE	5% = (7,967 x 0.05) = 398.35 SQ FT	
	398.35 SQ FT > 124.8 SQ FT	



EAST ELEVATION

1475 E EL SEGUNDO

PROPOSED SIGN TYPES	TYPE F	30 SQ FT
	TYPE G (8) (8 x 5.6)	= 44.8 SQ FT
TOTAL AREA		74.8 SQ FT
WEST FACADE		6,785 SQ FT
ALLOWABLE	5% = (6,785 x 0.05) = 339.25 SQ FT	
	339.25 SQ FT > 74.8 SQ FT	



WEST ELEVATION

1475 E EL SEGUNDO

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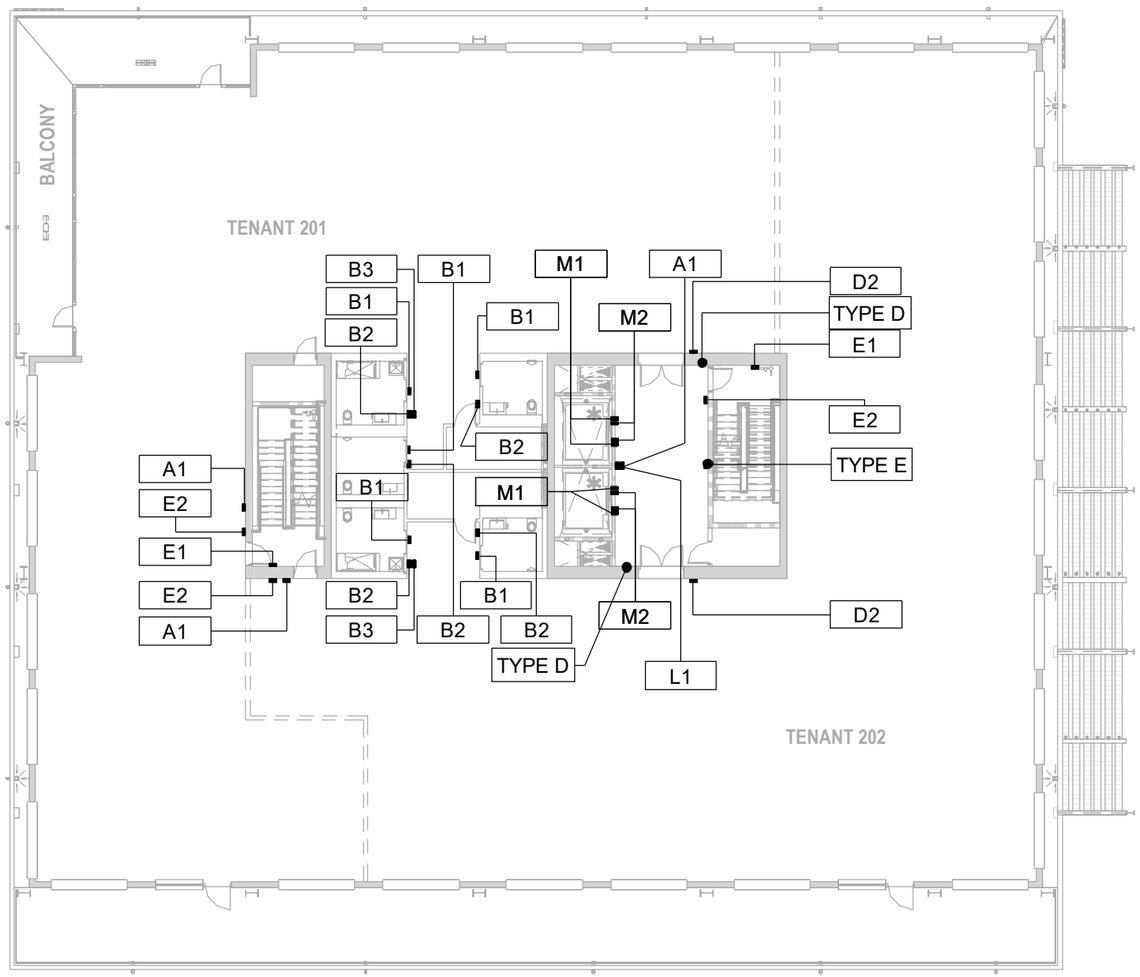
STANDARD WORKS - MASTER SIGN PROGRAM

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APRIL 19, 2021

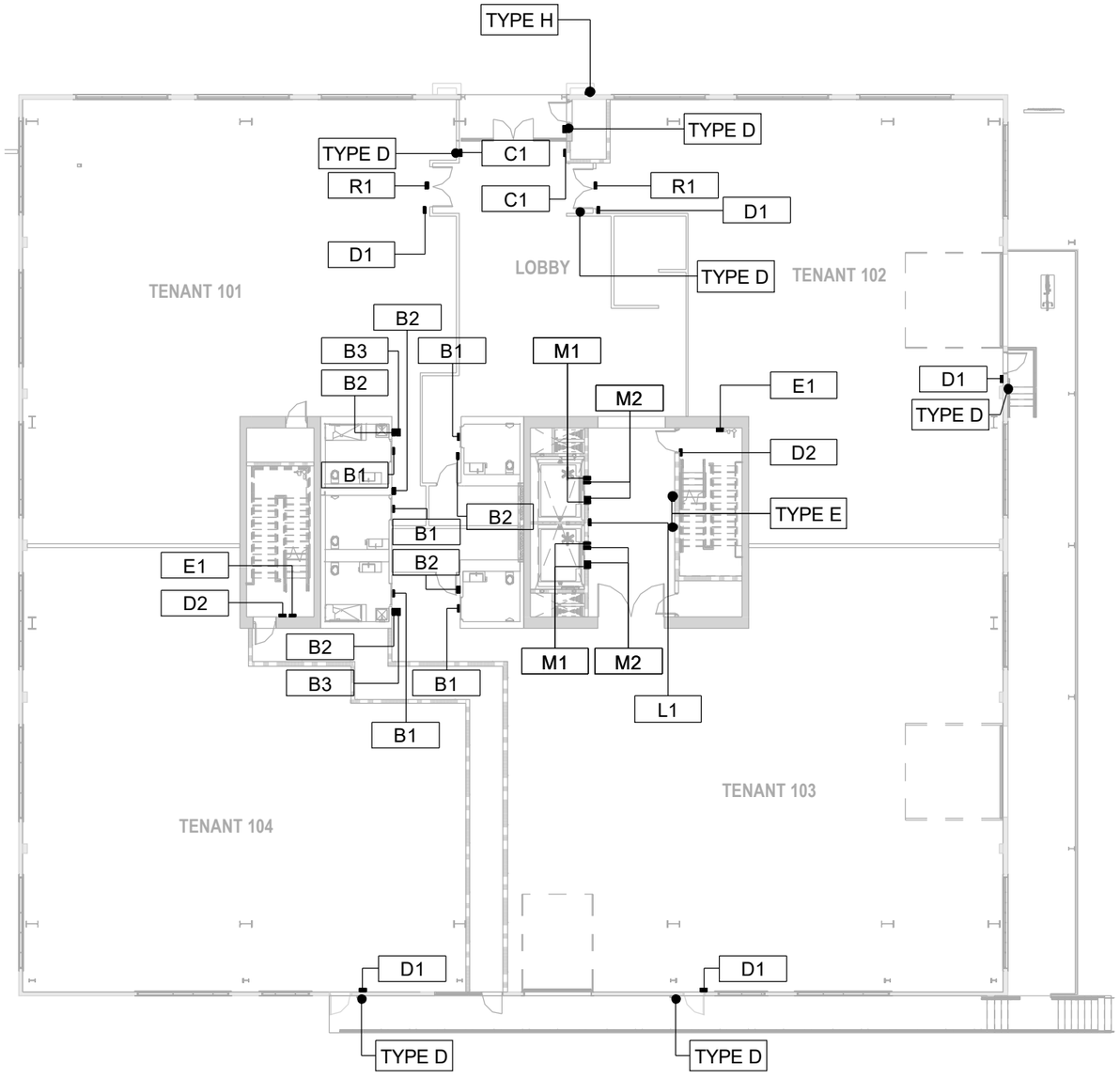
PARCEL A - BUILDING ELEVATION 025

STANDARD WORKS



LEVEL 2 - FLOOR PLAN

1330 E FRANKLIN



LEVEL 1 - FLOOR PLAN

1330 E FRANKLIN

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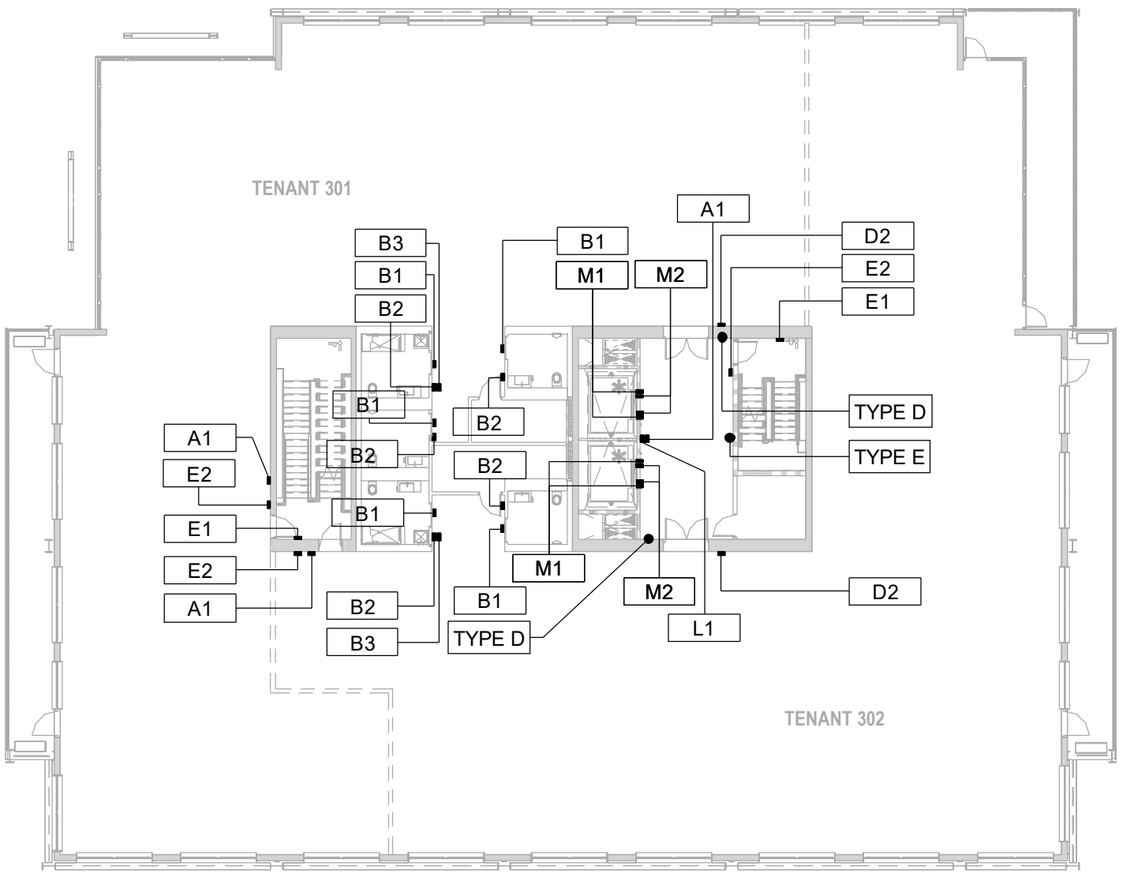
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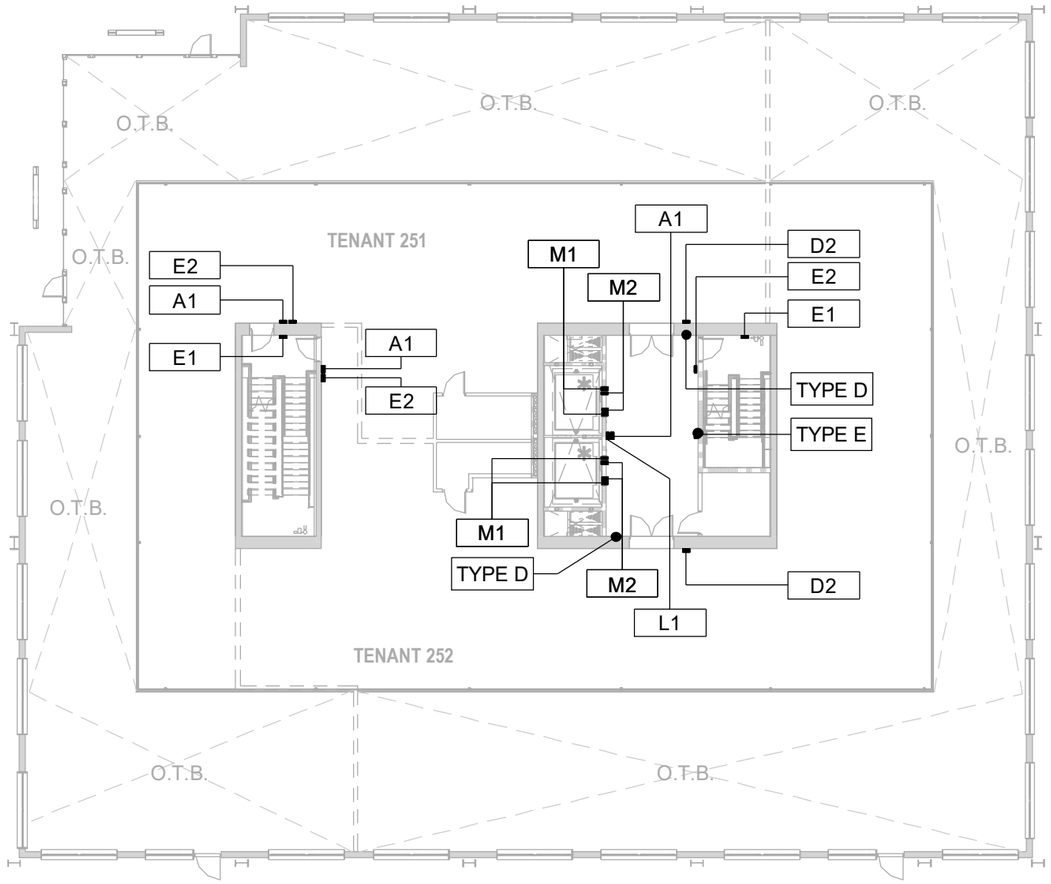
PARCEL E - LEVEL 1 AND LEVEL 2 FLOOR PLAN 026

STANDARD WORKS



LEVEL 3 - FLOOR PLAN

1330 E FRANKLIN



LEVEL 2 MEZZANINE - FLOOR PLAN

1330 E FRANKLIN

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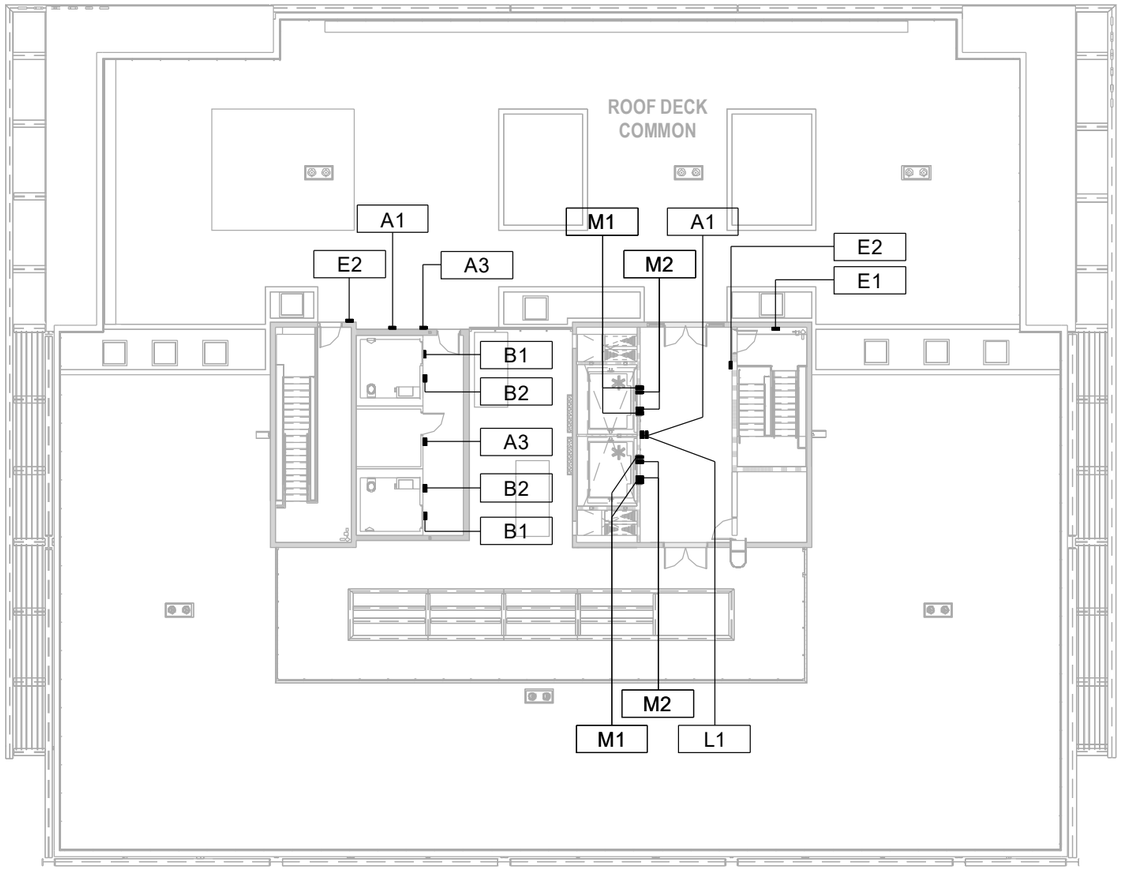
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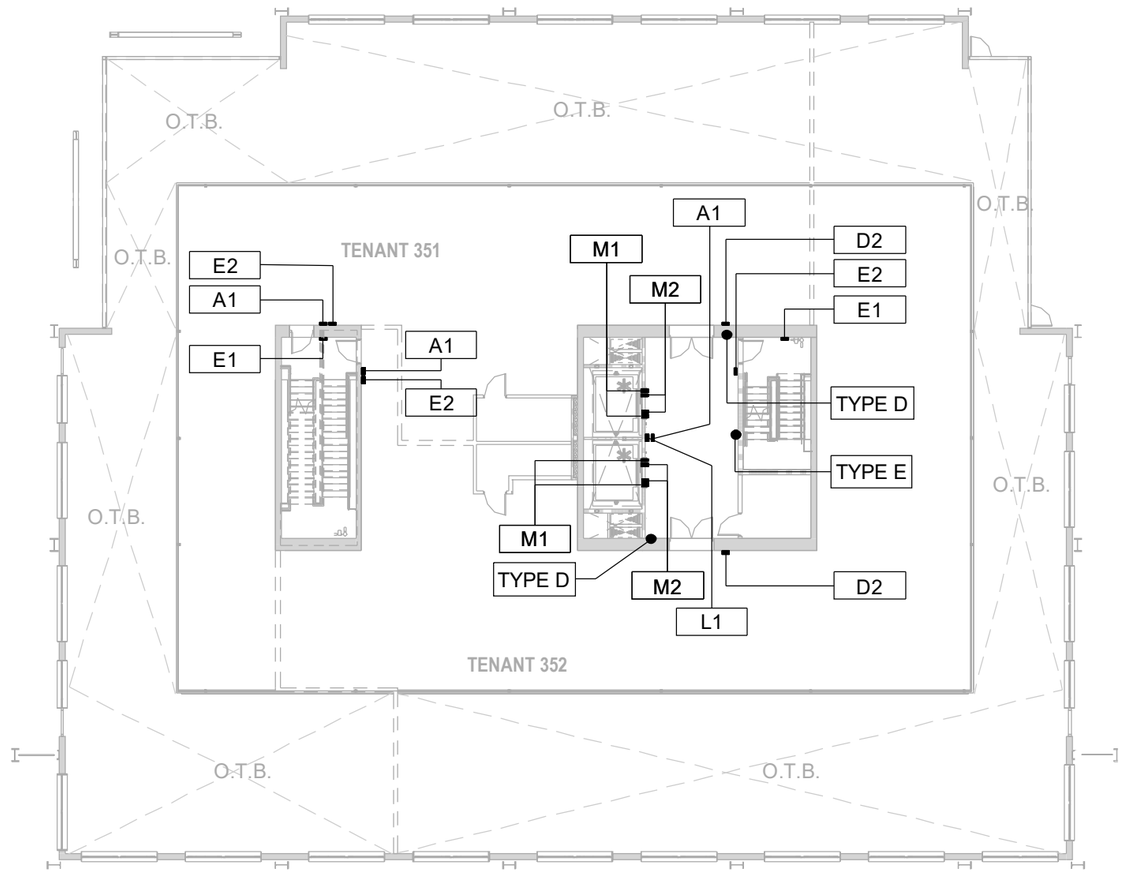
PARCEL E - LEVEL 2 MEZZANINE AND LEVEL 3 FLOOR PLAN 027

STANDARD WORKS



ROOF-FLOOR PLAN

1330 E FRANKLIN



LEVEL 3 MEZZANINE-FLOOR PLAN

1330 E FRANKLIN

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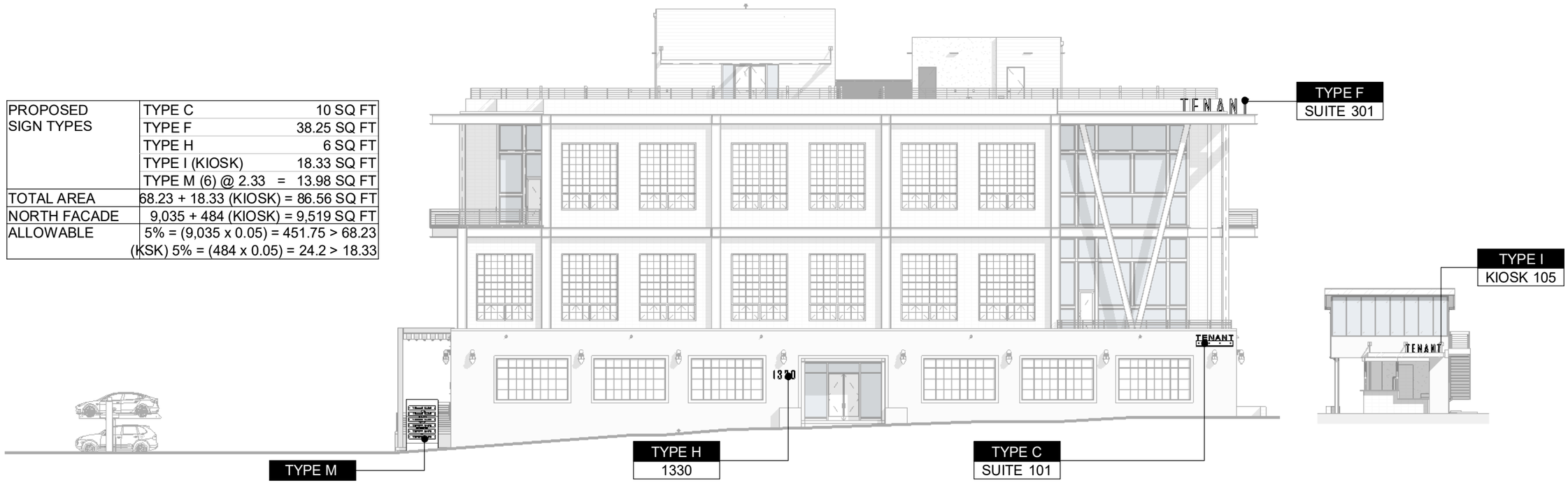
APRIL 19, 2021

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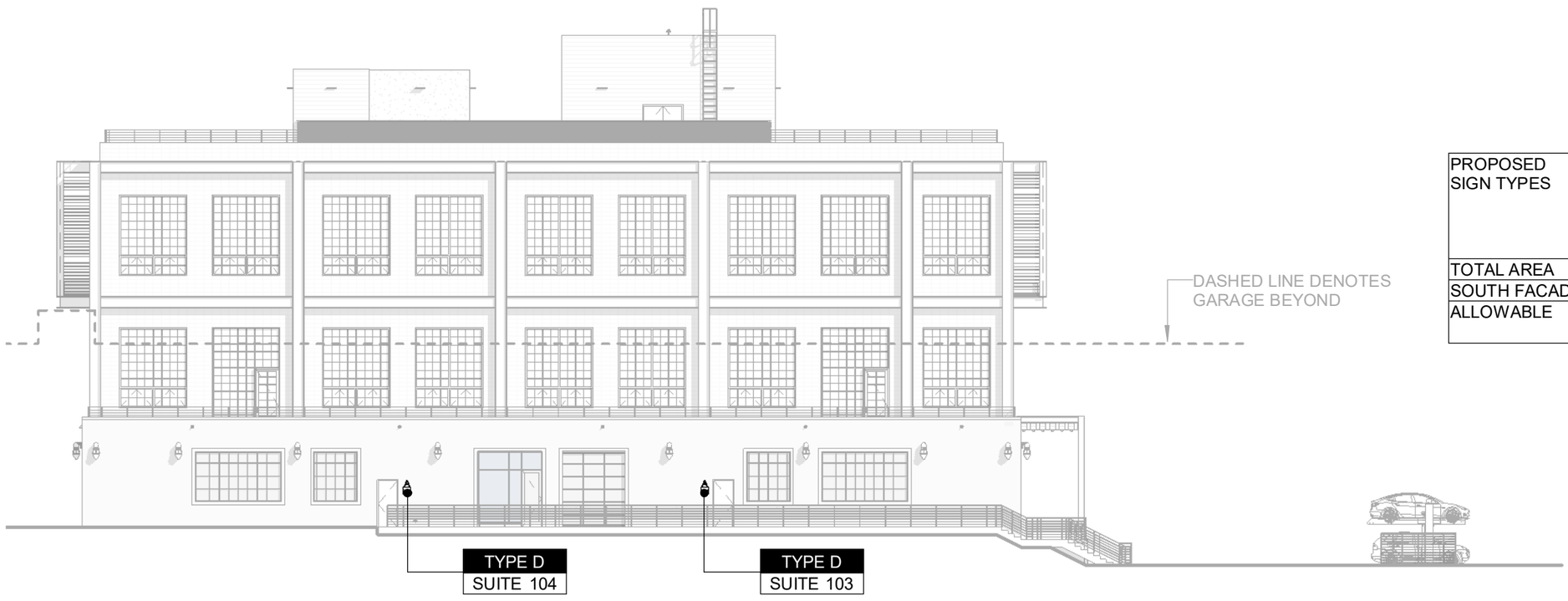
PARCEL E-LEVEL 3 MEZZANINE AND ROOF FLOOR PLAN

028

PROPOSED SIGN TYPES	TYPE C	10 SQ FT
	TYPE F	38.25 SQ FT
	TYPE H	6 SQ FT
	TYPE I (KIOSK)	18.33 SQ FT
	TYPE M (6) @ 2.33 =	13.98 SQ FT
TOTAL AREA	68.23 + 18.33 (KIOSK) = 86.56 SQ FT	
NORTH FACADE	9,035 + 484 (KIOSK) = 9,519 SQ FT	
ALLOWABLE	5% = (9,035 x 0.05) = 451.75 > 68.23	
	(KSK) 5% = (484 x 0.05) = 24.2 > 18.33	



KIOSK ELEVATION
NORTH ELEVATION
1330 E FRANKLIN



PROPOSED SIGN TYPES	TYPE D (2) (2 x 0.875) = 1.75 SQ FT
TOTAL AREA	1.75 SQ FT
SOUTH FACADE	8,870 SQ FT
ALLOWABLE	5% = (8,870 x 0.05) = 443.5 SQ FT
	443.5 SQ FT > 1.75 SQ FT

SOUTH ELEVATION
1330 E FRANKLIN

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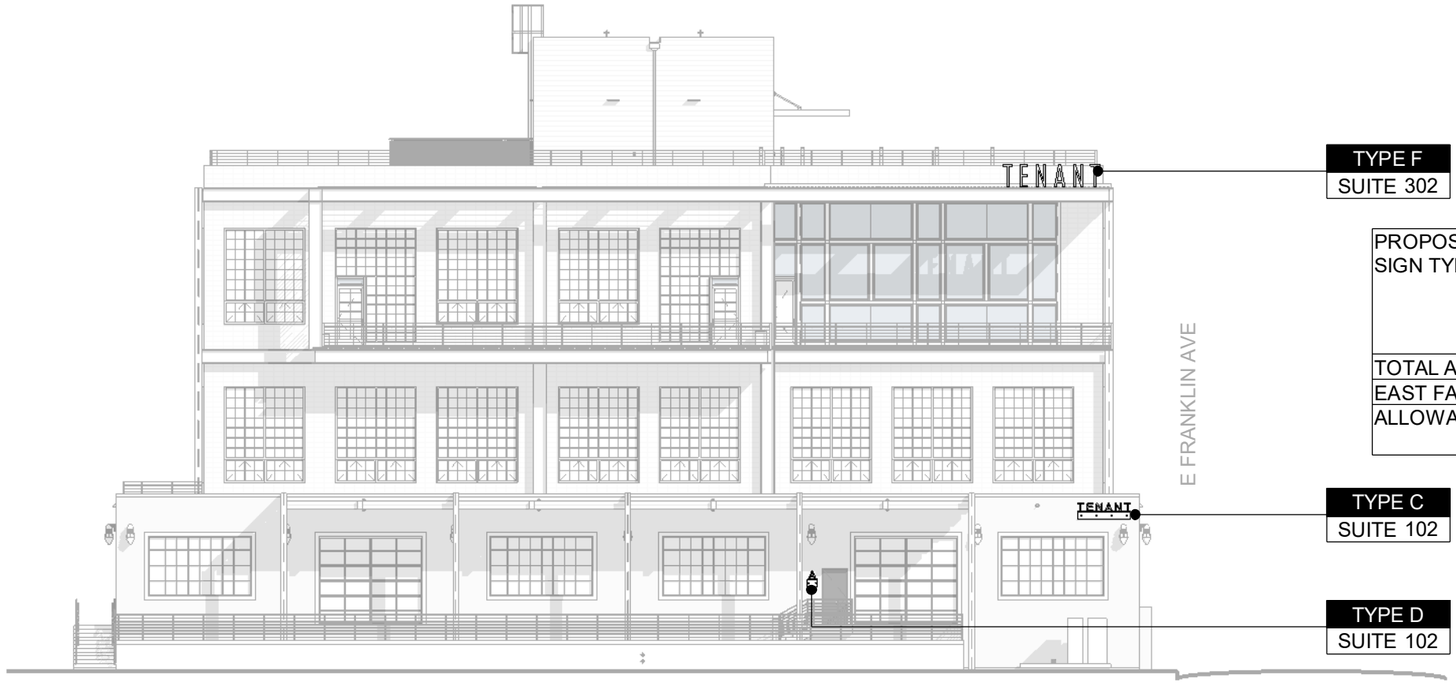
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APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

PARCEL E - BUILDING ELEVATION 029

STANDARD WORKS



TYPE F
SUITE 302

TYPE C
SUITE 102

TYPE D
SUITE 102

PROPOSED SIGN TYPES	TYPE C	10 SQ FT
	TYPE D	0.875 SQ FT
	TYPE F	38.25 SQ FT
TOTAL AREA		43.125 SQ FT
EAST FACADE		8,269 SQ FT
ALLOWABLE		5% = (8,269 x 0.05) = 413.45 SQ FT 413.45 SQ FT > 43.125 SQ FT

EAST ELEVATION

1330 E FRANKLIN



PROPOSED SIGN TYPES	
TOTAL AREA	N/A
WEST FACADE	7,268 SQ FT
ALLOWABLE	

WEST ELEVATION

1330 E FRANKLIN

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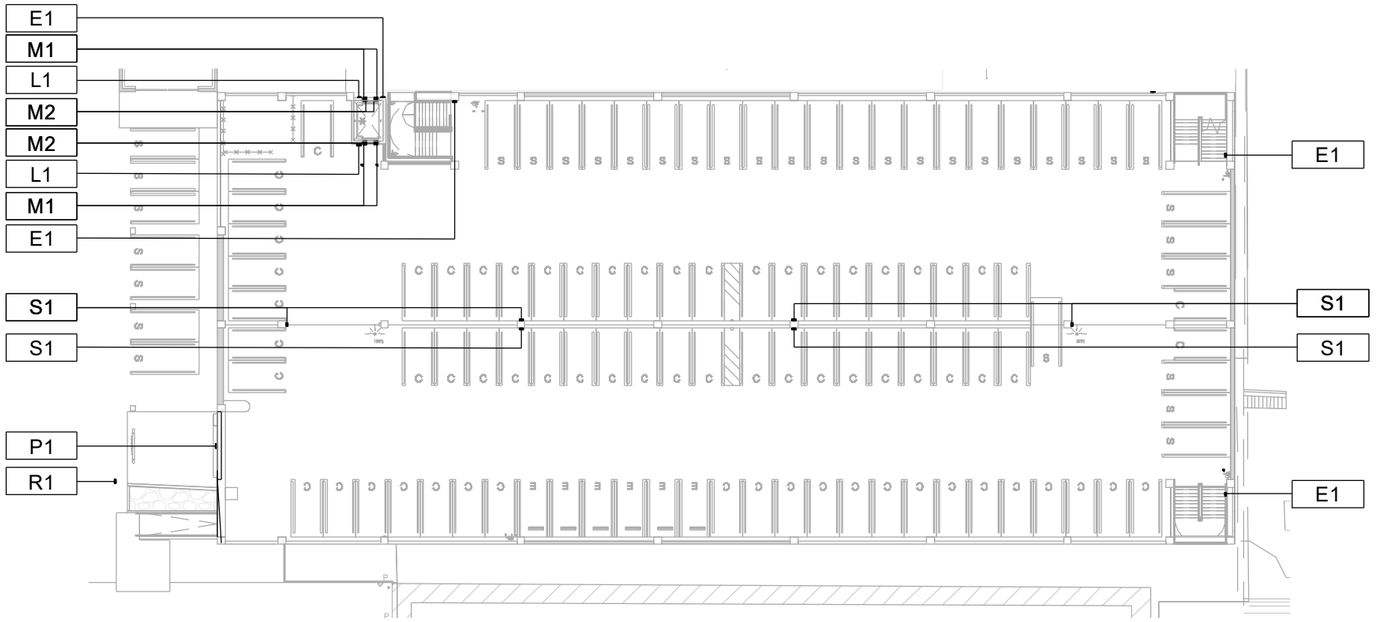
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APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

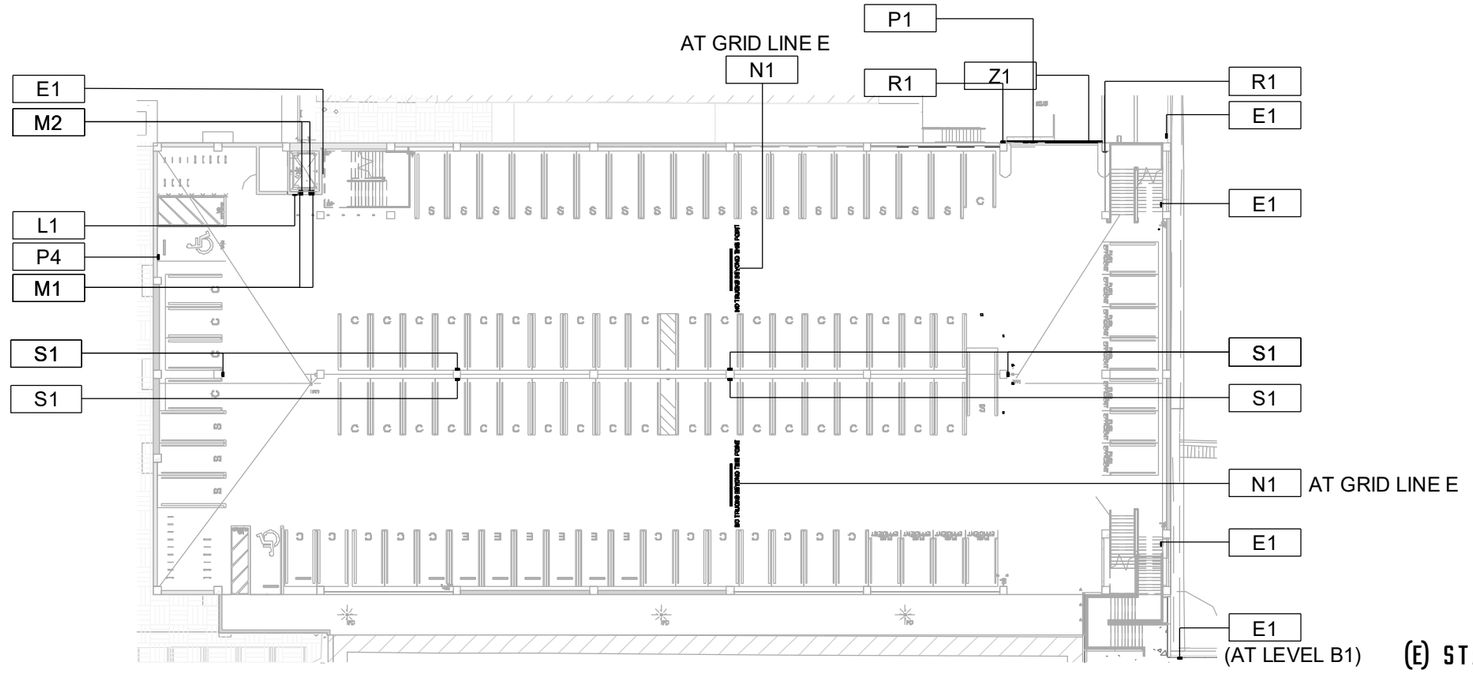
PARCEL E - BUILDING ELEVATION 030

STANDARD WORKS



LEVEL 2 - FLOOR PLAN

(E) STANDARD WORKS PARKING GARAGE



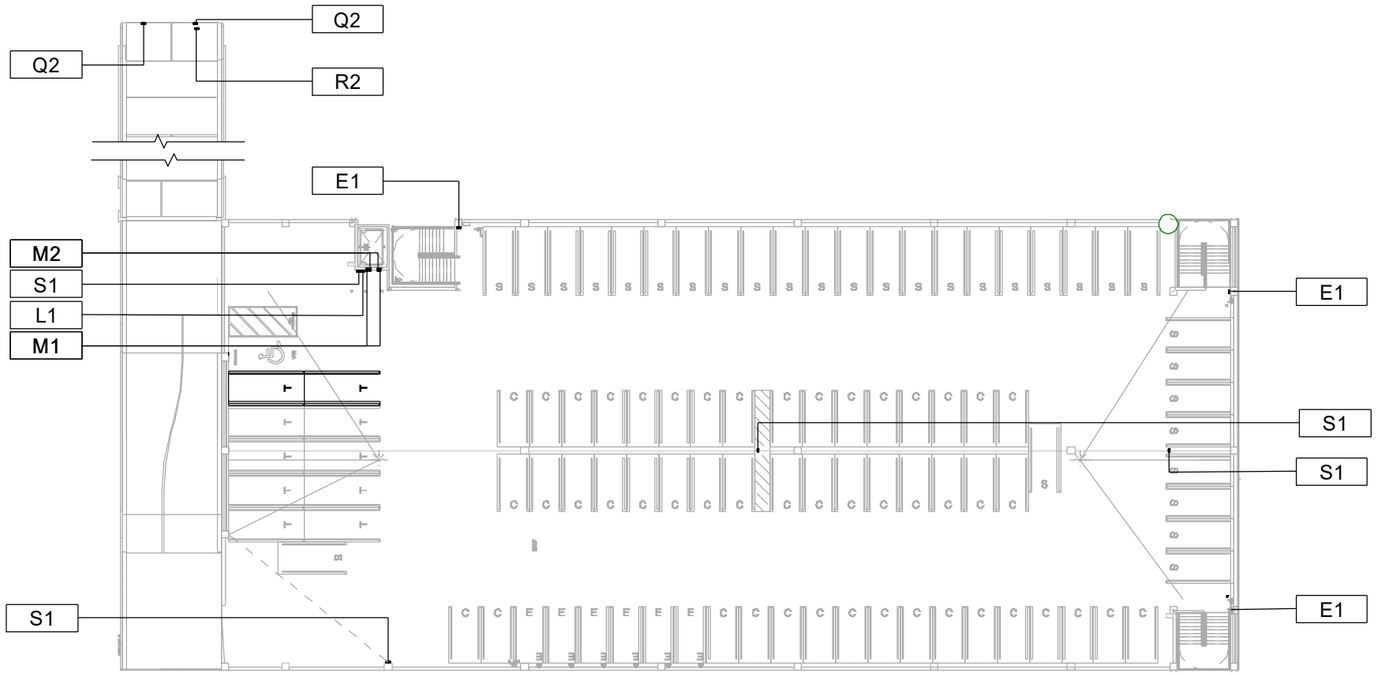
LEVEL 1 - FLOOR PLAN

(E) STANDARD WORKS PARKING GARAGE

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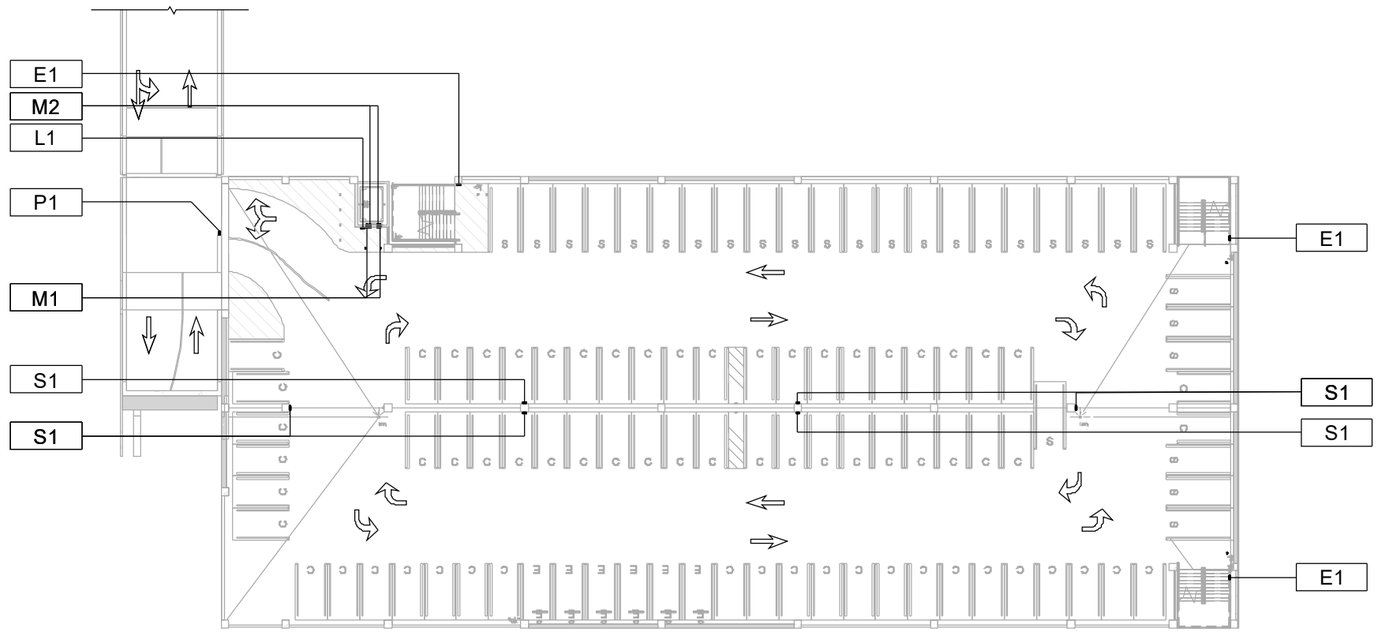
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LEVEL 4 - FLOOR PLAN

(E) STANDARD WORKS PARKING GARAGE



LEVEL 3 - FLOOR PLAN

(E) STANDARD WORKS PARKING GARAGE

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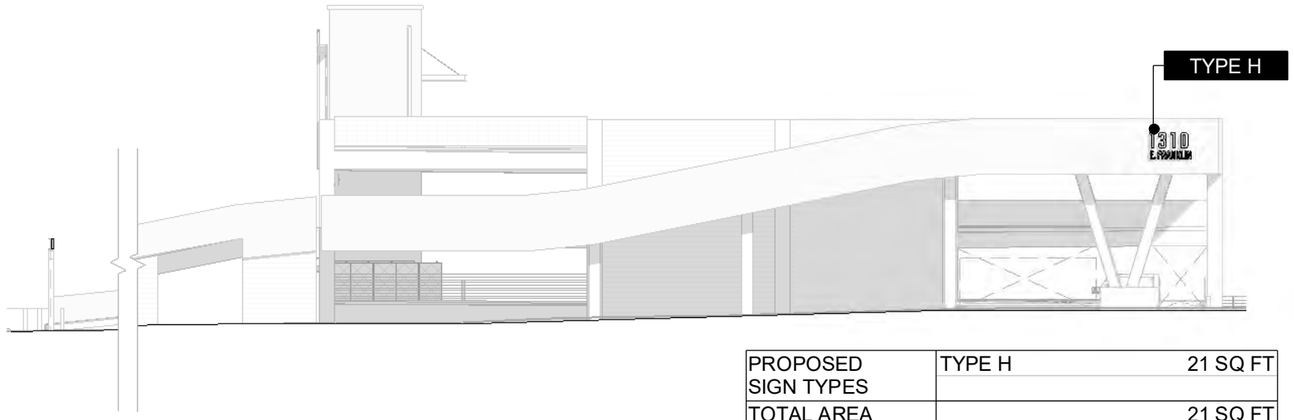
BIM 360://Standard Works Parking Garage/STANDARD WORKS PARKING GARAGE - CLOUD.rvt

APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

GARAGE - LEVEL 3 AND LEVEL 4 FLOOR PLAN 032

STANDARD WORKS



PROPOSED SIGN TYPES	TYPE H	21 SQ FT
TOTAL AREA		21 SQ FT
WEST FACADE		3,470 SQ FT
ALLOWABLE		5% = (3,470 x 0.05) = 173.5 SQ FT 173.5 SQ FT > 21 SQ FT

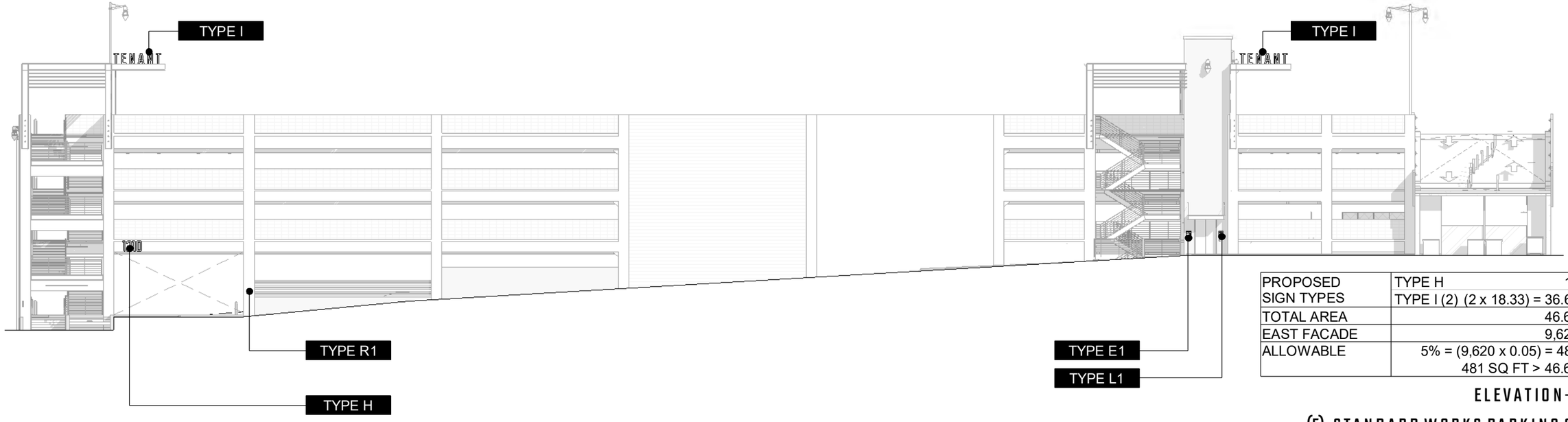
ELEVATION-WEST

(E) STANDARD WORKS PARKING GARAGE



ELEVATION-EAST

(E) STANDARD WORKS PARKING GARAGE ART



PROPOSED SIGN TYPES	TYPE H	10 SQ FT
	TYPE I (2) (2 x 18.33) = 36.67 SQ FT	
TOTAL AREA		46.67 SQ FT
EAST FACADE		9,620 SQ FT
ALLOWABLE		5% = (9,620 x 0.05) = 481 SQ FT 481 SQ FT > 46.67 SQ FT

ELEVATION-NORTH

(E) STANDARD WORKS PARKING GARAGE

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RM:\NO Bin\Work\1810.04 Parking Garage\STANDARD WORKS PARKING GARAGE - CCSD.vwx

APRIL 19, 2021

STANDARD WORKS - MASTER SIGN PROGRAM

GARAGE-BUILDING ELEVATION 033

PLANNING COMMISSION RESOLUTION NO. 2914

Exhibit D

OFFSITE PARKING COVENANT BETWEEN 1475 E. EL SEGUNDO (APN: 4139-002-025) & 1310 E. FRANKLIN AVENUE (APN: 4139-002-056) FOR STANDARD WORKS PROJECT

City of El Segundo – Development Services Department

Recorded a 350 Main Street, El Segundo, CA 90245-3813

(Name)

(Address)

Date of Recording: SPACE ABOVE THIS LINE FOR RECORDER'S USE

COVENANT AND AGREEMENT
REGARDING OFF-SITE PARKING SPACE

The undersigned covenantor hereby certify that we are the owners of the hereinafter legally described real property located in the City of El Segundo and State of California:
Address: 1310 E. Franklin Avenue Legal Description: 4139-002-056
as recorded in Book 4139, Page 002, Records of Los Angeles County.

Covenantor hereby covenant with the following undersigned covenantee, and agree to provide 123 off-site parking space(s) on the covenantor's abovedescribed property for the benefit of and use by the covenantee's building located at 1475 E El Segundo Blvd and legally described 4139-002-025 as recorded in Book 4139, Page 002, Records of Los Angeles County.

This covenant and agreement shall run with both the covenantor(s) and covenantee(s) above described land, shall be binding upon the convenantor, the covenantor's future owners, encumbrances, and their successors, heirs, or assignees for the benefit of the covenantee and the covenantee's future owners, encumbrances, and their successors, heirs, or assignees and shall continue in effect until released in writing by the City of El Segundo's Director of the Development Services Department.

Signature of Covenantor and Parking Site Owner Date Signature of Covenantee Date

SIGNATURES MUST BE NOTARIZED

(Notary acknowledgement must be attached)

FOR DEPARTMENT USE ONLY

MUST BE APPROVED BY the Planning Commission prior to recording

Covenant for City Department
To be completed for City owned property only.

APPROVED BY: Date:

RESOLUTION NO. 2915

A RESOLUTION OF THE EL SEGUNDO PLANNING COMMISSION RECOMMENDING CITY COUNCIL APPROVAL OF COMMUNITY BENEFIT PLAN (CBP) NO. 19-03, SITE PLAN REVIEW (SPR) NO. 21-04, MASTER SIGN PROGRAM (MSP) 21-01, ENVIRONMENTAL ASSESSMENT EA-1282, AND OFF-SITE PARKING COVENANT FOR THE NORTH SITE OF THE STANDARD WORKS PROJECT AT 1320-1330 E. FRANKLIN AVENUE.

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: Recitals.

A. On August 31, 2020, Mark Telesz, of Smoky Hollow Industries, LLC filed an application for Community Benefit Plan (CBP) No. 19-03, Site Plan Review (SPR) No. 21-04, and Environmental Assessment (EA) No. 1282 for a Tier II Community Benefits Plan and Site Plan Review of the proposed South Site of the Standard Works project at 1320-1330 E. Franklin Avenue.

B. On January 6, 2021, Mr. Telesz applied for an amendment to the Smoky Hollow Specific Plan which, if approved, would allow for a maximum building height of 60 feet within a designated subarea of the Smoky Hollow Specific Plan ("SHSP"), subject to the approval of a Tier II Community Benefits Plan. On the same date, a Master Sign Program was submitted for review on January 6, 2021.

C. Approval of the proposed Project is a subsequent discretionary action in furtherance of the SHSP; and

D. The application was reviewed by the City's Development Services Department for, in part, consistency with the General Plan, and conformity with the El Segundo Municipal Code ("ESMC") and the SHSP; and

E. On January 27, 2022, the Planning Commission continued the duly noticed public hearing to February 10, 2022.

F. On February 10, 2022, the Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the application including, without limitation, information set forth in the staff report and information provided by the applicant and the public.

G. At the February 10, 2022 meeting, the Commission recommended that the City Council approve the Smoky Hollow Specific Plan Amendment requested by the applicant.

H. The Commission considered all of the evidence presented at the February 10, 2022 public hearing, together with all other information in the administrative record. This Resolution, and its findings, are made based upon the totality of the evidence

in the administrative record before the Commission at its February 10, 2022 public hearing.

SECTION 2: *Factual Findings and Conclusions*. The Commission finds as follows:

A. The project site is a 4.34 acre site developed with 3 separate buildings and a newly constructed 398 space parking structure.

B. The existing building located at 140 Oregon Avenue (the northwest corner of the subject site) was approved (EA-1233) for a two-story addition atop the existing one-story structure, which exceeded height standards for the Smoky Hollow Specific Plan, with a Community Benefit Plan (18-01).

C. The proposed project would develop a 1.07-acre portion of a larger 4.4 acre property located at 1320-1330 E. Franklin Avenue. The existing 19,493 square-foot, one-story brick building on the site would be preserved with two new levels totaling 44,802 square feet added above it. This would result in a total floor area of 64,295 square feet (FAR=0.94) for R&D and office use. The new three-story building would have a maximum height of 59 feet and 6 inches from the average grade to the rooftop of the building.

D. The project site is located within a subarea of the Smoky Hollow Specific Plan that would be created upon the City Council's approval of the aforementioned Specific Plan Amendment. Said Amendment would allow for a maximum building height of 60 feet on the project site, subject to the approval of a Tier II Community Benefits Plan. The proposed building with a total of 64,295 square feet will be compliant with the Tier II floor area ratio, will be consistent with the Smoky Hollow Specific Plan design guidelines, open space and landscape, and parking requirements, and signage will be compliant with a Master Sign Program. The steel and glass structure will retain the existing red brick building on the first floor and proposes to construct a three-story structure. The project will also feature a passive public park and a two-story pavilion building that will house a public coffee shop. The application includes 11,847 square feet of landscaping and open space, divided between the ground level park and on the rooftop. Parking for the site is accessible in the newly constructed parking garage located at 1310 E. Franklin Avenue as a portion of the North site and satisfies the parking requirement of 163 spaces. 38 parking spaces will be provided on grade, with an additional 130 spaces within the parking garage. Further, the application includes a Master Sign Program which details signage provided for the entire Standard Works Campus, which entails the North and South site, as well as the under-construction building at 140 Oregon Street. The program features 15 types of identification sign, including tenant identification, wayfinding, parking, and monument signs to be places across the campus.

SECTION 3: *Environmental Assessment.* An Initial Study/Mitigated Negative (IS/MND) Declaration has been prepared to analyze the potential environmental effects of the proposed project. The Planning Commission has reviewed and considered the IS/MND and, by way of a separate resolution (Resolution No. 2912), has found that it complies with the California Environmental Quality Act. Accordingly, the Commission has recommended that the City Council approve the IS/MND. The findings and conclusions of Resolution No. 2912 are incorporated herein as though fully set forth.

SECTION 4: *Community Benefits Plan Findings.* Based upon the findings of fact set forth above, and on the evidence in the administrative record as a whole, the Planning Commission finds as follows:

A. The proposed additional building height, intensity, or deviation from the development standards would not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity.

The proposed building height for the project is compatible with the neighborhood in that two-story buildings, tall petroleum storage drums, and 200-foot-tall distillation columns from the Chevron oil refinery are located in the immediate vicinity. The additional 25-foot building height from base height standard is not anticipated to be detrimental, as the project is consistent with development directly adjacent (for example, the recently approved development at 140 Oregon was approved at 55 feet) and is consistent with the vision for Smoky Hollow to allow for creative and exemplary office space.

The project is located in a developed area which contains all utilities and public infrastructure. Additionally, before the City issues building permits for the project, the applicant will submit detailed plans to the City for review for compliance with all applicable Building and Fire safety codes. Therefore, the project overall is not anticipated to be detrimental to the public health, safety, or welfare.

B. The proposed community benefit provides exemplary project and/or streetscape design.

The Specific Plan contains 32 specific design guidelines in five categories including, building character, open space, landscaping, connectivity, and signage and art. Compliance with at least 17 of the guidelines is required to consider a project exemplary in building and/or streetscape design. The proposed project incorporates 28 of the 32 guidelines as indicated and detailed on project plans reviewed by Planning Commission on February 10, 2022, incorporated herein by this reference.

C. The proposed community benefits directly implements objectives of the Specific Plan.

1. Part of the proposed community benefit consists of compliance with the Smoky Hollow design guidelines. Compliance with the guidelines directly implements the Smoky Hollow Design Objectives in Specific Plan Section 2.4.1 as follows:

    a. The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character.

    b. The projects incorporate sidewalk-oriented entries for both projects as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. In addition, the project will make use of drought tolerant plant species in the landscaped areas, which will reduce the use of water for landscaping.

    c. The entries are directly accessible from the public sidewalk and serves to activate both Franklin Avenue and E. El Segundo Boulevard Street frontages and therefore create a vibrant atmosphere.

2. The proposed community benefit plan implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly accessible open spaces. The proposed community benefits plan includes public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish.

D. The value of the proposed community benefits bear a relationship to the value generated by the project.

The City retained Kosmont and Associates, Inc. (Kosmont) to prepare a comprehensive financial report of the proposed Tier II Community Benefits Plan for the project. The analysis indicates the value of the community benefits being offered and the financial gain by allowing an additional 10 feet of building height above the Tier II Community Benefit height limit of 50 feet. This height increase is an additional 25 feet in height above base standard, or 35 feet in height with the adoption of the Specific Plan Amendment. In compliance with the Smoky Hollow Specific Plan Tier II Community Benefit Plan requirements, the community benefits provided and incorporated into the project plans reviewed by Planning Commission on February 10, 2022, have been evaluated to quantify the total value of all community benefits. In this instance, the total value of the added 10 feet is shown to be $1.77 million while the total of the community benefits are estimated to be $4.07 million. Therefore, the value of the proposed community benefits bear a relationship to the value generated by the project.

E. The proposed community benefits do not principally benefit the project or the occupants of the project, but rather provide a district or area-wide benefit to the larger Smoky Hollow Plan area.

1. The project incorporates a range of community benefits in compliance with the prescribed Community Benefit categories of the Smoky Hollow Specific Plan. The following list of items benefit the public and not principally the occupants of the project:

    a. Transformative projects - significant investment for an architecturally expressive design that rehabilitates the original 1950s mid-century buildings for both the North and South sites, rather than demolishing. The unique design incorporates architectural elements such as exposed structural steel, large scale balconies and exterior decks, large mid-century like steel windows, and other period materials. The design will build upon the character of the smoky hollow neighborhood and help promote new designs by other developers.
    b. Preservation and rehabilitation - preservation and rehabilitation of the existing brick facades on both the North and South sites.
    c. Streetscape improvements – new landscaping located directly along the frontage of each building on the North and South sites.
    d. Utility improvements - removal of existing overhead utility lines along project frontage on East El Segundo Boulevard and Kansas Street will be removed and placed underground to beautify the streetscape views.
    e. Lighting and wayfinding - period appropriate exterior lighting and directional signage for the project will be provided adjacent to the sidewalks facing Franklin Avenue.

    The Commission finds that the project provides the aforementioned community benefits that do not principally benefit the occupants of the project, but rather, provide an area-wide benefit to the larger Smoky Hollow Plan area.

SECTION 5: *Site Plan Review Findings.* Pursuant to ESMC § 15-30 and based upon the findings of fact set forth above, and on the evidence in the administrative record as a whole, the Commission finds as follows:

A. The proposed development is consistent with the goals, policies, and objectives of the El Segundo General Plan, the Smoky Hollow Specific Plan, and the El Segundo Zoning Code.

As previously indicated, the applicant has simultaneously applied for an amendment to the Smoky Hollow Specific Plan that would create a new subarea within which the maximum building height would be increased to 60 feet (from 50 feet), subject to the approval of a Tier II Community Benefits Plan. By way of a separate resolution (Resolution No. 2913), the Commission has recommended that the City Council approve the requested amendment to the Specific Plan. The project site is located within that proposed subarea.

The proposed Project complies with the Smoky Hollow Specific Plan as amended. The SHSP permits a mix of office, research and development, light industrial, and warehouse uses. Further, the SHSP sets standards to achieve high quality

development, which includes design guidelines and development standards with criteria for site design, architecture, orientation and massing, parking and loading, landscaping, lighting, and connectivity. The proposed development has been evaluated in the context of the goals, policies and objectives from the SHSP. The project design helps preserve Smoky Hollow's existing character by preserving existing brick materials for both projects and incorporating materials and colors that are consistent with existing buildings in the area and with the neighborhood's industrial character. The project incorporates sidewalk-oriented entries for the project as well as pedestrian-oriented scale and design features such as lighting, windows, and signage. The proposed Project implements the goals and objectives of Specific Plan Chapter 3 regarding publicly owned rights-of-way and publicly accessible open spaces. The proposed Project includes public improvements to utilities in the public right-of-way, landscaping adjacent to the street, and open space, which will in turn help integrate cyclists, pedestrians, and transit users for businesses to flourish.

Economic Development Element

General Plan Economic Development Element Goal ED1 outlines the City's objectives to create a strong, healthy economic community in which all diverse stakeholders may benefit.

The City's Economic Development Element of the General Plan specifies the following:

Objective ED1-1.1*:* To build support and cooperation among the City of El Segundo and its business and residential communities for the mutual benefits derived from the maintenance and expansion of El Segundo's economic base.

Policy ED1-1.1: Maintain economic development as one of the City's and the business and residential communities' top priorities, diversifying the City's economic base to meet quality of life goals, and results in job creation and growth potential.

Objective ED1-2*:* Center diversification efforts on targeted industries that meet the City's criteria for job creation, growth potential, fiscal impact, and fit with local resources.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Policy ED1-2.2: Maintain and promote land uses that improve the City's tax base, balancing economic development and quality of life goals.

The proposed project is consistent with the General Plan's Economic Development Element and directly implements and furthers the General Plan's goals, objectives and policies above because the project promotes economic development and improves the City's tax base through inclusion of office, research and development, and retail land uses within the Smoky Hollow Specific Plan area. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Economic Development Element.

Land Use Element

General Plan Land Use Element Goal LU2 outlines the City's objectives to preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance.

The City's Land Use Element of the General Plan specifies the following:

> Objective LU2-1: Maintain the distinct character of the existing areas of the City.

The proposed project is consistent with the General Plan's Land Use Element and directly implements and furthers the General Plan's goals, objectives and policies above because the proposed project design preserves the existing red brick building, to maintain the character of the post-war period architecture found within Smoky Hollow. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Land Use Element.

Circulation Element

The City's Circulation Element of the General Plan specifies the following:

> Objective C1-1: Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.
>
> Policy C 1-1.14: Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development.

The proposed project is consistent with the General Plan's Circulation Element and directly implements and furthers the General Plan's goals, objectives, and policies above because the project would not disturb or impact the existing roadway network immediately surrounding the project sites. Access to and from the projects are well established by Franklin Avenue, Kansas Street, Oregon Street, and El Segundo Boulevard. In compliance with SHSP EIR Mitigation Measure 18-1, a Traffic Impact Analysis was conducted to analyze any new impacts to the local street network from the Project, based on LOS standards per the General Plan, and calculate a fair share contribution for project traffic impacts. Based on the traffic impact analysis conducted, the proposed Project will not create traffic impacts greater than those identified in the

TIA conducted for the SHSP EIR. The project applicant will be required to pay fair share for the improvements to the roadway network as identified in the SHSP EIR. The SHSP was adopted in 2018 and was found to be consistent with the City's General Plan. The proposed project will not obstruct the attainment of any goal, policy or objective of the General Plan's Circulation Element. Additionally, the project is consistent with the design and zoning standards as required by the SHSP. Specifically, with the approval of the proposed SHSP amendment to allow 60 feet for projects within Subarea 1, the project would be compliant with all zoning standards including height, floor area ratio, setbacks, design standards, and landscape and open space standards. Parking for the project would be both surface parking and located within the on-site existing 398 space parking garage.

B. The proposed project is functionally compatible with the area in which it is located.

The City of El Segundo has distinctive land use patterns, which are divided into four quadrants by the intersection of Pacific Coast Highway and El Segundo Boulevard. Compatibility of an individual land use is determined mainly by its relationship to other uses within its quadrant. The SHSP area is located in the northwestern quadrant of the City of El Segundo which is west of Pacific Coast Highway and north of El Segundo Boulevard. The design and implementation of the Specific Plan relates directly to the goals and objectives of the Specific Plan and would be functionally compatible with other uses within the Specific Plan area. The SHSP includes a range of commercial and industrial uses that will contribute to job creation opportunities and balance growth with local resources and infrastructure capacity.

The proposed building height for the project is compatible with the area in that two-story buildings, tall petroleum storage drums, and 200-foot-tall distillation columns from the Chevron oil refinery are located in the immediate vicinity. The project is located in a developed area which contains all utilities and public infrastructure.

The project is within the Smoky Hollow East (SH-E) zoning district, which provides a transitional land use area between higher-intensity office uses east of PCH and the smaller, single-parcel industrial and creative businesses of the western portion of Smoky Hollow area. The SH-E zoning district accommodates development of incubator industrial, research, and technology uses; medium-sized light industrial and manufacturing; and creative office activities. The Standard Works development project is compatible and consistent with the types of development desired by the Smoky Hollow Specific Plan within the SH-E zoning district.

C. The proposed development will not adversely affect the general welfare of the City.

The SHSP development standards ensure that the Projects are developed in an orderly fashion with high quality architecture, building materials, and urban design. The Project's consistency with these standards, its design, and configuration result in a project that will not adversely affect the general welfare of the City. Before the City issues building permits for the project, the applicant will submit detailed plans to the

City to review for compliance with all applicable Building and Fire safety codes. Further, the proposed project will promote the orderly development of property, the preservation of property values and preservation of the distinct character of Smoky Hollow. The project will be consistent with surrounding development and will not adversely affect the value of neighboring properties. The proposed project is compatible with the neighborhood, and therefore is not anticipated to be detrimental to the public health, safety, or welfare.

SECTION 6: *Master Sign Program Findings*. Pursuant to ESMC Chapter 15-18, a Master Sign Program (MSP) is required for multi-tenant developments of three of more commercial tenants. This MSP:

A. Is consistent with Chapter 15-18 of the ESMC in all regards including size, type, locations, prohibited signs, exempt signs, general sign standards, applications, permits, nonconforming conditions, substitutions, enforcement and maintenance.
B. Provides all Tenants a guideline for Tenant signage that is architecturally compatible with the campus wide architectural esthetic for the purposes of a unified campus standard in design, installation and otherwise as approved by the authorities having jurisdiction with the original construction of the project.
C. Provides the appropriate process for review, submittal, approval, installation, maintenance and removal of all signage on the Standard Works campus.

SECTION 7: *Recommendation.* Subject to the conditions listed on Exhibit A of this Resolution, the Planning Commission recommends that the City Council approve the Community Benefit Plan (CBP) No. 19-03, Site Plan Review (SPR) No. 21-04, Master Sign Program (MSP) 21-01 and EA 1282 for the development of 1320-1330 E. Franklin Avenue.

SECTION 8: *Reliance on Record.* Each and every one of the findings and determination in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 9: This Resolution will remain effective unless superseded by a subsequent resolution.

SECTION 10: The Commission Secretary is directed to mail a copy of this Resolution to Mark Telesz, of Smoky Hollow Industries LLC., and to any other person requesting a copy.

PASSED, APPROVED AND ADOPTED this 10th DAY of FEBRUARY, 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2915

Exhibit A

CONDITIONS OF APPROVAL

In addition to all applicable provisions of the El Segundo Municipal Code ("ESMC") and all provisions of the Smoky Hollow Specific Plan, Mark Telesz and Smoky Hollow Industries, LLC (the "Applicant" or "Owner") agrees to comply with the following provisions as conditions for the City of El Segundo's approval of Community Benefit Plan CBP 19-03, Site Plan Review (SPR 21-04), and Environmental Assessment (EA) No. 1282 for a Tier II Community Benefits Plan and Site Plan Review of the proposed South Site of the Standard Works project at 1320-1330 E. Franklin Avenue. ("Project Conditions"):

Zoning Conditions

1. This approval is for the project as shown on the plans presented to and reviewed by the Planning Commission on February 10, 2022 and approved by City Council on _____, and on file with the Development Services Department.

2. Prior to issuance of any permit for the project, the applicant must submit plans, showing that the project substantially complies with the plans and conditions of approval on file with the Development Services Department. The Development Services Director is authorized to approve minor modifications to the approved plans or any of the conditions if such modifications achieve substantially the same results as would strict compliance with said plans and conditions. Any subsequent modification must be referred to the Development Services Director for a determination regarding the need for Planning Commission and/or City Council review and approval of the proposed modification.

3. This approval allows for construction of a new office facility at 1320-1330 E. Franklin Avenue. Specifically, the approved construction on the north site includes the following:

   a. Construction of a 44,802-square foot addition to the existing building that would be structurally preserved in place, resulting in a total gross floor area of 65,061 square feet.
   b. The maximum height of the resulting three-story building is limited to 59'-6" as measured from average grade to the rooftop of the building. Per the Smoky Hollow Specific Plan, building height does not include additional parapet height of 5', or additional structures allowed per the CBC and ESMC Section 15-2-3.

   A change in uses or changes in the allocation of square footages specified above must be referred to the Development Director for a determination regarding the need for Planning Commission and/or City Council review and approval of the proposed changes.

4. Signs proposed for the project, including monument signs, shall be designed in conformance with the approved Master Sign Program (MSP 21-01), which is included as Exhibit C of this Resolution. Any revisions to the Master Sign Program must be submitted and approved by the Development Services Director or designee prior to final building permit approval.

5. This approval shall not become effective unless and until the City Council adopts an ordinance approving the associated Smoky Hollow Specific Plan Amendment and said ordinance takes effect.

6. Before any building permits are issued, the applicant will be required to pay fair-share contribution to the City of El Segundo in compliance with Smoky Hollow Specific Plan EIR Mitigation Measure 18-1. The fair share contribution has been determined as follows:

   a. 4.7% for PCH/Grand Avenue for a new right-turn overlap signal phase on all approaches. The total cost estimate for the improvement is $80,788.00, of which $3,797.04 is the project's fair share contribution.

   b. 5.3% for PCH/El Segundo Boulevard for a Second eastbound left-turn lane, and new right-turn overlap signal phase at the northbound approach. The total cost estimate for improvements is $2,553,500.00 of which the project's fair share contribution is $135,335.50.

7. All rooftop mechanical equipment shall be architecturally screened in accordance with ESMC Section 15-2-8(C). Prior to permit final, the equipment shall be adequately screened to the satisfaction of the Development Services Director.

8. All building and drainage gutters, down spouts, vents and other protrusions shall be concealed from view within the exterior walls. Ladders for roof access shall be mounted on the inside of the building.

9. Mandatory solid waste disposal services shall be provided by a City approved waste hauler to all parcels/lots or uses affected by approval of this project.

10. The Applicant shall provide receptacles (bins) for the collection of refuse and recyclable materials, as well as a hose bib for washing collection areas. Prior to the issuance of building permits, the applicant shall provide documentation from a City approved waste hauler stating that the number and size of bins provided for the collection of refuse and recyclable materials generated by the project is adequate.

11. Prior to the issuance of building permits, the Applicant shall provide documentation from a City approved waste hauler stating that the dimensions of the refuse storage enclosure are of adequate size to accommodate containers consistent with the current methods of collection, are designed with a walk-in access component, and located and designed to facilitate trash truck access and pickup.

12. Trash enclosures on the property shall be either fully enclosed within the building or must be adequately screened by a trash enclosure per the ESMC. Further, the gates shall include architectural paneling or finishing that is consistent with the paneling or finishing of the building. Lastly, trash enclosure areas for the project shall have a non-combustible decorative cover that matches the building's architecture.

13. All mitigation measures and conditions of approval must be listed on the plans submitted for plan check and the plans for which a building permit is issued.

14. The applicant shall submit a Landscape Plan in accordance with ESMC Section 15-15a.

15. At the applicant's expense, the open spaces approved within the project shall be maintained in accordance with the approved Landscape Plan.

Community Benefits Plan

16. The applicant must provide all the community benefits as stated in Exhibit B (Community Benefits Plan). If the project does not provide a benefit or ceases to provide one, the owner must submit a revised CBP including equivalent replacement benefit of an equal value to the Development Services Director for review and approval. The Director may at his discretion refer the revised CBP to the Planning Commission and City Council for review and approval.

17. The applicant must construct the public improvements indicated in the Community Benefits Plan, including, but not limited to, sidewalk, streetscape, landscaping, parking, open space, and other improvements within the public right-of-way.

IS/MND / CEQA

18. Applicant must comply with all applicable mitigation measures identified in the Final Environmental Impact Report prepared for the SHSP. All mitigation measures and conditions of approval must be listed on the plans submitted for plan check and the plans for which a building permit is issued.

19. Prior to issuance of any demolition, grading or building permit or as otherwise appropriate, a matrix/spreadsheet shall be submitted to the City, as applicable, for review and compliance with:

    a) The SHSP 2018 EIR (EA-1101) Mitigation Monitoring and Reporting Program (MMRP) as adopted by the City Council on October 2, 2018.

    b) The Project IS/MND MMRP as adopted as part of Planning Commission Resolution No. 2912.

c) All project conditions of approval.

20. Prior to Certificate of Occupancy, the project shall demonstrate compliance with all applicable mitigation measures in the MMRP for the SHSP EIR and project COA. A final mitigation and COA monitoring matrix/spreadsheet shall be submitted to the City.

21. All mitigation measures listed in Mitigation Monitoring and Reporting Program adopted as part of Planning Commission Resolution No. 2912 shall be complied with. This shall include:

*Denotes mitigation measure carried over from the Smoky Hollow Specific Plan EIR

Biological Resources

22. **BIO MM 7-1*** To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occurs within the avian nesting season (during the period from February 1 to September 1), areas within 100 feet of a development site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds covered under the Migratory Bird Treaty Act, mitigation measure 7-2 shall apply.

23. **BIO MM 7-2*** If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within an appropriate setback from occupied nests as determined by a qualified biologist. Protective measures (e.g., established setbacks) shall be required to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the CDFW prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

Cultural Resources

24. **CUL MM 8-2*** Prior to the commencement of grading or demolition of subsurface structures, a professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, shall conduct a brief archaeological and paleontological informational session for construction personnel. The training session may consist of an in-person meeting or a written handout describing: (1) how to identify archaeological and paleontological resources that may be encountered during earth-moving activities and (2) the procedures to be followed in such an event, including contact information for the appropriate entities if archaeological or paleontological resources are discovered.

25. **CUL MM 8-3*** In the event that archaeological or paleontological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist or paleontologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. If the archaeologist identifies the find as a tribal cultural resource or suspects it to be a tribal cultural resource, the City will contact the Native American Heritage Commission (NAHC) to report the discovery, and will contact local Native American tribal representatives as directed by the NAHC. Should the newly discovered artifact(s) be determined to be a tribal cultural resource, Native American construction monitoring will be initiated. The City shall coordinate with the archaeologist and tribal representative(s) to develop an appropriate treatment plan for the resources.

26. **CUL MM 8-4** If human remains are uncovered during Project grading, work must be halted in the immediate area of the find and the County Coroner notified in accordance with Health and Safety Code Section 7050.5. The Coroner must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, they must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant". The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the area shall also be subject to consultation between appropriate representatives from that group and the local jurisdiction/lead agency involved. This measure shall be implemented to the satisfaction of the City Planning Department.

Geology and Soils

27. **MM GEO-1** Prior to issuance of any grading or building permits, the applicant shall demonstrate that all improvements and construction-related activities comply with the recommendations outlined in the Project geotechnical report (CWI 2017). This measure applies to all potential geologic and soil constraints that could affect one or both sites, including but not limited to seismic ground failure, strong seismic shaking, differential settlement, liquefaction, lateral spreading, and subsidence, and landslides/slope stability as appropriate. This measure shall be implemented to the satisfaction of the City Engineer.

Greenhouse Gas Emissions

28. **EECAP 4.1*** Encourage or Require Energy Efficiency Standards Exceeding Title 24. This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that required by current Title 24 Standards.

29. **EECAP 5.2*** Promote Water Efficiency Standards Exceeding SB X7-7. In addition to SB X7-7, more actions are being studied or have been taken to exceed water efficiency standards. These efforts include education and outreach practices that could be combined with residential and commercial EECAP actions that emphasize the reuse of recycled/gray water and promote harvesting rainwater.

Hazards and Hazardous Materials

30. **MM HAZ-3** Prior to issuance of any demolition or building permits for South Site (1475 E. El Segundo Boulevard) or North Site (1320-1330 E. Franklin Avenue), the applicant shall identify and effectively remediate any asbestos-containing materials (ACMs) associated with the onsite buildings. This remediation may be accomplished by either in-place encapsulation or removal as appropriate. The applicant shall retain a qualified asbestos contractor to conduct this work and shall provide the City with a final report within 45 days of completion of all remediation activities, including appropriate documentation of disposal of any onsite ACMs at an approved landfill. This measure shall be implemented to the satisfaction of the City Planning Department.

Transportation (VMT)

31. **MM VMT-1 Unbundle Parking Cost.** This measure implements workplace parking pricing and unbundles the cost of parking from the lease. The Project shall include parking in the access-controlled parking structure. The property owner shall include language in the lease agreement which provides reduced lease rates if parking is not required by the tenant. The developer shall implement a monthly cost for parking spaces by charging a parking fee per access card. The range of VMT reduction from this measure is between 2.6% and 13%. Based on the calculations, a $50 per month/employee parking cost will result in a VMT reduction of 5.1%.

32. **MM VMT-2 Parking Management Strategies**. Strategies to encourage efficiency in parking facilities and improve the quality of service to parking users results in reduction of VMT. This includes signage and directions, providing preferential carpool/vanpool parking spaces closer to the building entrance to and from the destination, etc. This encourages carpooling/vanpooling and also reduces the amount of time patrons drive around to find the best parking area to minimize walking. The maximum reduction from this measure is 3%.

33. **MM VMT-3 Mandatory Travel Behavior Change Program, Promotions & Marketing.** This involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The project shall provide a web site that allows employees to research other modes of transportation for commuting. If a website is planned for the development, links to Google Transit, and/or local bus operators should be provided on the website. If a website is not planned, QR Codes could be provided in the parking structure and the building lobbies to enable users an easy way to access information about transit routes. The maximum reduction due to this measure is 1%.

34. **MM VMT-4 Implement Commute Trip Reduction Marketing.** This involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. The project shall implement marketing strategies to reduce commute trips. The project will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include new employee orientation of trip reduction and alternative mode options, event promotions, and printed material. CAPCOA states that the range of reduction is between 0.8% to 4%, but states that in some literature, the VMT reduction has been as much as 15%, especially for urban areas. For this project, a conservative reduction of 3% has been assumed.

35. **MM VMT-5 Include Bike Parking in Excess of City Code.** This implements short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations. Based on discussion with the applicant, bike parking in excess of City code shall be provided. The City's code requires a minimum of 4 spaces for non-residential buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. The maximum number of bicycle parking required under City code is 25 spaces. For the project, the number of bicycle parking spaces required under code is 17 spaces, and therefore, it is recommended that the project provide at least 18 spaces. This results in a VMT reduction of 0.625%.

36. **MM VMT-6 Include Secure Bike Parking and Showers.** This implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel. Based on discussion with the applicant, each building shall include shower facilities and secure bike parking facilities shall be provided. This results in a VMT reduction of 0.625%.

Tribal Cultural Resources

37. **MM-TCR-1 Native American Monitoring.** Prior to the commencement of any ground disturbing activity at the Project site, the Project applicant shall retain a Native American Monitor approved by the Gabrieleño Band of Mission Indians-Kizh Nation

and the Gabrielino Tongva Indians of California, the tribes that consulted on this Project pursuant to AB 52 and SB 18 (the "Tribes" or the "Consulting Tribes"). Copies of the executed contracts shall be submitted to the City of El Segundo Development Services Department prior to the issuance of any permit necessary to commence a ground-disturbing activity.

The Tribal monitors shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribes as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitors shall complete daily monitoring logs that will provide descriptions of the day's grading and related earth-disturbing activities, including type and extent of construction activities, location of work, soil and any cultural materials identified, or other items potentially related to cultural resources. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitors have indicated that all upcoming ground-disturbing activities at the Project site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by Project activities shall be evaluated by the Consulting Tribes approved Tribal monitors. If the resources are Native American in origin, the Consulting Tribes shall retain it/them in the form and/or manner the Tribes deem appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).

General Conditions

38. The project is subject to the Public Art or In-Lieu Fee Requirement (Cultural Development Program) established by City Council Ordinance 1594, which requires placement of public art on-site or payment of in-lieu fees to the Cultural Development Fund. Prior to issuance of a building permit, the applicant shall submit an application to the Community Services Department and shall either: a) enter into an agreement with the City of El Segundo to provide public art onsite; or, b) in-lieu of commissioning public art onsite, pay a fee equal to 1% of the project cost to the City's Cultural Development Fund.

39. A positive balance shall be always maintained in all project Reimbursement Accounts. If the balance of the Reimbursement Account(s) associated with the project becomes

negative at any time, all work on the project shall be suspended, including the issuance of permits and project inspections, until such time as the sufficient funds are deposited to return the account(s) to a positive balance.

40. A weatherproof notice/sign to report dust, noise, or other construction-related impacts shall be posted and prominently displayed on the construction fencing clearly visible to the public from along the abutting street(s). The notice/sign shall set forth the name of the person(s) responsible for the construction site and a phone number(s) to be called in the event that a construction-related impact occurs.

41. Reclaimed water must be utilized for all landscaped areas.

42. Prior to issuance of any permit, landscaping plans must be submitted to the Development Services Department that conform to the City's Water Conservation in Landscaping requirements as set forth in ESMC Chapter 15.

43. All utilities lines installed to serve the new construction shall be placed underground.

44. The developer shall be responsible for the relocation of any existing utility necessary as a result of the development.

45. Pedestrian walkways within the project must include admixture colored concrete and/or design that enhance and complement the project.

46. The project site shall be fenced and screened during construction.

47. All areas within the project site shall be maintained free of trash and debris.

48. Prior to issuance of any permit, an erosion control plan shall be reviewed and approved by the Building Official and the Public Works Director.

49. Water spraying or other approved methods shall be used during grading operations to control fugitive dust. Recycled water shall be used for grading operations whenever available.

50. During the grading phase and as needed during the remainder of the construction phase, the owner or contractor must conduct daily street sweeping along the streets abutting the project site(s).

51. In the event that a Planning, Building, Public Works, Fire Department or Police Department requirement are in conflict, the stricter standard shall apply.

Impact Fee Conditions

52. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time library services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

53. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time fire services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

54. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit new Building C, the applicant must pay a one-time police services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

55. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time park services mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

56. Pursuant to ESMC §§ 15-27 A-1, et seq., prior to issuance of a building permit for new Building C, the applicant must pay a one-time traffic mitigation fee. The fee amount must be based upon the adopted fee at the time the building permit is issued.

Building Safety Conditions

57. All projects shall comply with the El Segundo Municipal Code, and the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, and the California Green Building Standards Code in effect at the time of the plan submittal to Building and Safety Division for plan review.

58. All projects shall comply with the El Segundo Municipal Code, and the 2019 editions of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, and the California Green Building Standards Code.

59. Construction projects must comply with Best Management Practices for construction and storm-water runoff requirements of the National Pollutant Discharge Elimination System MS4 Permit. Construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale must obtain the (SWPPP) Construction Activities Storm Water General Permit.

60. A site-specific soils and geotechnical report must be submitted to Building and Safety Division for review and approval. The report shall comply with the minimum requirements of Chapter 18 of the CBC and shall address the possible sulfate content of the soils.

61. A stamped setback certification by a Licensed Surveyor will be required to certify the location of the new construction in relation to the setbacks prior to the first foundation inspection and stamped setback certification by a Licensed Surveyor will be required to certify the height of the structures prior to issuance of Certificate of Occupancy.

62. The applicant shall obtain a building, grading, mechanical, plumbing, electrical, demolition permit for the project.

63. Plans submitted for plan check must be stamped by a State-licensed architect or engineer and shall include:

    a. Complete structural calculations, details, notes and material specifications.

    b. Complete Accessibility Plan with a statement from a California Certified Access Specialist (CASp) indicating that a plan review has been performed and that it complies with the requirements of Chapter 11A &11B of the CBC.

    c. A stamped and signed Boundary and Topographic survey by a California licensed Land Surveyor.

    d. A complete grading and drainage plan showing compliance with the Los Angeles Regional Water Quality Control Board (LARWQCB) Low Impact Development (LID) requirement. The Los Angeles County LID Manual may be used as a guideline for preparing the LID report.

    e. Hydrology report along with hydraulic calculations.

    f. Complete energy calculations, details, notes, and material specifications.

64. Applicant shall submit a site-wide New Address Issuance request to the Building Division. Approved building addresses to be shown on the submitted plans.

65. Applicant shall pay all development fees, including school district developer fees, prior to issuance of building permits.

Fire Department Conditions

66. The applicant must comply with the applicable requirements of the 2019 California Building and Fire Codes and the 2018 International Fire Code as adopted by the City of El Segundo and El Segundo Fire Department Regulations.

67. The applicant must submit and have approved by the Fire Department a Fire/Life Safety Plan, identifying fire safety precautions during demolition and construction, emergency site access during construction, permanent fire department access, fire hydrant locations and any existing or proposed fire sprinkler systems and fire alarm systems prior to issuance of the building permit.

Public Works Conditions

"City Engineer" = City Engineer or his/her designee throughout this document.

General

68. All work in the City's right-of-way or on City-owned and maintained facilities shall require review and approval of the City Engineer or his/her designee.

69. The applicant shall ensure that encroachment permits are secured from the Public Works Department/Engineering Division before commencing any and all work in the City's public right-of-way (ROW), including lane closures.

70. Construction inspection shall be coordinated with the Public Works Inspector and no construction shall deviate from the approved plans without approval of the City Engineer. If plan deviations are necessary, the applicant shall provide a revised plan or details of the proposed change for review and approval of the City Engineer prior to construction.

71. Prior to issuing of the Certificate of Occupancy, the applicant shall ensure installation of all improvements required by the Public Works Department are inspected and approved by the City Engineer.

72. All construction-related parking shall be accommodated on-site. No construction related parking shall be permitted off-site.

73. A grading and drainage plan shall be provided and stamped by a California (CA) State-licensed civil engineer as part of the Building Permit process.

74. A utility plan shall be provided that shows all existing and proposed utility lines and their sizes (sewer, water, gas, storm drain, electrical, etc.), including easements, within 200 feet of the project site boundary.

75. Easements shall be granted for all public utilities installed outside the public-right-way with 15 ft. wide minimum up to entering the public right-of-way.

Street Improvements & Traffic Control

76. All existing sidewalk, curb & gutter, driveway approaches, and curb ramps that are broken or not in conformance with the latest SPPWC or City standards shall be removed and constructed per the latest SPPWC and City standards.

77. PG-64-10 tack coat and hot mix asphalt shall be used for all slot paving required next to new concrete installations. Slot paving shall be 3 feet wide and 1 foot deep, consisting of 6 inches of asphalt over 6 inches of base.

78. The applicant shall coldmill 2" Asphalt Concrete (AC) pavement surface and overlay with 2" AC PG-64-10 the curb-to-centerline half street width of Kansas Street and El Segundo Boulevard fronting the property. AC mix specification shall conform to Standard Specifications for Public Works Construction (SSPWC) "Greenbook", section 203-1.

79. Once the ROW improvements are accepted by the City Engineer, they are not to be used for staging building construction activities, including but not limited to, storage of construction materials and equipment. The street and sidewalks shall be kept free of construction debris, mud and other obstacles and shall remain open to traffic at all times. The applicant shall bear the entire cost of replacement or repair to any damage to improvements caused by its use, or its Contractors' and Subcontractors' use, of the improvements after acceptance by the City Engineer.

80. The proposed ingress/egress into the project sit requires a traffic study to be prepared by a State-licensed Traffic Engineer to demonstrate the driveways will be in compliance with the requirements of the General Plan, subject to the review and approval of the Public Works Director or his designee.

Water

81. Any existing water meters, potable water service connections, fire backflow devices and potable water backflow devices must be upgraded to current City Water Division standards. These devices shall be placed or relocated onto private property.

Sewer

82. The proposed improvement will impact the capacity of the existing City owned sewer main lines. The applicant must submit a sewer study to determine if there is a capacity deficiency in the affected sewer main lines and if so, sewer upgrades will be required. The sewer study shall be reviewed and approved by the City Engineer.

83. Prior to issuance of a Certificate of Occupancy, a $60,551.30 sewer connection fee for this project must be paid to the City of El Segundo Public Works Department.

84. Any unused sanitary sewer laterals shall be abandoned and properly capped at the City main. The Contractor is to obtain necessary permits and licenses, and provide traffic control plans and shoring plans.

Storm Drain

85. Hydrologic and hydraulic calculations shall be submitted to size appropriate storm drain facilities to control on-site drainage and mitigate off-site impacts. Refer to the most recent Los Angeles County Hydrology Manual. Instructions and the manual are available at the County website at http://dpw.lacounty.gov/wrd/Publication/index.cfm. Calculations shall be signed by a registered civil engineer.

86. The project shall comply with the National Pollutant Discharge Elimination System (NPDES) requirements and shall provide Best Management Practices (BMPs) for sediment control, construction material control and erosion control.

Miscellaneous Conditions

87. Approval of this permit shall not be construed as a waiver of applicable and appropriate zoning regulations, or any Federal, State, County and/or City laws and regulations. Unless otherwise expressly specified, all other requirements of the ESMC shall apply.

88. Failure to comply with and adhere to all of these conditions of approval may be cause to revoke the approval of the project by the Planning Commission, or City Council, pursuant to the provisions of the ESMC.

89. In the event that any of these conditions conflict with the recommendations and/or requirements of another permitting agency or City Department, the stricter standard shall apply.

90. The applicant and its successors in interest shall indemnify, protect, defend (with legal counsel reasonably acceptable to the City), and hold harmless, the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes of action, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including reasonable attorney's fees and disbursements (collectively "Claims") arising out of or in any way relating this project, any discretionary approvals granted by the City related to the development of the project, or the environmental review conducted under California Environmental Quality Act, Public Resources Code Section 21000 et seq., for the project. If the City Attorney is required to enforce any conditions of approval, all costs, including attorney's fees, shall be paid for by the applicant. The Applicant agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise. For purposes of this section "the City" includes the City of El Segundo's elected officials, appointed officials, officers, and employees.

By signing this document, _____, on behalf of Smoky Hollow Industries, LLC, certifies that he/she has read, understands, and agrees to the Project Conditions listed in this document.

_____
Name, Title
(Smoky Hollow Industries, LLC)

{If Corporation or similar entity, needs two officer signatures or evidence that one signature binds the company}

PLANNING COMMISSION RESOLUTION NO. 2915

Exhibit B

Community Benefits Plan
1475 E. El Segundo Blvd. and 1320-1330 E. Franklin Ave

Project description:

The development project at 1320-1330 E. Franklin Ave and 1475 E. El Segundo Blvd is subject to the following applications: Community Benefits Plan No. CBP 19-03 and CBP 19-04, Site Plan Review No. SPA 21-03 and SPA 21-04 and Environmental Assessment No. EA 1281 and EA 1282.

The proposed Project for the North Site includes developing a 1.07-acre portion of the 4.34-acre property located at 1320-1330 E. Franklin Avenue within the SHSP. The existing 19,493 square foot, one-story brick building will be preserved and two levels would be added above it, for a total of 64,295 square feet for R&D and office use. In addition, a 766 square foot pavilion building is proposed, which includes a public café, resulting in a total of 65,061 square feet of floor area for the North site (FAR = 0.95). Specifically, the proposed project on the North Site includes:

- Construction of a two-story 44,802-square foot addition to the existing building that would be structurally preserved in place, for a total floor area of 65,061 square feet (including the two-story pavilion noted below). The resulting three-story main building will measure 59'-6" in height, as measured from average grade to the rooftop of the building.
- Construction of a new two-story pavilion building to serve the neighborhood with a café and gathering point at the entry of a new public park accessible by the public. The new pavilion will have 766 square feet of floor area and will reach a maximum height of 23 feet and 8 inches.
- Construction of a new 5,000-square foot public outdoor park with park seating, picnic tables, shade trees and landscaping.

The development project deviates from the following Smoky Hollow Specific Plan (Specific Plan) development standards in Section 2.3:

1. **Building Height.**
   The permitted building height is 35 feet. The proposed building height is up to 60 feet to the top of the roofline.
2. **Allowable gross floor area ratio (FAR).**
   The permitted FAR is 1.5. The proposed FAR is up to 1.45.

Community benefits:

In exchange for the above deviations, the applicant offers the following community benefits and improvements, at the applicant's expense, as stated in pursuant to Smoky

Hollow Specific Plan Section 4.5.2:

Community Benefits Plan

The project is proposed as a campus, with multiple sites to be developed. The design of the building proposed on the North site exceeds the current base standard for building height in the SHSP, and the design of the building proposed on the South site exceeds the current base standards for building height and allowable Gross Floor Area Ratio (FAR). Projects within the SHSP area are allowed to request deviations from current City development standards with the approval of a Tier I or Tier II Community Benefits Plan. The proposed project would amend the SHSP to allow for an increase in the maximum permissible height for CBP Tier II qualifying projects. Allowable heights would increase to 60 feet from the current Tier II maximum of 50 feet. Approval of the SPA is required before the Development Sites can be permitted at a maximum height of 59.5 feet.

The Project requests the following deviations from the current development standards which require a Tier II Community Benefits Plan:

1. **Additional Building Height.** Proposed building heights of up to 59.5 feet on both Project sites would exceed the SHSP Base Standard height of 35 feet.
2. **Additional Building FAR.** Proposed 1.45 floor area ratio (FAR) on the South site exceeds the SHSP Base Standard FAR of 1.0. Proposed 0.94 floor area ratio (FAR) on the North site does not exceed the SHSP Base Standard FAR of 1.0.

In exchange for the above deviations allowed by Tier II CBP, the applicant is proposing the following community benefits and improvements, at the applicant's expense, pursuant to Smoky Hollow Specific Plan Section 4.5.2. The following Community Benefits are based on objectives and suggestions directly identified as development standards in the SHSP with the objective of benefiting the Smoky Hollow Specific Plan area. Additionally, the Specific Plan contains 32 design guidelines in five categories: building character, open space, landscaping, connectivity, signage and public art and Public Realm. Compliance with at least 17 of the guidelines is required to be considered as an exemplary project; the proposed Project incorporates 29 of the 32 design guidelines, far exceeding the minimum threshold for exemplary projects. A summary of the main community benefits that are proposed for the Project include the following:

1. **Underground Utilities**. The Project proposes to underground all electric power and low voltage phone and data lines that currently serve the buildings on East El Segundo Blvd and Kansas Street.
2. **Public Seating**. Proposed architectural seating will be provided along the sidewalk area within the public right-of-way (ROW) facing E. Franklin Avenue and Kansas Street.
3. **Coffee Pavilion/Public Café**. The proposed Project would also include a 276-square foot public café (Coffee Pavilion) and associated outdoor dining area immediately adjacent to the E Franklin sidewalk, in order to active the street and provide a convenient break location for local neighbors. The café is part of the

proposed 5,000-square foot public park that will be a landscaped focal point of the Project and of the surrounding area as well.

4. **Architecture that enhances building character.** See below under "Group A".
5. **Open space that facilitates gathering.** See below under "Group B".
6. **Landscaping and environmental design. "**See below under "Group C".

In addition, the Development Project will provide the following specific community benefits as summarized from the CBP Tier II application scoring sheets:

Group A – Enhance Building Character

1. *Build on the quality industrial character:* Project has exposed steel beams and large industrial-style windows.
2. *Convey a sense of the old and new:* Project will preserve ground floor red brick exterior while adding two setback floors of a modern industrial building
3. *Build upon existing context:* Project stays within existing footprint but adds 2 floors with roof decks.
4. *Conserve and retain the character-defining features:* Project preserves ground floor red brick exterior and three historical building entrances.
5. *Encourage additions that complement the character-defining features:* Project has large industrial windows with exposed steel beams characteristic of mid-century architecture but stacked blond block with exposed aggregate and stain coloring to enhance the industrial appearance.
6. *Incorporate small, medium, and large scales:* Project includes several interlocking design elements of different scales for visual interest including large to small "nested" windows and balconies to break up the building facade into different sized elements.
7. *Enhance design at the pedestrian level:* Project will have extensive landscaping along all street frontages with pedestrian scale seating.
8. *Specify 360^{o} architecture:* Project will have enhanced architecture on all four sides of each building.
9. *Enhance entry expression:* Project has new landscaping and a double high entry portal at the southwest corner.
10. *Encourage the use of roll-up doors and sliding walls at street frontage:* Roll-up doors are used in several main entrance locations.
11. *Orient secondary entries to alleys:* Some secondary access points are oriented toward local alleys.
12. *Incorporate different materials, colors, and textures:* Project includes a variety of materials, colors, and textures, including red brick, medium grey block, black steel, corten, architectural board formed concrete, and glass.

Group B – Facilitate Gathering

13. *Form an active street wall:* Project has a new two-story entry portal with enhanced landscaping along street frontages and distinctive entrances.
14. *Develop outdoor gathering spaces:* Project will have a pocket park with outdoor seating.

15. *Provide ease of access:* The Project will have multiple pedestrian and vehicular access points and ground floor tenants will have direct access to adjacent streets.
16. *Enhance surface parking:* Project will have shade coverings for surface parking lots plus stacked parking using current technology.
17. *Use enduring quality paving materials:* Project will have special paving materials to demarcate pedestrian walkways with integral color and crystal aggregate.
18. *Provide street furniture:* Project will provide street furniture for seating at the pocket park.
19. *Use exterior lighting to accentuate safety and design:* Project will provide period lighting on all sides of buildings for pedestrian safety.

Group C – Incorporate Landscaping and Environmental Design

20. *Design layered and lush landscaping:* Project will have extensive landscaping per landscaping plan.
21. *Select drought-tolerant and native plants:* Project landscape plan has drought-tolerant and native plants throughout.
22. *Utilize planters and pots to provide greenery:* Project has planters and pots on Level 2 and 3 decks and balconies and on the rooftop.
23. *Improve landscaping in parking areas:* Parking areas include landscaping on at least two sides (those facing the buildings).
24. *Use fences and walls as an extension of the architecture:* Project includes monument signs for both buildings that compliment and extend the building architecture.
25. *Use natural light:* Project has large windows for 2-story spaces with mezzanines to allow natural light in all interior spaces.

Group D – Encourage Connectivity

26. *Install bike facilities:* Two bike racks will be installed at each Project building.

Group E – Signage, Way Finding, and Public Art

27. *Design signs as an integral component:* Project includes integrated tenant signage.
28. *Incorporate way-finding through integral design:* Project has architecturally integrated signage for both pedestrians and vehicles.
29. *Encourage public art:* Project will have a large scale art wall on the west side of the north building.

Public Realm

30. *Underground utilities:* The incoming power and low voltage cables for data and phone will be consolidated into one location and undergrounded.

PLANNING COMMISSION RESOLUTION NO. 2915

Exhibit C

MASTER SIGN PROGRAM 21-01 FOR STANDARD WORKS PROJECT

Refer to Exhibit C for PC Resolution No. 2915, above

Development Plans North Site



STANDARD WORKS

EL SEGUNDO, CALIFORNIA
PARCEL E

1320 & 1330 E FRANKLIN AVENUE
EL SEGUNDO, CA 90245

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

1320 -1330 E FRANKLIN AVE

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INITIAL SUBMITTAL	-	12.19.2019
CBP SUBMITTAL	-	05.16.2020
REVISED SUBMITTAL	-	01.06.2021
CEQA SUBMITTAL	-	05.06.2021
FINAL SUBMITTAL	-	01.20.2022
PROJECT #		17.019

BIM 360://1320 E. Franklin Avenue/1330 E FRANKLIN - CLOUD.rvt

COVER

01

EXECUTIVE SUMMARY

GENERAL OVERVIEW AND GRAND VISION
THE "STANDARD WORKS" PROJECT IS A 191,896 SF PARCEL BOUND BY EAST FRANKLIN AVENUE ON THE NORTH, EAST EL SEGUNDO BOULEVARD ON THE SOUTH AND OREGON STREET ON THE WEST ENCOMPASSING 3 BUILDINGS, A NEWELY CONSTRUCTED 4 LEVEL PARKING GARAGE CONTAINING 398 PARKING SPACES AND SEVERAL ON GRADE PARKING AREAS. PRESERVATION OF THE EXISTING 1950'S MID-CENTURY RED BRICK FACADE IS AN OBJECTIVE OF THE PROPOSED DESIGN AND THE SMOKY HOLLOW SPECIFIC PLAN. THE GRAND VISION OF THE DEVELOPMENT IS A DESIGN THAT ENHANCES THE EXISTING INDUSTRIAL AESTHETIC OF THE NEIGHBORHOOD BY PRESERVING ALL MID-CENTURY FACADES AND UTILIZING SIMILAR INDUSTRIAL BUILDING MATERIALS AND TECHNIQUES TO CREATE A COHESIVE ARCHITECTURAL EXPRESSION BETWEEN THE EXISTING AND THE PROPOSED DEVELOPMENTS. THIS MIX OF UNIQUE OLD AND NEW ECLECTIC BUILDINGS IS ENTICING TO PROSPECTIVE CREATIVE AND KNOWLEDGE-BASED BUSINESSES ACROSS MANY INDUSTRIES. THE LIVELY AND PEDESTRIAN FRIENDLY CREATIVE ATMOSPHERE OF STANDARD WORKS WILL CONTRIBUTE TO THE ONGOING SMOKY HOLLOW TRANSFORMATION TO AN INCUBATOR DISTRICT AND MAJOR ECONOMIC FORCE IN THE CITY.

USE
THE CURRENT USES OF THE EXISTING STRUCTURE IS LIGHT INDUSTRIAL WITH ASSOCIATED ACCESSORY GENERAL OFFICE AND WAREHOUSE. THE PROPOSED FLOOR AREA SHALL BE A COMBINATION OF GENERAL OFFICE, LIGHT INDUSTRIAL AND TECHNOLOGICAL USES INCLUDING R&D .

FLOOR AREA
THE PROJECT PROPOSES 45,568 SF IN ADDITION TO THE EXISTING 19,493 SF, FOR A TOTAL OF 65,061 SF. AT THE COMPLETION OF THE PROPOSED PROJECT, THE SITE WILL REMAIN SIGNIFICANTLY UNDERDEVELOPED WITH THE FLOOR AREA RATIO OF 0.95 WHICH IS MUCH LESS THAN THE ALLOWED 1.5 FAR IN THE TIER II COMMUNITY BENEFITS PLAN ALL THE WHILE ACTUALIZING ALL THE GOALS OF THE SPECIFIC PLAN WITHOUT THE NEED FOR REQUESETING ADDITIONAL FLOOR AREA BEYOND THE BY-RIGHT ALLOWED AREA OF 1.0.

PARKING
THE COMPLETED PROJECT WILL REQUIRE A TOTAL OF 168 PARKING SPACES WHICH WILL ALL BE PROVIDED ENTIRELY ON-SITE. THE PROJECT WILL CONTAIN APPROXIMATELY 38 ON GRADE PARKING AND UTILZE 130 SPACES IN THE RECENTLY COMPLETED PARKING GARAGE STRUCTURE.

MISCELLANEOUS
THE HOURS OF OPERATION FOR THE DEVELOPMENT ARE STANDARD BUSINESS HOURS FIVE DAYS A WEEK WITH OCCASIONAL WEEKEND HOURS. THE EXISTING BRICK STRUCTURE of 19,493 SF ON THE NORTH SIDE OF THE PROPERTY SHALL BE ENTIRELY PRESERVED AND REHABILITATED WITH LARGER OPENINGS FOR WINDOWS AND ACCESSIBLE ENTRANCES.

CONCLUSION
THE PROPOSED PROJECT DESIGN IS COMPATIBLE AND INTEGRATED WITH, AND NOT DETRIMENTAL TO, THE EXISTING DEVELOPMENT ON ADJACENT AND SURROUNDING NEIGHBORING PROPERTIES AND FURTHERMORE PAYS HOMAGE TO THE NEIGHBORHOOD'S INDUSTRIAL PAST AND ENCOURAGES LOOKING FORWARD TO THE FUTURE OF WHAT THE NEIGHBORHOOD WILL TRANSFORM INTO IN THE NEAR FUTURE.

TIER II COMMUNITY BENEFIT PLAN (CBP) PER SECTION 4.5.2 AND TABLE 4-1 OF SHSP:
1. BUILDING HEIGHT: REQUEST FOR UP TO 60 FEET

FLOOR AREA AND PARKING CALCULATIONS

PROJECT INFORMATION TABLE

	PARCEL A - SOUTH SITE 1475 E. EL SEGUNDO BLVD APN: 4139-002-025		PARCEL C 1301 E. EL SEGUNDO BLVD APN: 4139-002-023		PARCEL B 1325 E. EL SEGUNDO BLVD		PARCEL D 136-142 OREGON STREET APN: 4139-002-056		PARCEL E - NORTH SITE 1320 - 1330 E. FRANKLIN AVE.	
GROSS LOT AREA (PRE DEDICATIONS)	43,966.00		58,316.00				191,896 SF			
FLOOR AREA ALLOWED (1:1)	43,966.00		58,318.00				191,896 SF			
USE	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**
INDUSTRIAL	12,064.00		10,967.00		19,398 SF		19,007 SF		10,428 SF	
GENERAL OFFICE	7,247.00	18,780.00	17,608.00		8,206 SF		8,204 SF	23,243 SF	9,065 SF	19,226 SF
STORAGE		14,788.00			2,064 SF			21,022 SF		15,381 SF
		7,187.00						9,149 SF		7,318 SF
		15,984.00						21,784 SF		15,052 SF
		7,176.00						9,688 SF		7,318 SF
CAFE										766 SF
FLOOR AREA EXISTING	19,311.00		28,575.00		29,668 SF		27,211 SF		19,493 SF	
FLOOR AREA PROPOSED		63,915.00						84,886 SF		65,061 SF
TOTAL FAR		1.45								0.94
PARKING										
REQUIRED	160		69*		69 **		212 ***		163 ****	
PROVIDED ON GRADE	42		69		40		44		38	
ADDITIONAL SPACES REQUIRED	118		0		29		168		125	
BICYCLE PARKING ((TOTAL FAR - 15,000 SF) / 400] * 0.05% + 4	10				2		13		10	

124,258 SF	FLOOR AREA EXISTING
179,615 SF	TOTAL PROPOSED FLOOR AREA
PARKING REQUIRED	
673	PARKING REQUIRED
233	PARKING PROVIDED ON GRADE
440	ADDITIONAL SPACES REQUIRED
398 ******	TOTAL GARAGE PARKING SPACES
61 ***	ADDITIONAL GARAGE LIFT PARKING
15 *****	ADDITIONAL GARAGE LIFT PARKING
34	REMAINING/UNUSED GARAGE PARKING SPACES
35	TOTAL BICYCLE PARKING SPACES REQUIRED

* 1301 E. El Segundo - B0423-17 (69 Spaces Required)
** 1325 E. El Segundo - B0559-17 (69 Spaces Required)
*** 140 Oregon - EA-1233 and C0092-19 (212 Spaces Required)
**** 1320-1330 E. Franklin - EA-1282
***** 1310 E. Franklin - B0421-20 (Scope of work = 61 additional parking spaces on level 1 of the parking garage)
****** 1310 E. Franklin - B0182-18 (Scope of work = 398 Space 4 level parking garage)
******* 1310 E. Franklin - Field Change 1 to B0421-20 (Scope of work = 15 additional parking spaces on grade south of 140 Oregon)
A minimum of 4 spaces for buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. Maximum of 25 spaces

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

1320 -1330 E FRANKLIN AVE

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INITIAL SUBMITTAL	-	12.19.2019
CBP SUBMITTAL	-	05.16.2020
REVISED SUBMITTAL	-	01.06.2021
CEQA SUBMITTAL	-	05.06.2021
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EXECUTIVE DEVELOPMENT SUMMARY



BALIAN

ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

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BALIAN

ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

STANDARD WORKS
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ARCHITECTS
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LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

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ZONING ANALYSIS

(SHSP TABLE 2-3) C. LOT STANDARDS

	REQUIRED	PROVIDED
1. MINIMUM LOT AREA	11,200 SF	191,896 SF
2. MINIMUM LOT FRONTAGE	50'	456' - 9"

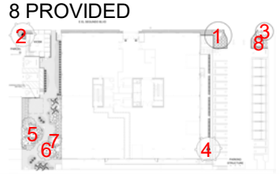
(SHSP TABLE 2-3) D. BUILDING DESIGN STANDARDS

	REQUIRED	PROVIDED
1. BUILDING ORIENTATION FRANKLIN AVENUE	LOTS ADJOINING FRANKLIN AVENUE SHALL PROVIDE A MINIMUM OF ONE PRIMARY ENTRY FACING FRANKLIN AVENUE. PRIMARY ENTRY DOORS SHALL BE VISIBLE AND ACCESSIBLE FROM THE PUBLIC SIDEWALK	SEE NORTH ELEVATION
2. BUILDING TRANSPARENCY: FRANKLIN AVENUE FRONTAGE	FOR NEW BUILDINGS OR NEW ADDITIONS FRONTING FRANKLIN AVENUE, A MINIMUM **15% FACADE** TRANSPARENCY SHALL BE PROVIDED AT THE GROUND LEVEL OR FIRST 12 FEET OF HEIGHT ABOVE GRADE, WHICHEVER IS LESS, THROUGH THE UTILIZATION OF WINDOWS, ENTRIES, OR SIMILAR OPENINGS.	43% PROVIDED

(SHSP TABLE 2-3) E. SETBACK STANDARDS

	REQUIRED	PROVIDED
1. FRONT YARD (FRANKLIN)	MIN 0', MAX 5'	0' - 8"
2. SIDE YARD (EASTERLY)	NONE	75' - 1 3/4" (TO PL)
3. SIDE YARD (WESTERLY)	NONE	95' - 10 1/4" (TO FACE OF ADJACENT BUILDING)
4. REAR YARD (SOUTHERLY)	NONE	10' - 9" (TO FACE OF ADJACENT BUILDING)
5. ADJOINING ALLEY	MIN. 10'	N/A
6. ALL STRUCTURES	COMPLY WITH CORNER, DRIVEWAY, & ALLEY VISIBILITY REQUIREMENTS IN ESMC SECTIONS 15-2-6 (CORNER CLEARANCE) & 15-2-11 DRIVEWAY VISIBILITY).	N/A

(SHSP TABLE 2-4) F. OPEN SPACE & LANDSCAPING STANDARDS

	REQUIRED	PROVIDED
1. OPEN SPACE, 10% OF LOT, REQUIRED OPEN SPACE MAY BE PROVIDED ON BUILDING ROOFTOPS; HOWEVER, AT LEAST 50% OF REQUIRED OPEN SPACE SHALL HAVE DIRECT ACCESS FROM THE EXISTING GROUND ELEVATION.	191,896 x 0.1 = 19,190 SF	PARCEL D = 19,189 (RESOULTION 5205) 1. LANDSCAPING AT GRADE = 5,937 2. ROOFTOP OPEN SPACE = 4,722 3. ROOFTOP LANDSCAPING = 1,188 **TOTAL = 31,036 SF**
2. SURFACE PARKING LOT LANDSCAPING. ON SITES LARGER THAN 22,400 SF, A MINIMUM OF 1 TREE SHALL BE PROVIDED ON SITE FOR EVERY 4 AT-GRADE, OPEN-TO-THE-SKY SURFACE PARKING SPACES	29 SURFACE PARKING SPACES / 4 = 8	8 PROVIDED 
3. IRRIGATION	ALL LANDSCAPED AREAS, INCLUDING TREES AT SURFACE PARKING LOTS, SHALL BE PROVIDED WITH APPROPRIATE PERMANENT WATERING FACILITIES.	IRRIGATION SHALL BE PROVIDED AS A DEFERRED SUBMITTAL

JURISDICTION:	CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA
SPECIFIC PLAN:	SMOKY HOLLOW SPECIFIC PLAN
ZONING:	SH-E (SMOKY HOLLOW EAST)
PREVIOUS USE:	LIGHT INDUSTRIAL
PROPOSED USE:	GENERAL OFFICE / ACCESSORY RETAIL / RESEARCH & DEVELOPMENT
OCCUPANCY CLASS:	B (GENERAL OFFICE, R&D)
CHANGE OF USE:	YES

ZONING MAP

Figure 2-1: Zoning Districts



(SHSP TABLE 2-2) A. ALLOWABLE GROSS FLOOR AREA

	ALLOWED	PROVIDED
BASE ALLOWED: COMMUNITY BENEFITS TIER I:	1:0 = 191,896 x 1.0 = 191,896 SF 1.5 = 191,896 x 1.5 = **287,844 SF**	29,668 SF (1325 E. EL SEGUNDO) **65,061 SF (1320 & 1330 E. FRANKLIN)** 84,886 SF (140 OREGON) 179,615 SF (0.94 FAR)

B. HEIGHT STANDARDS

	ALLOWED	PROVIDED
BASE ZONING	35'-0"	59'-6"
COMMUNITY BENEFITS TIER II	ADDITIONAL 24'-6"	
HEIGHT EXCEPTIONS	ELEVATOR SHAFT HOUSING IS EXEMPT FROM HEIGHT REQUIREMENTS	
PARAPET HEIGHT	MAY EXCEED MAXIMUM BUILDING HEIGHT BY 5'-0"	

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
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STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
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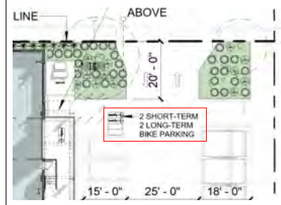
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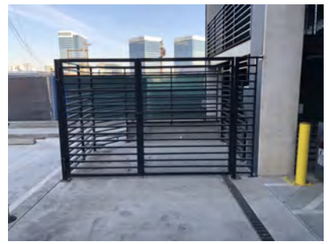
SMOKY HOLLOW SPECIFIC PLAN ZONING ANALYSIS

ZONING ANALYSIS

(SHSP TABLE 2-6) H. PRIVATE PARKING STANDARDS

	REQUIRED	PROVIDED
1. NEW CONSTRUCTION & CHANGE OF OCCUPANCY	(2.5 / 1,000 GROSS SF) CHANGE OF USE: 19,493 SF 19,493 / 400 = 49	**ON GRADE = 38** **130 IN PARKING GARAGE** NOTE: ALSO SEE ZONING ANALYSIS CHART ON PAGE 2 FOR ALL PARKING REQ. FOR 1325 E. EL SEGUNDO BUILDING AND 140 OREGON BUILDINGS
2. ADDITIONS TO BUILDINGS	(2.5 / 1,000 GROSS SF) NEW CONSTRUCTION: 45,568 SF 45,568 / 400 = 114	
SUB-TOTAL REQUIRED	65,061 / 400 = **163 SPACES**	
3. TANDEM PARKING	TANDEM SPACES SHALL HAVE A MAXIMUM LENGTH OF 40 FEET (PARKING FOR 2 VEHICLES MAXIMUM).	N/A (NONE PROPOSED)
4. BICYCLE PARKING	CONSISTENT WITH SECTION 5.106.4 OF THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE: NEW PROJECTS ANTICIPATED TO GENERATE VISITOR TRAFFIC SHALL PROVIDE ONE 2-BIKE CAPACITY RACK FOR 5% OF NEW VISITOR MOTORIZED VEHICLE PARKING SPACES BEING ADDED, WITH A MINIMUM OF ONE 2-BIKE CAPACITY RACK. ADDITIONS OR ALTERATIONS THAT ADD 9 OR FEWER VISITOR VEHICLE PARKING SPACES ARE EXCLUDED. NEW BUILDINGS WITH 10 OR MORE TENANT-OCCUPANTS OR ADDITIONS OR ALTERATIONS THAT ADD 10 OR MORE TENANT VEHICLE PARKING SPACES SHALL PROVIDE SECURE BICYCLE PARKING FOR 5% OF THE TENANT VEHICLE PARKING SPACES BEING ADDED, WITH A MINIMUM OF ONE SECURE BICYCLE PARKING SPACE. ACCEPTABLE PARKING FACILITIES SHALL BE CONVENIENT FROM THE STREET AND SHALL MEET ONE OF THE FOLLOWING: A. COVERED, LOCKABLE ENCLOSURES WITH PERMANENTLY ANCHORED RACKS FOR BICYCLES; B. LOCKABLE BICYCLE ROOMS WITH PERMANENTLY ANCHORED RACKS; OR C. LOCKABLE, PERMANENTLY ANCHORED BICYCLE LOCKERS.	THE PROPOSED PROJECT HEREIN PROPOSES 38 NEW PARKING SPACES. 38X.05 = 2 SHORT TERM AND 2 LONG TERM PARKING SPACES. SEE LEVEL 01 PLAN  THE PROJECT ALSO REQUIRES 125 SPACES IN THE RECENTLY COMPLETED PARKING GARAGE (B0182-18). THIS GARAGE INCLUDES 398 PARKING SPACES SHARED BETWEEN SEVERAL BUILDINGS. THIS PERMIT INCLUDED SHORT TERM AND LONG TERM BICYCLE PARKING AS REQUIRED BY CGC WHICH IS ALSO 5%. THEREFORE, ALL REQUIRED PARKING SPACES INCLUDE ASSOCIATED SHORT TERM AND LONG TERM BICYCLE PARKING.
5. OTHER PARKING AREA DEVELOPMENT STANDARDS	REFER TO ESMC SECTION 15-15-1 THROUGH 15-15-5.	PROVIDED

(SHSP TABLE 2-5) G. ACCESS, LOADING AND TRASH STANDARDS

	REQUIRED	PROVIDED
1. VEHICULAR ACCESS	A. LOTS ADJOINING AN ALLEY ARE PROHIBITED FROM PROVIDING CURB CUTS ALONG STREET FRONTAGES.	N/A (NO ALLEY)
	B. FOR LOTS NOT ADJOINING AN ALLEY, A MAXIMUM OF 1 CURB CUT IS ALLOWED FOR EACH 150 FT OF LOT FRONTAGE ALONG A PUBLIC STREET.	PROVIDED, SEE SITE PLAN
	C. NEW CURB CUTS ALONG FRANKLIN AVENUE ARE PROHIBITED.	NO NEW CURB CUTS PROPOSED ON FRANKLIN AVENUE
	D. CURB CUTS SHALL NOT BE MORE THAN 25 FT IN WIDTH EXCEPT WHERE REQUIRED BY THE CITY TO BE LARGER FOR SAFETY PURPOSES.	PROVIDED, SEE SITE PLAN
2. LOADING	A. NOT REQUIRED IF GROSS BUILDING AREA < 50,000 SF.	SEE B BELOW
	B. REQUIRED IF GROSS BUILDING AREA ≥ 50,000 SF AND/OR REQUIRED FOR THE FOLLOWING USES WHEN THE USE EXCEEDS 2,500 SF IN SIZE: RESTAURANT OR OTHER FOOD SALES AND SERVICE.	PROVIDED, SEE SITE PLAN SHEET 17
	C. ON-SITE LOADING AREAS SHALL BE AT LEAST 18 FT LONG AND 10 FT WIDE. FOR LOTS ADJOINING AN ALLEY, LOADING AREAS SHALL ADJOIN OR HAVE ACCESS FROM THE ALLEY. LOADING SPACES MAY ENCROACH INTO ANY REQUIRED ALLEY SETBACK.	PROVIDED, SEE SITE PLAN SHEET 17
3. REFUSE COLLECTION	A. REFUSE COLLECTION SERVICE SHALL BE CONTRACTED WITH AN APPROVED LOCAL SERVICE PROVIDER. REFUSE COLLECTION AREAS SHALL BE SCREENED PER ESMC SECTION 15-2-8 D.	FULLY SCREENED 125 SF TRASH & RECYCLING AREA IS CONSTRUCTED AS A PART OF THE GARAGE
	B. ON LOTS ADJOINING AN ALLEY, REFUSE COLLECTION STORAGE AREAS SHALL BE ORIENTED TO AND ACCESSED FROM THE ALLEY.	N/A (NO ALLEY)
		

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
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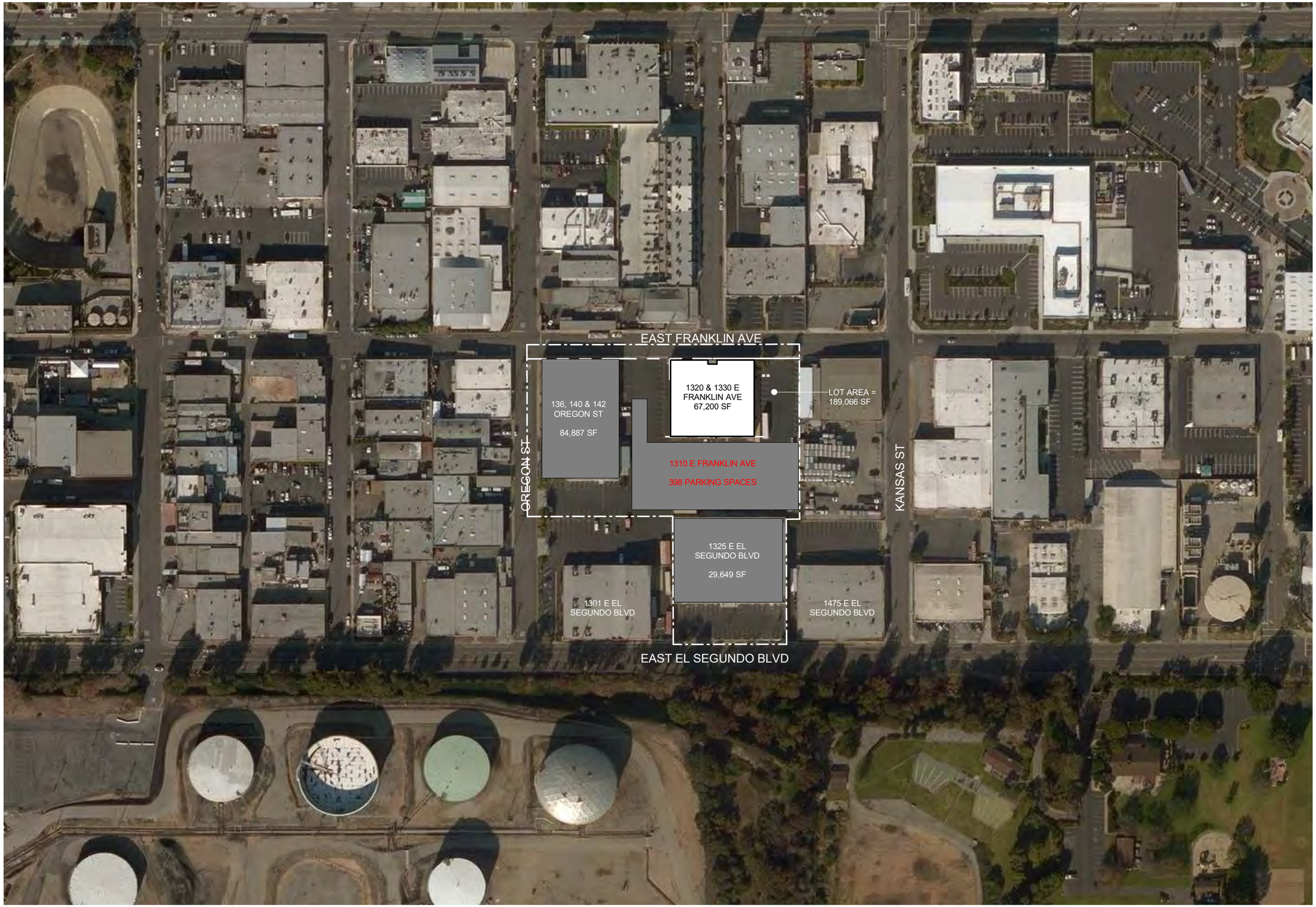
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SMOKY HOLLOW SPECIFIC PLAN ZONING ANALYSIS

08



1 EXISTING AERIAL PLAN
1" = 160'-0"

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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EXISTING AERIAL PLAN



VIEW FROM NORTHEAST



VIEW FROM NORTHWEST



VIEW FROM SOUTHEAST



VIEW FROM SOUTHWEST

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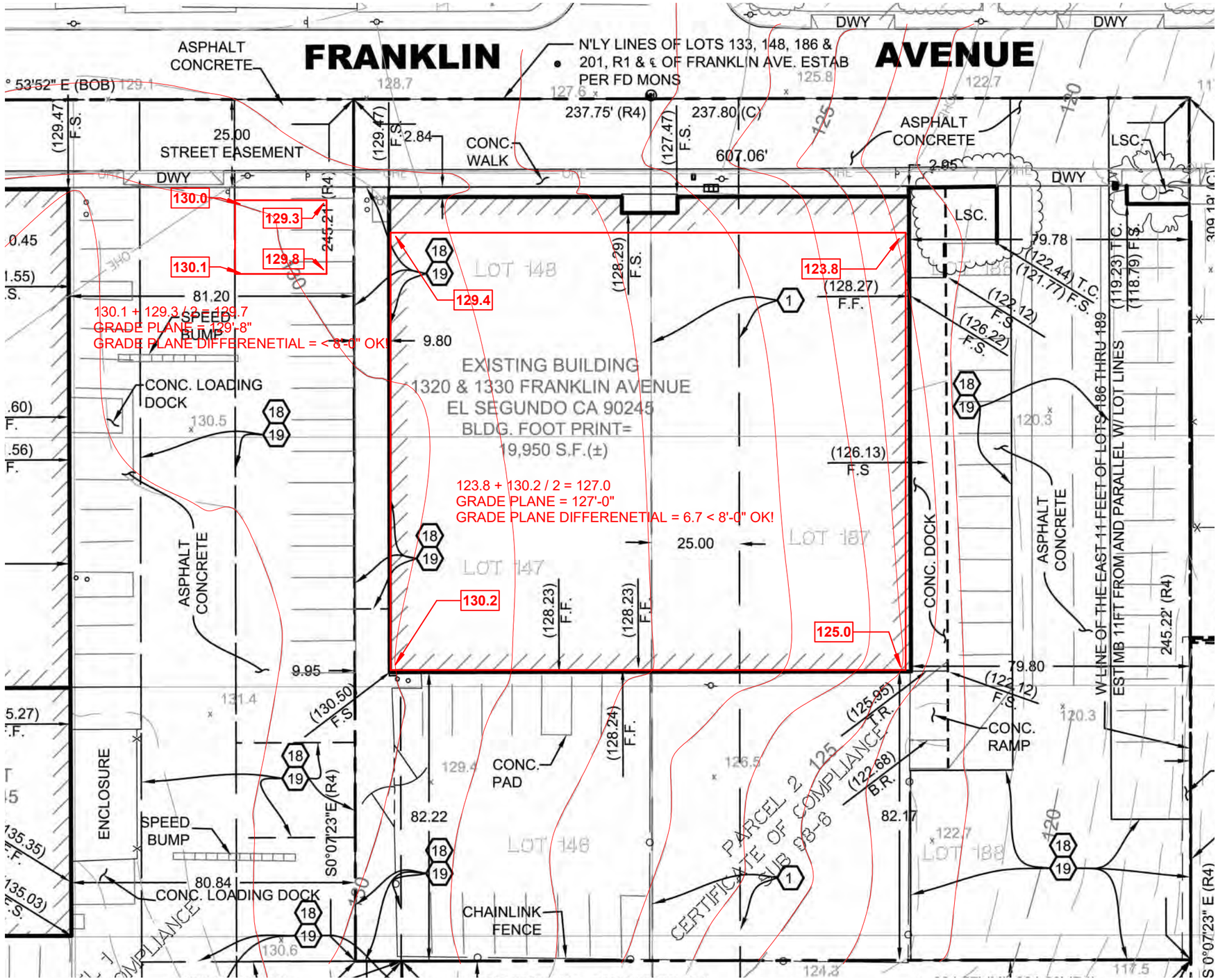
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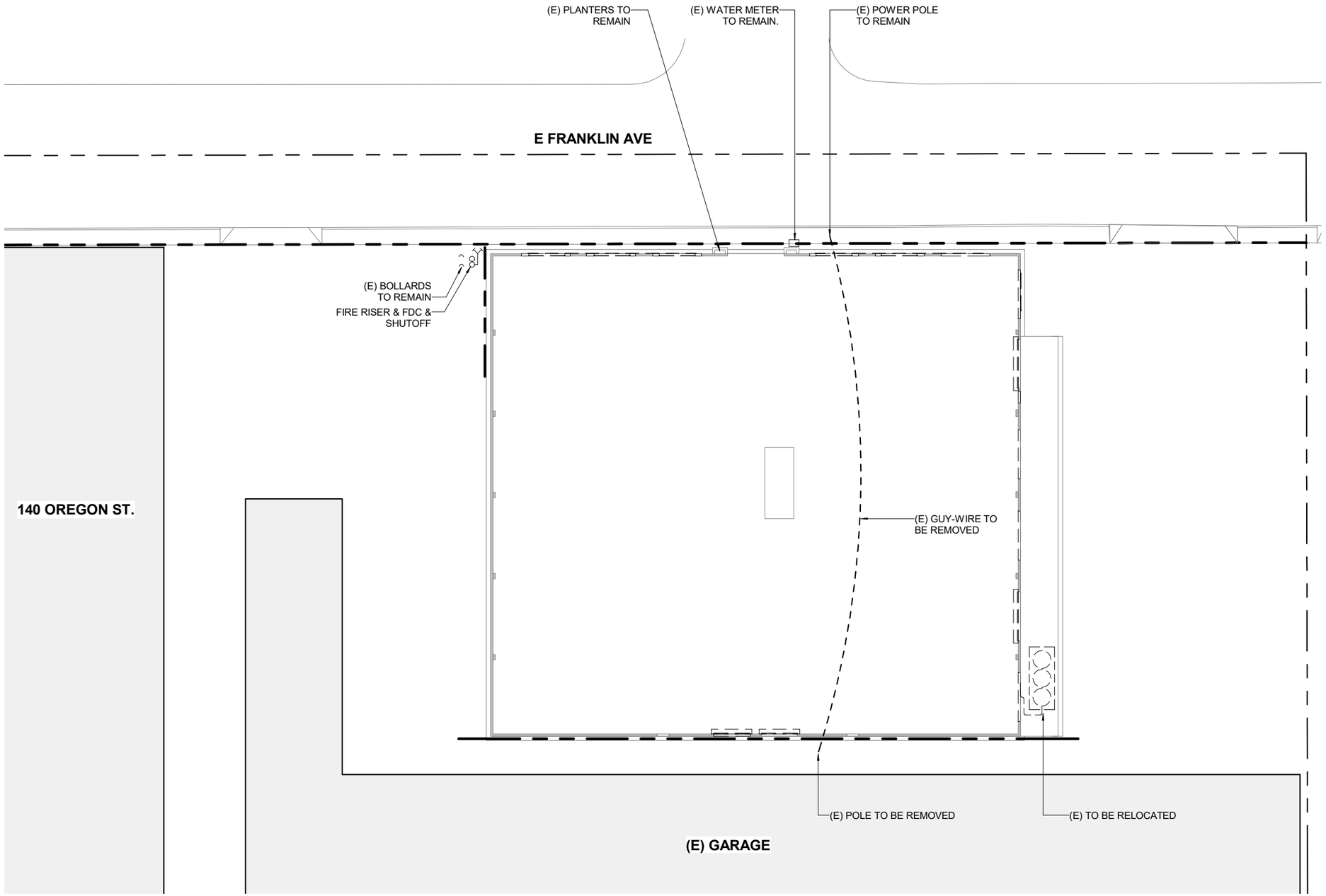
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FINAL SUBMITTAL	-	01.20.2022

PROJECT # 17.019

BIM 360://1320 E. Franklin Avenue/1320 E FRANKLIN - CLOUD.rvt

EXISTING SURVEY & GRADE PLANE



1 SITE PLAN - EXISTING
1" = 30'-0"

N

0' 15' 30' 60'

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
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EL SEGUNDO, CA 90245
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OFFICE 310.616.5040

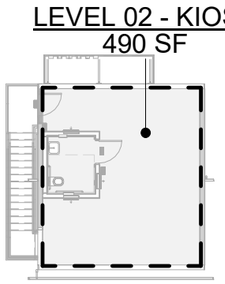
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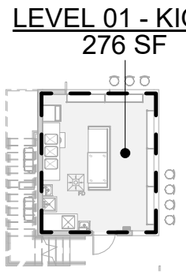
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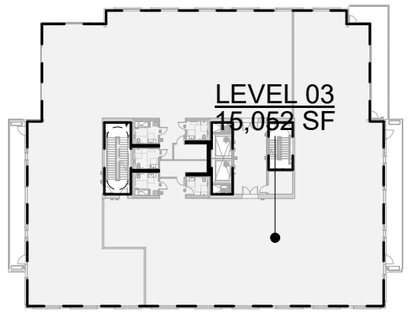
EXISTING SITE PLAN



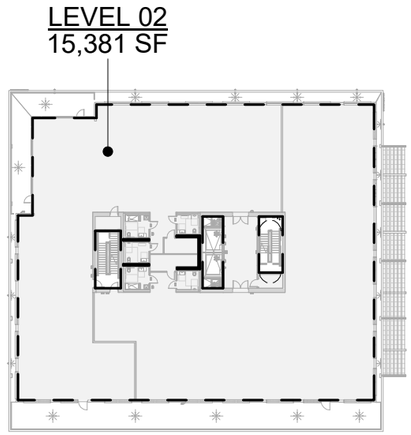
7 LEVEL 02 - FLOOR AREA
1" = 20'-0"



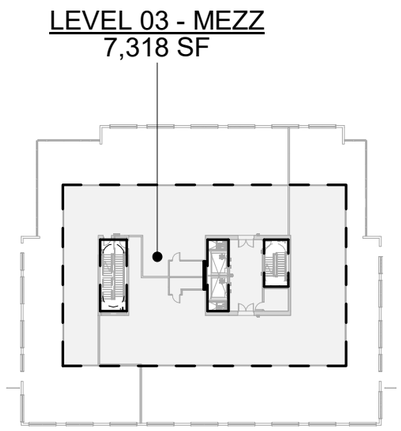
6 KIOSK LEVEL 01 - FLOOR AREA
1" = 20'-0"



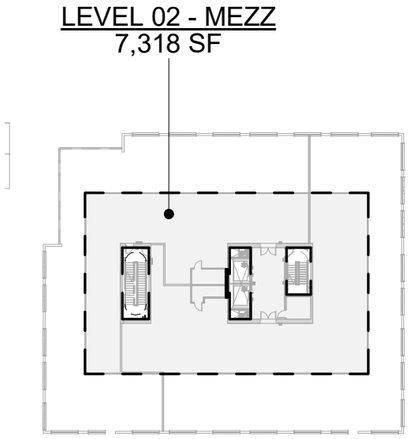
4 LEVEL 03 - FLOOR AREA
1" = 60'-0"



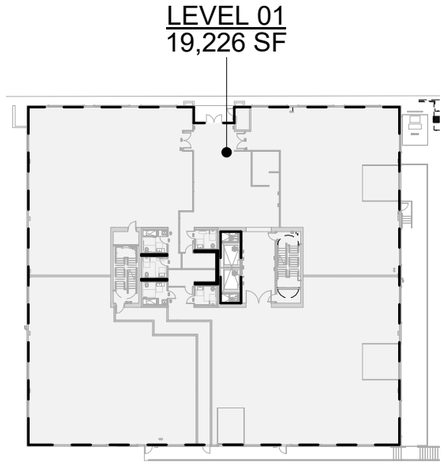
2 LEVEL 02 - FLOOR AREA
1" = 60'-0"



5 LEVEL 03 - MEZZ - FLOOR AREA
1" = 60'-0"



3 LEVEL 02 - MEZZ - FLOOR AREA
1" = 60'-0"



1 LEVEL 01 - FLOOR AREA
1" = 60'-0"

FLOOR AREA SCHEDULE

NAME	AREA
LEVEL 01	19,226 SF
LEVEL 01 - KIOSK	276 SF
LEVEL 02	15,381 SF
LEVEL 02 - KIOSK	490 SF
LEVEL 02 - MEZZ	7,318 SF
LEVEL 03	15,052 SF
LEVEL 03 - MEZZ	7,318 SF
Grand total	65,061 SF

SMOKY HOLLOW SPECIFIC PLAN -GLOSSARY

FLOOR AREA (GROSS): The area included within the surrounding exterior walls of a building or portion thereof, exclusive of garages, vent shafts and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
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STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

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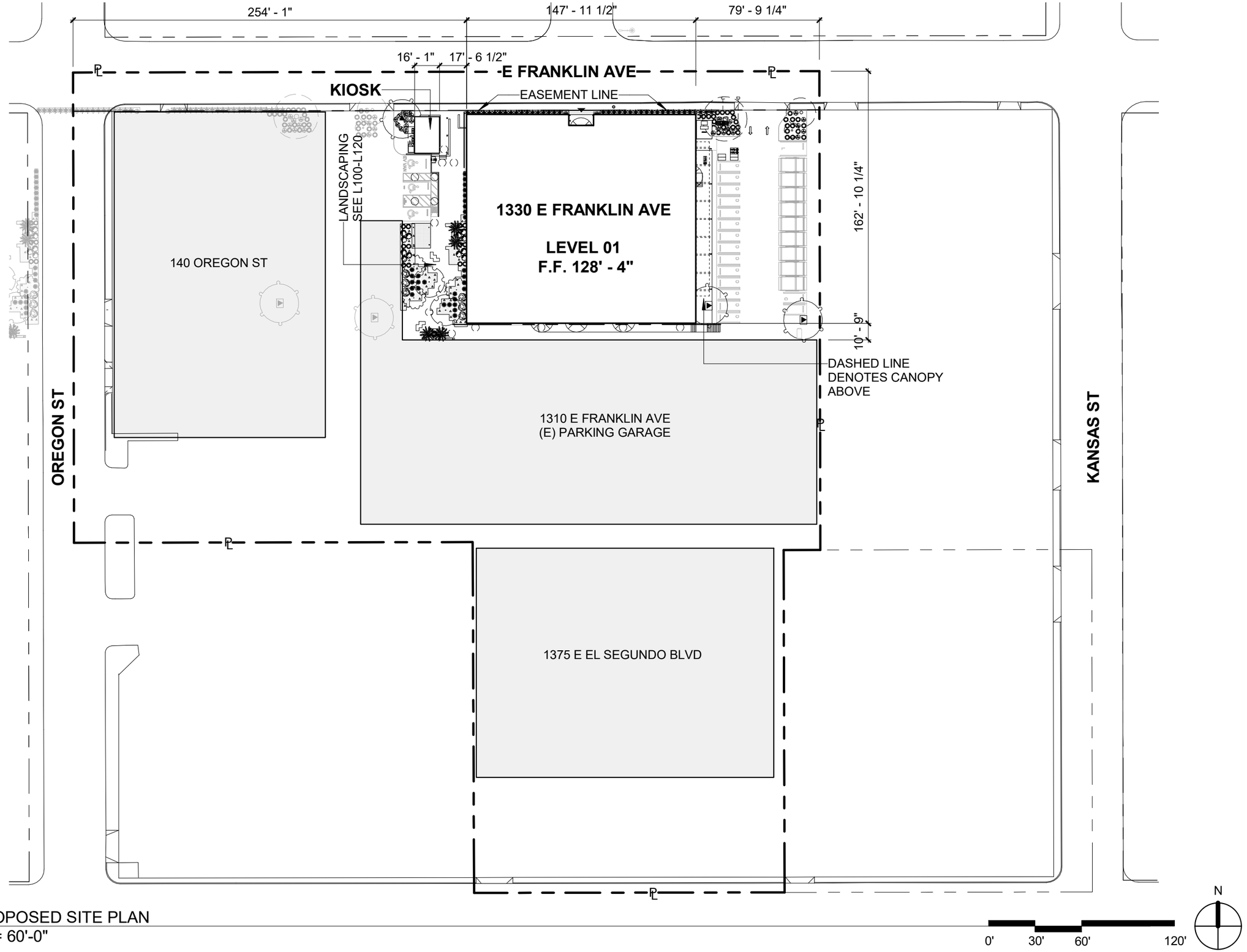
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"FLOOR AREA" DIAGRAMS



1 PROPOSED SITE PLAN
1" = 60'-0"

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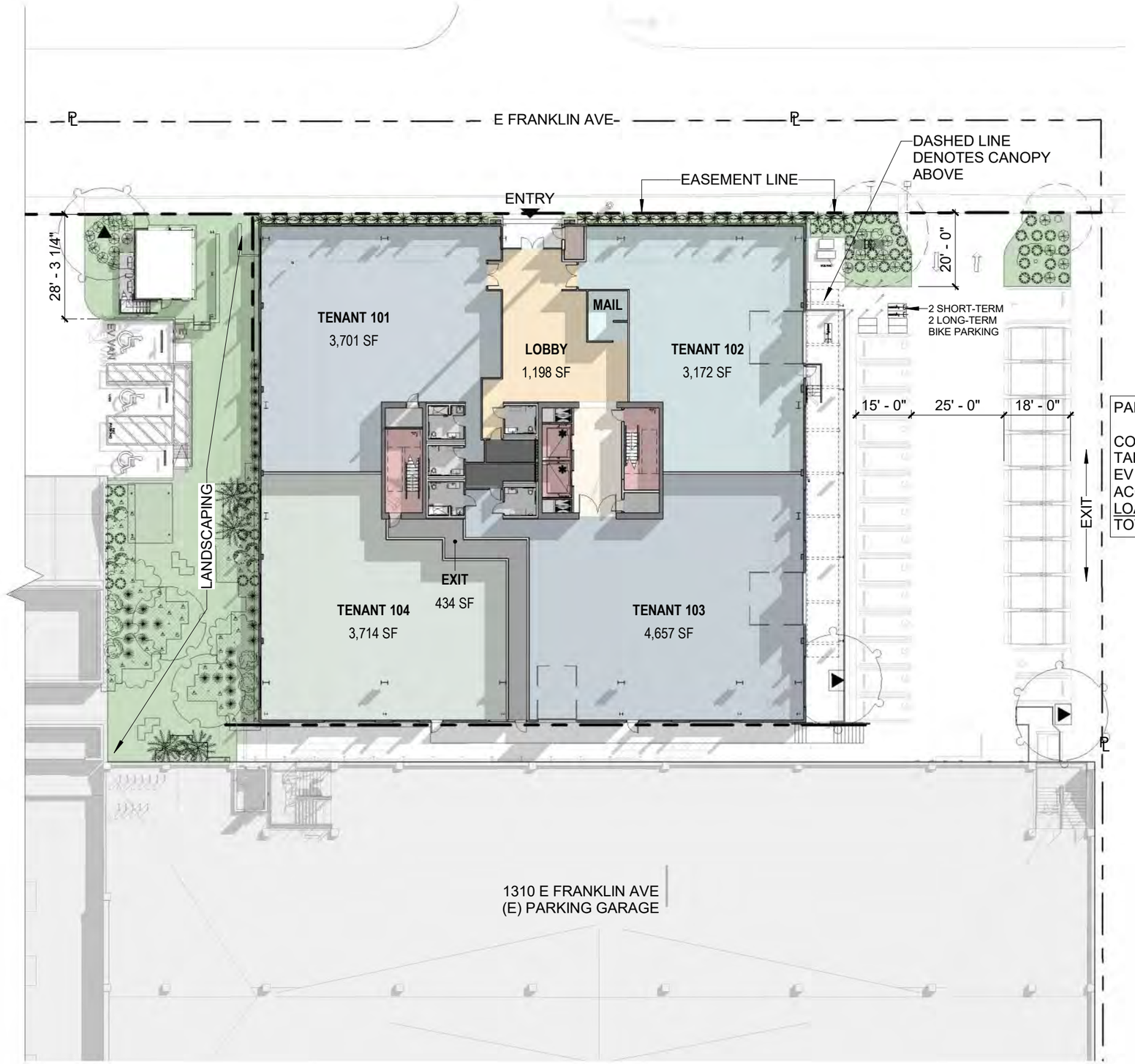
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PROPOSED SITE PLAN



PARKING STALL BREAKDOWN:

COMPACT	=	16
TANDEM	=	18
EV VAN	=	01
ACCESSIBLE	=	02
LOADING	=	01
TOTAL	=	38

1 LEVEL 01
1" = 30'-0"

0' 15' 30' 60'

N

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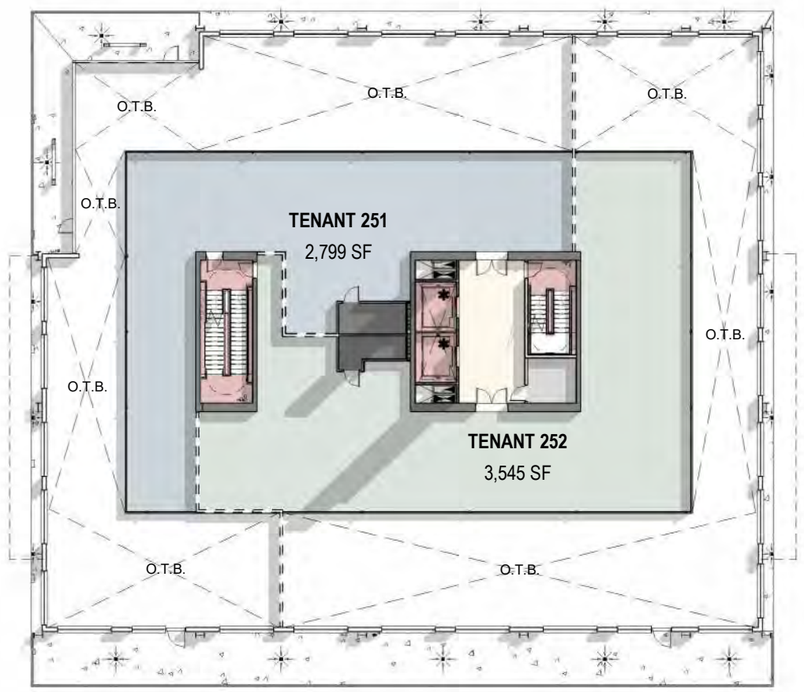
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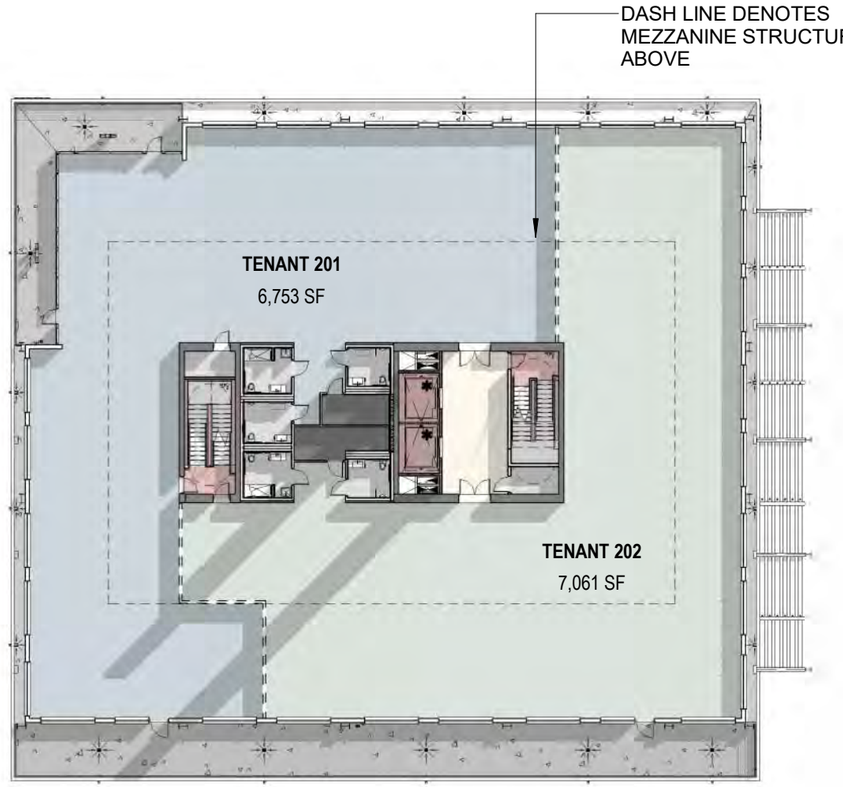
FLOOR PLAN LEVEL 01



2 LEVEL 02 - MEZZ
1" = 30'-0"

N

0' 15' 30' 60'



1 LEVEL 02
1" = 30'-0"

N

0' 15' 30' 60'

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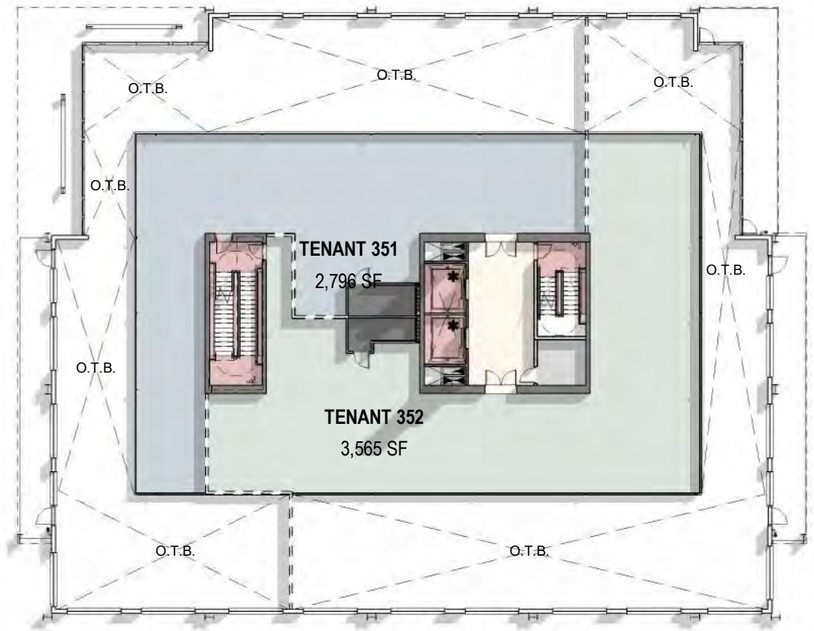
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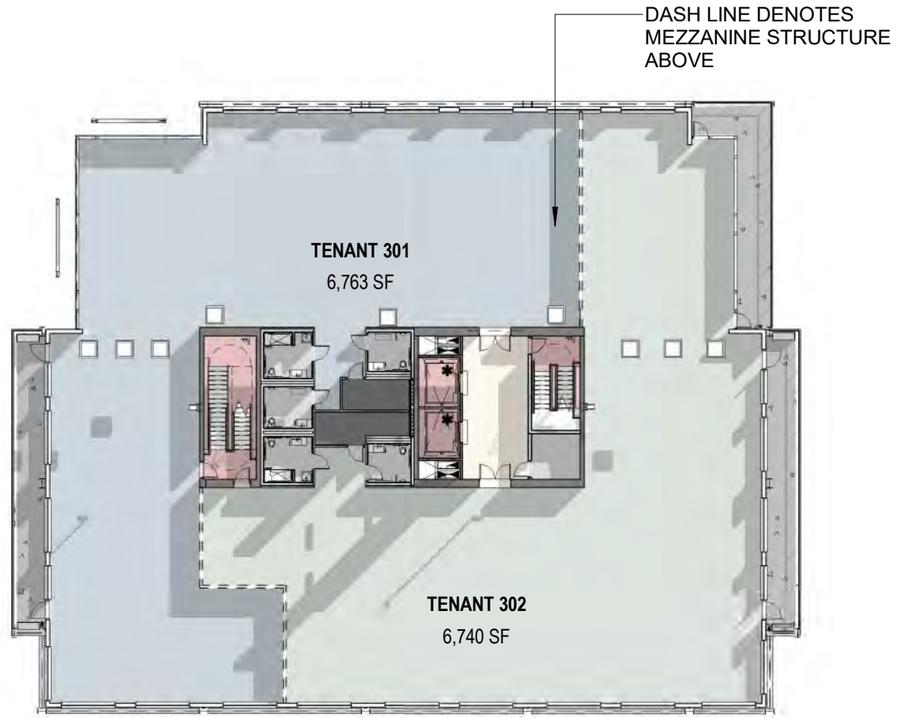
FLOOR PLANS LEVELS 02 & MEZZANINE



2 LEVEL 03 - MEZZ
1" = 30'-0"

N

0' 15' 30' 60'



1 LEVEL 03
1" = 30'-0"

N

0' 15' 30' 60'

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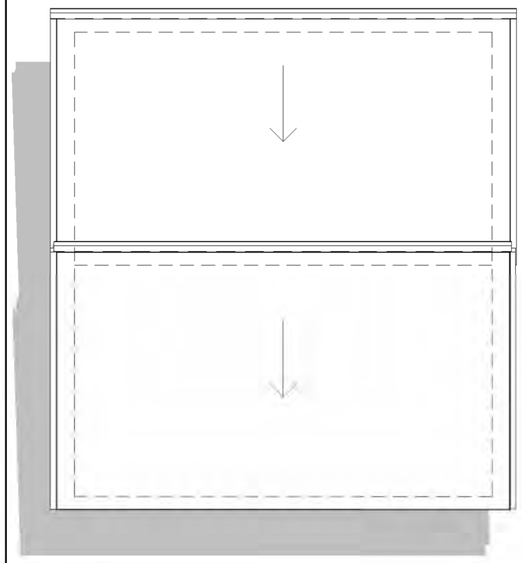
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FLOOR PLANS
LEVEL 03 &
MEZZANINE



5 KIOSK ROOF - FLOOR PLAN
1/8" = 1'-0"

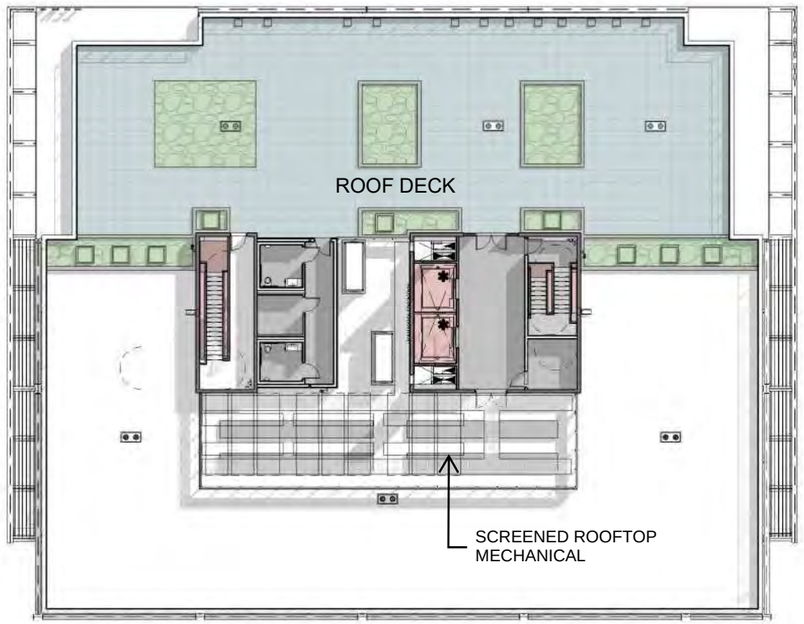


3 KIOSK LEVEL 02 - FLOOR PLAN
1/8" = 1'-0"



2 KIOSK LEVEL 01 - FLOOR PLAN
1/8" = 1'-0"

N
0' 4' 8' 16'



1 ROOF
1" = 30'-0"

N
0' 15' 30' 60'

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ARCHITECTS
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ROOF PLAN & CAFE PLANS





FRANKLIN AVENUE TRANSPARENCY DIAGRAM

723 SF / 1,668 SF = 43% >15% = OK!
(THE TRANSPARANCY IS MORE THAN DOUBLE THE MINIMUM REQUIRED PER SHSP)

1 NORTH ELEVATION (FRANKLIN AVE)
1" = 20'-0"

 ARCHITECTURAL GRADE EXPOSED CONCRETE	AC-1 ARCHITECTURAL CONCRETE	 SOLITAIRE-LED BY KING LUMINARES	LF-4 PERIOD WALL SCONCE		GW-1 CLIMBING VINES		MT-1 POWDER COAT FINISH		AC-2 BOARD FORMED CONCRETE		MT-2 TNEMEC COATING
	WD-1 WOOD PLANKS		CMU-1 CMU BLOCK		BM-1 (E) BRICK						

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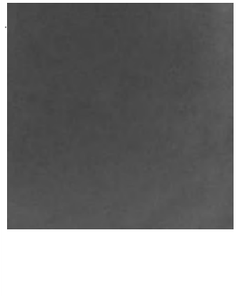
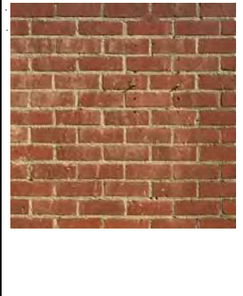
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ELEVATION NORTH (FRANKLIN AVE)



1 EAST ELEVATION
1" = 20'-0"

 ARCHITECTURAL GRADE EXPOSED CONCRETE	AC-1 ARCHITECTURAL CONCRETE	 SOLITAIRE-LED BY KING LUMINARES	LF-4 PERIOD WALL SCONCE		GW-1 CLIMBING VINES		MT-1 POWDER COAT FINISH		AC-2 BOARD FORMED CONCRETE		MT-2 TNEMEC COATING
	WD-1 WOOD PLANKS		CMU-1 CMU BLOCK		BM-1 (E) BRICK						

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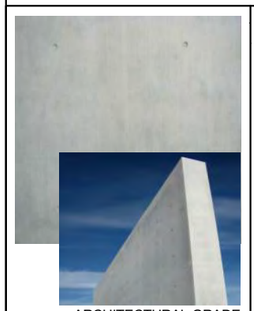
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ELEVATION EAST



1 WEST ELEVATION
1" = 20'-0"



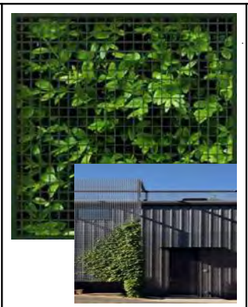
ARCHITECTURAL GRADE EXPOSED CONCRETE

AC-1 ARCHITECTURAL CONCRETE

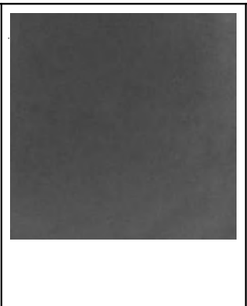


SOLITAIRE-LED BY KING LUMINARES

LF-4 PERIOD WALL SCONCE



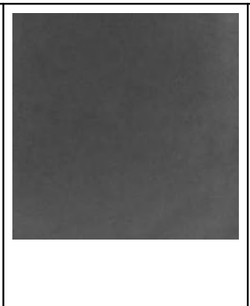
GW-1 CLIMBING VINES



MT-1 POWDER COAT FINISH



AC-2 BOARD FORMED CONCRETE



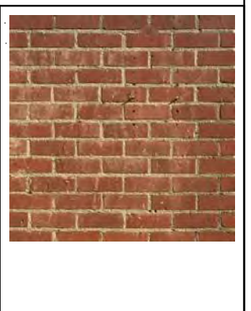
MT-2 TNEMEC COATING



WD-1 WOOD PLANKS



CMU-1 CMU BLOCK



BM-1 (E) BRICK

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
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OFFICE 310.616.5040

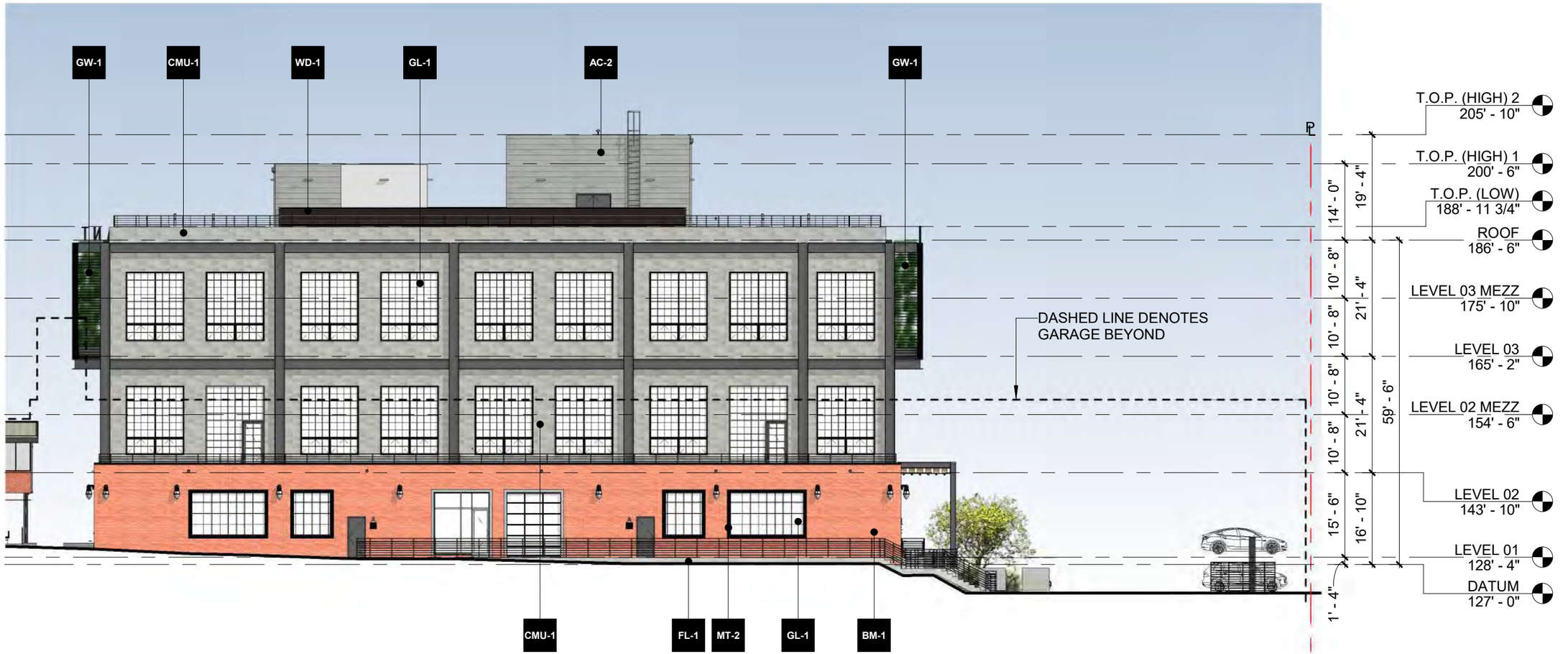
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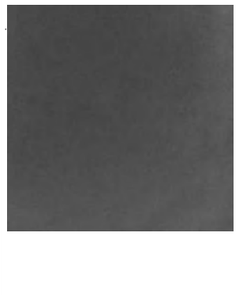
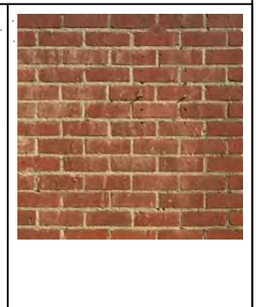
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ELEVATION WEST



1 SOUTH ELEVATION
1" = 20'-0"

 ARCHITECTURAL GRADE EXPOSED CONCRETE	AC-1	ARCHITECTURAL CONCRETE	 SOLITAIRE-LED BY KING LUMINARES	LF-4	PERIOD WALL SCONCE		GW-1	CLIMBING VINES		MT-1	POWDER COAT FINISH		AC-2	BOARD FORMED CONCRETE		MT-2	TNEMEC COATING		WD-1	WOOD PLANKS		CMU-1	CMU BLOCK		BM-1	(E) BRICK

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EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
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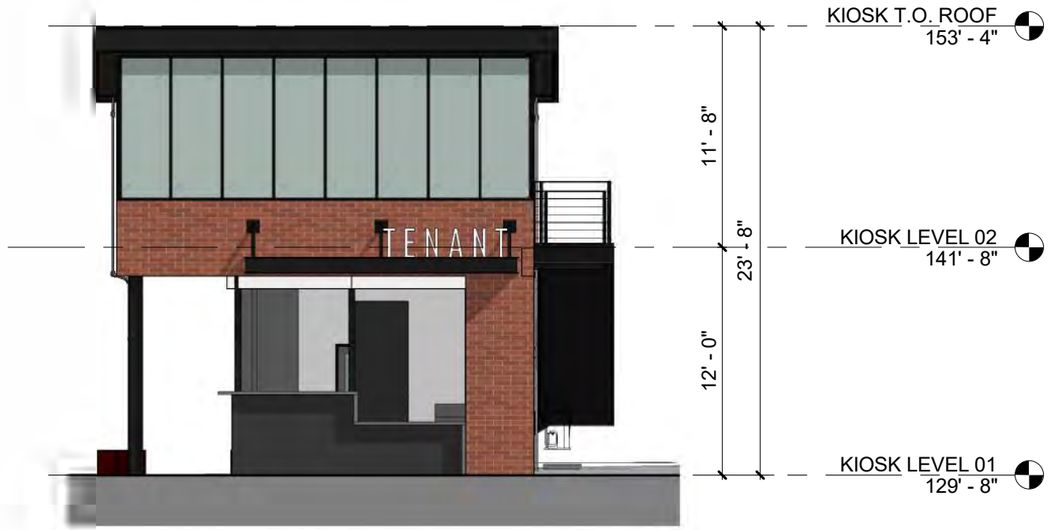
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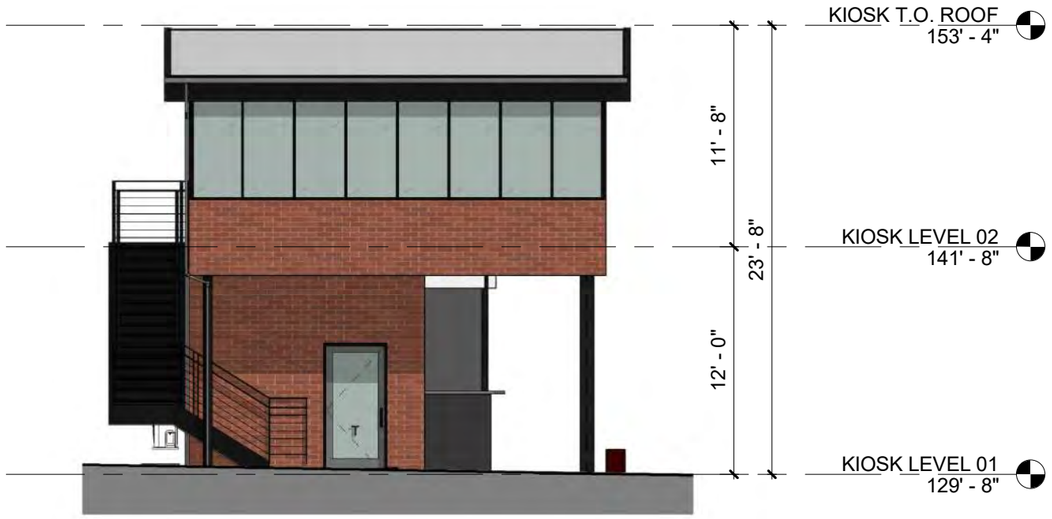
ELEVATION SOUTH



4 KIOSK - WEST ELEVATION DA
1/8" = 1'-0"



2 KIOSK - NORTH ELEVATION DA
1/8" = 1'-0"



3 KIOSK - SOUTH ELEVATION DA
1/8" = 1'-0"



1 KIOSK - EAST ELEVATION DA
1/8" = 1'-0"

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KIOSK ELEVATIONS

Group A

		yes	no	n/a	criteria	
Enhance Building Character	A1	1			Build on the quality industrial character	The proposed design is a complimenting contemporary industrial esthetic with the use of exposed steel and large industrial windows and features
	A2	1			Convey a sense of old and new	The proposed design entirely preserves the existing red brick building at the ground level and proposes a complimenting industrial structure that embraces the existing structure and builds out of it above the 2nd floor.
	A3	1			Build upon existing context	The proposed structure stays within the existing footprint and creates accessible decks at the roof level of the existing structure preserving and adding to the original architecture.
	A4	1			Conserve and retain the character-defining features	The proposed design entirely preserves the existing red brick building at the ground level also retaining and enhancing the existing entries and openings on all sides.
	A5	1			Encourage additions that complement (E) character-defining features	The proposed design complements the existing large industrial window openings and entries and is an overall complimenting mid-century architecture above with the use of stacked bond block and other similar materials.
	A6	1			Incorporate small, medium, and large scales	The proposed design includes several interlocking scale elements. The exposed super-structure creates a large grid in which large window openings are located in which smaller window grids are utilized creating a sort of Russian nesting doll effect. Additionally, there are large corner single and double story cut-outs and setbacks on multiple levels with balconies extending forward breaking up the facade in large and small scales.
	A7	1			Emphasize design at the pedestrian level	The proposed design includes new landscaping the entire length of Franlin Ave. Additionally vertical landscaping is proposed at the West and East elevaitons at level 3 balconies. An entirely new public park and café fronting Franklin Avenue creating seating and dining/cafe areas at pedestrian level.
	A8	1			Specify 360° architecture	The proposed architecture is developed at a similar design on all 4 sides creating a 360 degree architectural expression.
	A9	1			Enhance entry expression	The proposed architecture enlarges, frames and emphesizes the existing primary entry on Franklin but both NE and SE corners architecturally emphesize "visual arrival" with recenssed corners.
	A10	1			Encourage the use of roll-up doors & sliding walls at street frontages	The proposed design includes a roll-up door at the east elevation.
	A11	1			Orient secondary entries to alleys	The proposed design includes secondary entries toward the East of the property along a raised deck and the rear of the property. The east and south side are technically not an alley but its certainly a private alley of sorts accessible by pedestrians and vehicles. There should be no destinction between a public alley and private alleys. They are physically the same thing.
	A12	1			Incorporate different materials, colors, and textures	The proposed design includes several differing materials, colors and textures: Red Brick, Medium Gray Block, Black Steel, Corten, Architectural Board Formed Concrete and glass and colorful landscaping
		12				

Group B

		yes	no	n/a	criteria	
Facilitate Gathering	B1	1			Form an active street wall	The proposed design includes landscaping and recessed entry on the north side and a raised shaded deck on the east side. The north side is entirely a public park with landscaping.
	B2			1	Provide street corner plazas	
	B3	1			Develop outdoor gathering spaces	The proposed design includes a large public park on street level, a raised and shaded deck on the east side at street level, accessible deck at level 2 and protruding and recesed balconies on level 3. Additionally the roof includes a large outdoor deck/patio.
	B4			1	Provide alley-facing gathering spaces	
	B5	1			Provide ease of access	The proposed design includes 3 pedestrian entries on 3 sides as well as 2 vehicular entries and a controlled traffic pattern for safety. Additionally the tenants on the ground floor will each have separate entries and exists from Franklin street and the rear and east side of the building
	B6	1			Enhance surface parking	The proposed design includes all new landscaping on the north side of the parking areas along Franklin Ave on both sides. Additionally, providing create stacked parking is another way to enhance surface parking areas with efficient parking solutions that utilize state of the art technology.
	B7		1		Use enduring, quality paving materials	
	B8	1			Provide street furniture	The proposed design includes street furniture at the NE at the public park and seating at the café fronting Franklin Avenue.
	B9	1			Use exterior lighting to accentuate safety and design	The proposed project will include period lighting throughout the site on all sides creating lighting for pedestrians for added safety.
	B10		1		Provide Wi-Fi hotspots	
		6				

Group C

		yes	no	n/a	criteria	
Incorporate Landscape &	C1	1			Design layered and lush landscaping	The proposed landscaping design includes layered and lush planting both horizontally and vertically. See Landscape Sheets.
	C2	1			Select drought-tolerant and native plants	The proposed landscaping includes drought-tolerant and native planting throughout. See Landscape Sheets.
	C3	1			Utilize planters and pots to provide greenery	The proposed landscaping includes pots & planters at level 3 balcony and roof and at the streetside public park.
	C4	1			Improve landscaping in parking areas	The proposed parking area includes landscaping on the north side of both parking isles.
	C5	1			Use fences and walls as an extension of the architecture	The proposed design includes an architecturally complimenting side wall of the café structure with vertical landscaping.
	C6	1			Utilize natural light	The proposed design utilizes large windows for double story spaces with mezzanines pushing natural light from all sides deep into the building.
		6				

Group D

		yes	no	n/a	criteria	
Encourage Connectivity	D1	1			Install bike facilities. If "yes," total bike storage spaces provided:	4
		1			Required:	4
						0

Group E

		yes	no	n/a	criteria	
Signage, Way Finding, & Public	E1	1			Design signs as an integral component	The proposed design includes integrated tenant signage.
	E2	1			Incorporate way-finding through integral design	The proposed design includes architecturally integrated way-finding signage for vehicular and pedestrian traffic.
	E3	1			Encourage public art	Large Scale Public Art
		3				

PUBLIC REALM

		yes	no	n/a	criteria
Public Realm	PR1			1	Undergrounding Utilities
	PR2			1	Approved Public Infrastructure

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

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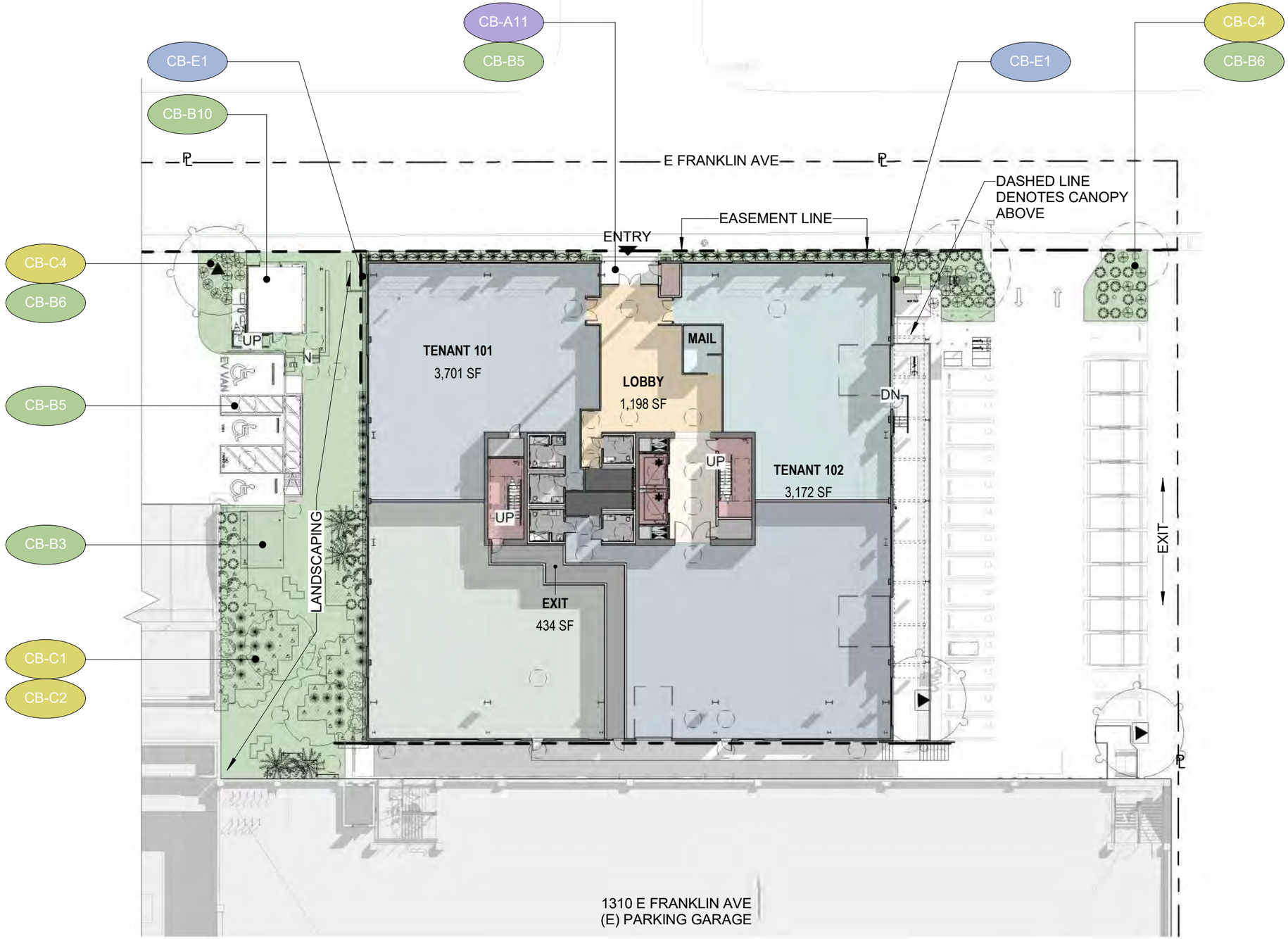
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COMMUNITY BENEFITS TABULATION WORKSHEET



1 LEVEL 01
1" = 30'-0"

0' 15' 30' 60'

N

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ARCHITECTS
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COMMUNITY BENEFITS - FLOOR PLAN LEVEL 01



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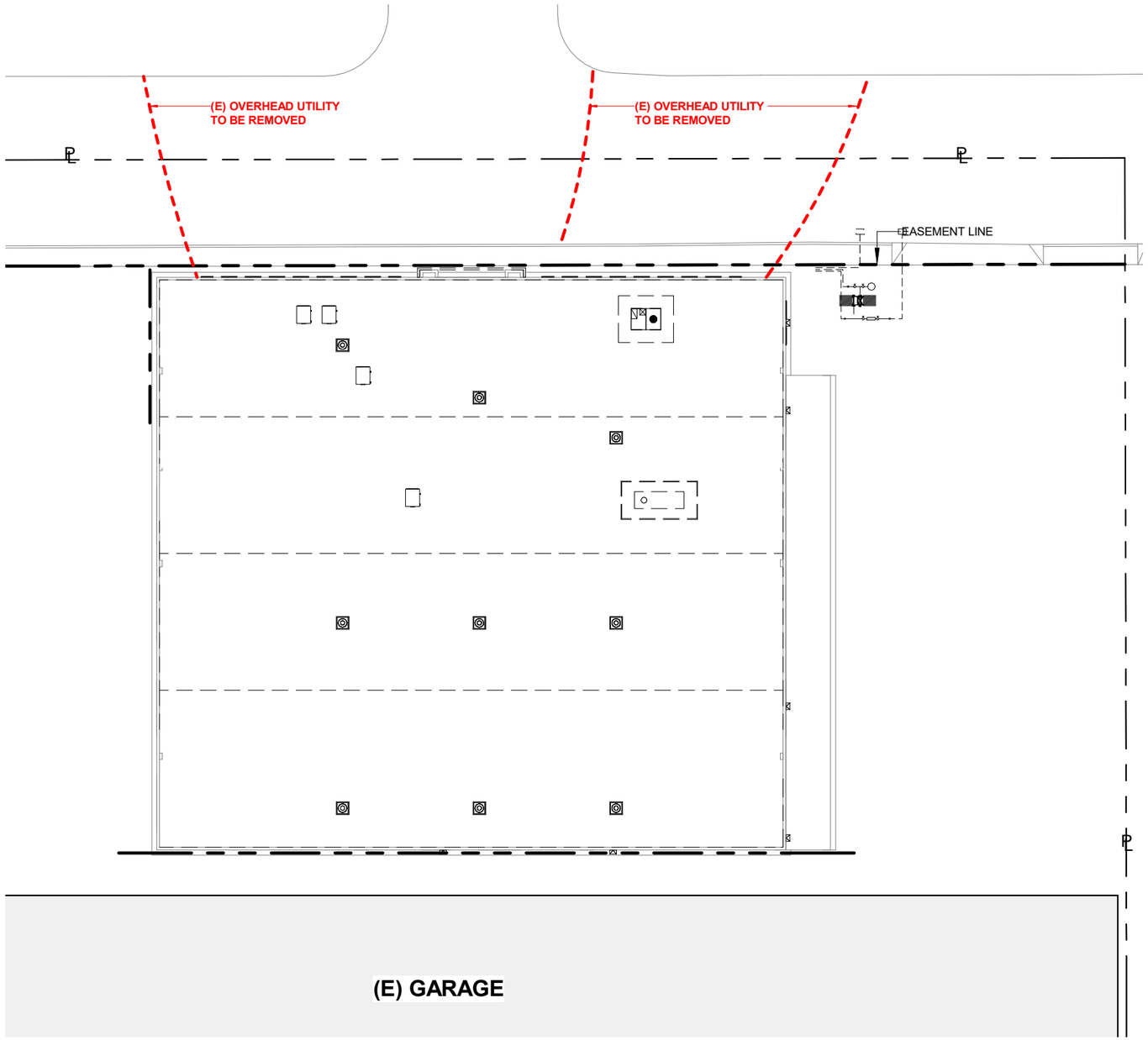
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1 SITE PLAN - PUBLIC UTILITIES
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BIM 360://1320 E. Franklin Avenue/1320 E FRANKLIN - CLOUD.rvt

COMMUNITY BENEFITS - PUBLIC REALM

FRANKLIN AVENUE



PICNIC TABLE

CAFE TABLE

I-BEAM BENCH

I-BEAM

PRECAST BEAM BENCH

N

0' 20' 40'

SCALE: 1" = 20'

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EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
310.616.5040

1320 & 1330 FRANKLIN AVE

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Pocket Park Conceptual Landscape Plan

L110

POCKET PARK RENDERING



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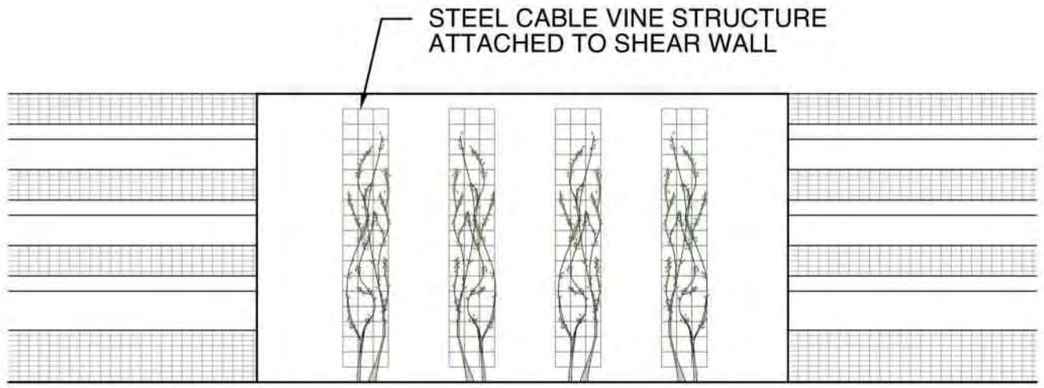
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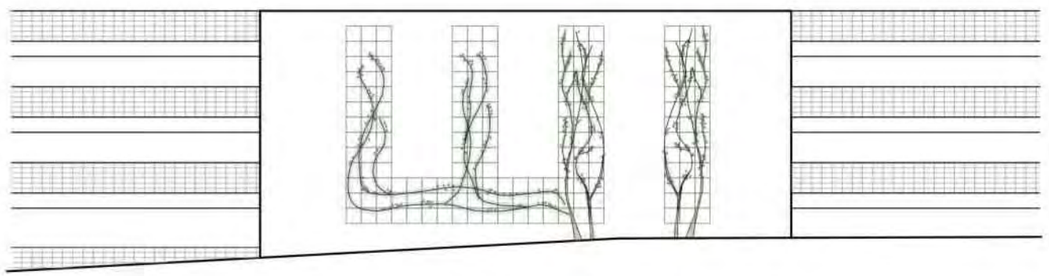
POCKET PARK RENDERING

L120

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PARKING GARAGE SOUTH ELEVATION



PARKING GARAGE NORTH ELEVATION

SCALE: 1" = 20'



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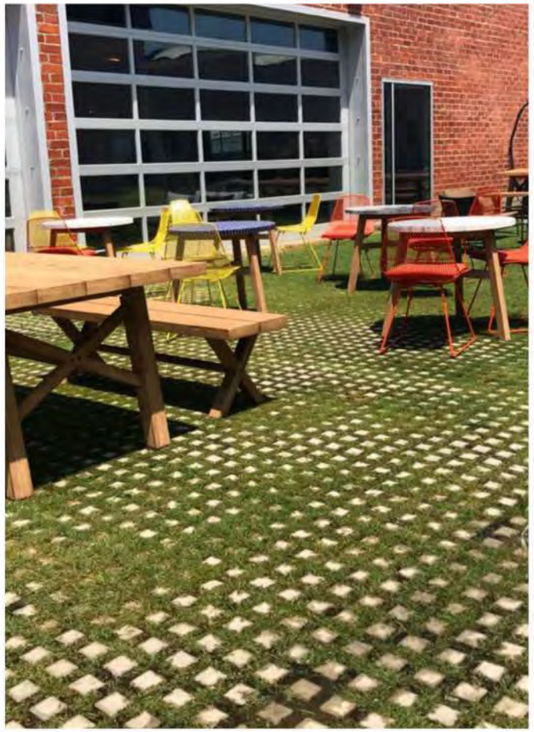
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PARKING STRUCTURE VINE PANELS

L130

MATERIALS



Driveable Grass, pocket park paving





Petroliana



FURNITURE



Colorful metal and wood commercial pieces to complement custom items





BIKE AMENITIES







OVER STRUCTURE PLANTING

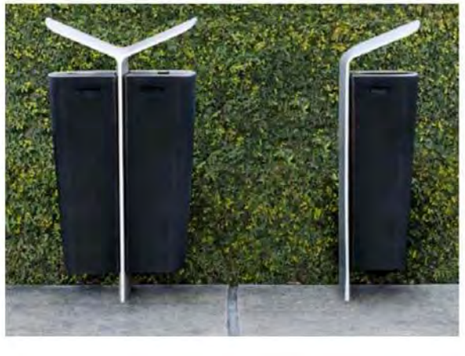


Tree planters



Low profile planters





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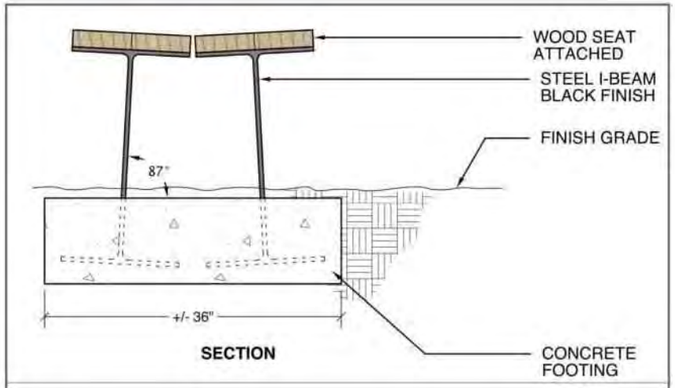
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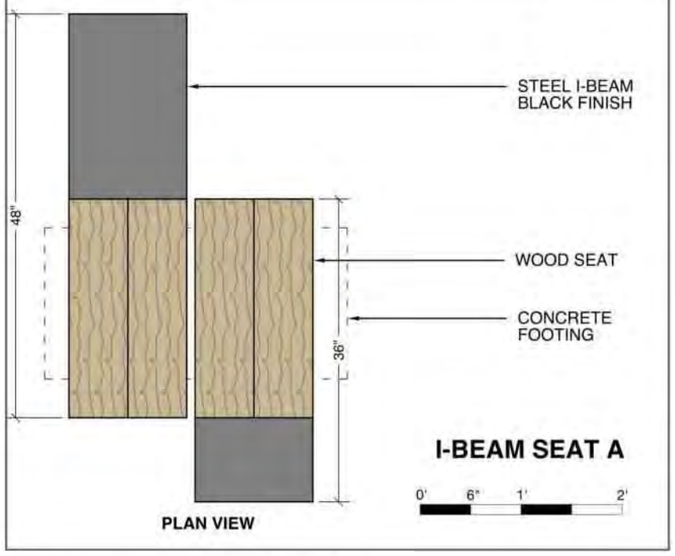
LANDSCAPE MATERIALS

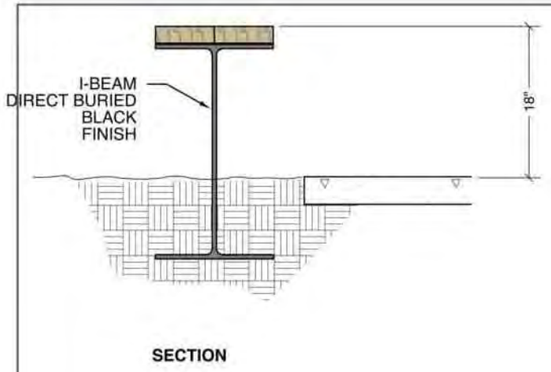
L200

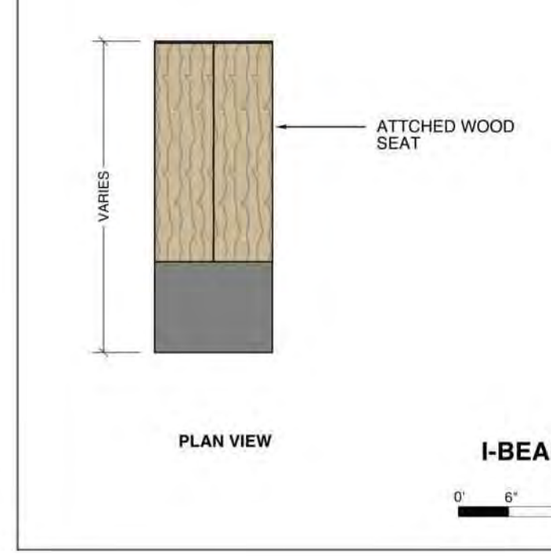
MATERIALS

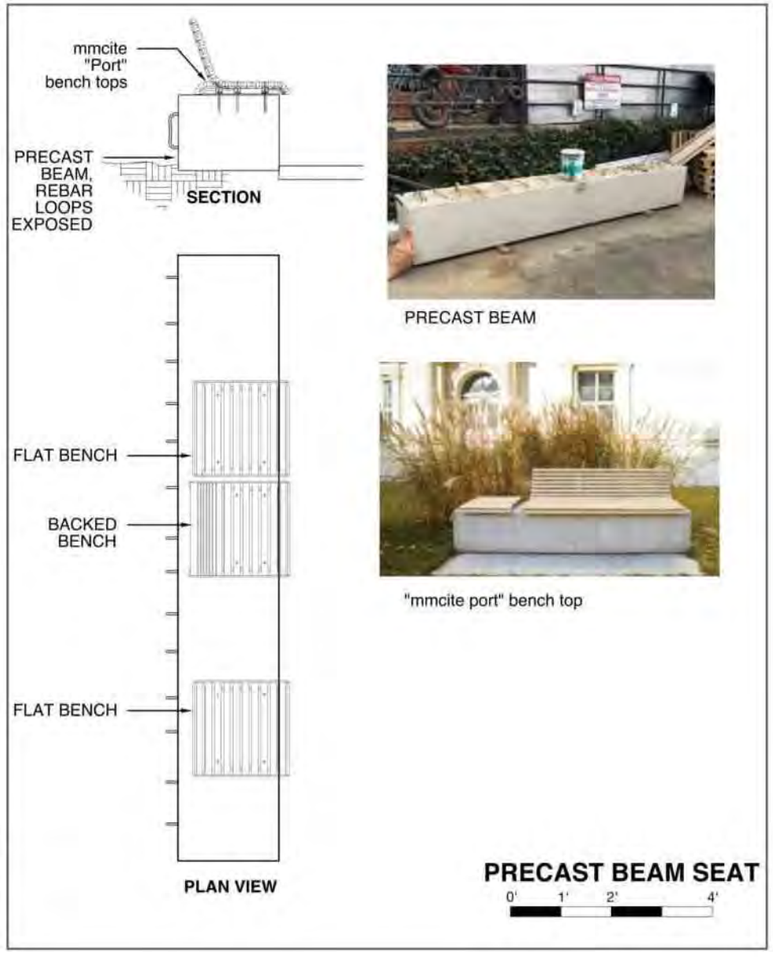
CUSTOM FURNITURE











PRECAST BEAM

"mmcite port" bench top

Custom furnishings made from industrial site materials to complement those on building

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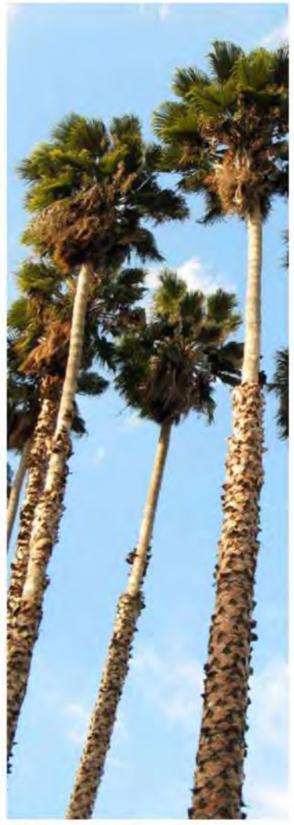
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LANDSCAPE MATERIALS

L210

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PLANT PALETTE - TREES



Washingtonia robusta
Mexican Fan Palm
Evergreen to 100' H x 10'W



Ginkgo biloba 'Autumn Gold'
Autumn Gold Maidenhair Tree
Deciduous 40' H x 30'W
golden fall color



Agonis flexuosa Peppermint Willow
Evergreen 25' - 35' H x 15' -30'W



Cotinus coggygria Smoke Tree
Deciduous 10'-15' H x 10'-18' W

GRASS AND GRASS-LIKE



Bouteloua gracilis 'Blond Ambition'
Blond Ambition Grama Grass
Evergreen / 1'-2' H x W
red bloom spring - summer



Lomandra longifolia 'Breeze'
Dwarf Mat Rush
Evergreen / 2'- 3' H x 2'-4' W
red bloom spring - summer



Muhlenbergia capillaris 'Lendca'
Regal Mist Pink Mulhy Grass
Evergreen / 4' H x 3 W
pink flowers late summer - fall



Nassella tenuissima
Mexican Feather Grass
Evergreen /1'-2' H x W
golden summer - fall

SHRUBS



Pittosporum 'Silver Sheen'
Silver Sheen Kohuhu
Evergreen / 12' H x 6' W



Coprosma repens 'Pacific Sunset'
Pacific Sunset Mirror Plant
Evergreen / 5' H x 3'W
red foliage



Rhaphiolepis umbellata 'Minor'
Dwarf Yeddo Hawthorn
Evergreen / 4'- 6' H x 2'-3' W
white flowers spring



Hesperaloe 'Brakelights'
Brakelights Red Yucca
Evergreen / 2'- 3' H x W
red bloom spring - summer



Asclepias curassavica 'Silky Deep Red'
Red Butterflyweed
Evergreen /3'-4' H x 2'-3' W
red-orange flowers Summer - attracts butterflies

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LANDSCAPE MATERIALS

L220

PLANT PALETTE - VINES

SOUTH FACING / SUNNY



Wisteria sinensis. CHINESE WISTERIA
Deciduous, Climbing



DIstictus buccinatoria, BLOOD RED TRUMPET VINE
Evergreen, 20-30 ft



Akebia quinata, CHOCOLATE VINE
Semi-Evergreen, 15-30 ft

NORTH FACING / SHADY



Stephanotis floribunda, MADAGASCAR JASMINE
Evergreen, 15-30 ft.



Lonicera hildebrandiana, GIANT BURMESE HONEYSUCKLE
Evergreen, 30ft



Akebia quinata, CHOCOLATE VINE
Semi-Evergreen, 15-30 ft

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LANDSCAPE MATERIALS

L230

Development Plans South Site



STANDARD WORKS

EL SEGUNDO, CALIFORNIA
PARCEL A

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E EL SEGUNDO

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COVER

01

EXECUTIVE SUMMARY

GENERAL OVERVIEW AND GRAND VISION
THE “STANDARD WORKS” PARCEL A PROJECT IS A 43,966 SF PARCEL BOUND BY EAST EL SEGUNDO BOULEVARD ON THE SOUTH AND KANSAS STREET ON THE EAST. PRESERVATION OF THE EXISTING 1950'S MID-CENTURY RED BRICK FACADE IS AN OBJECTIVE OF THE DESIGN AND THE SMOKY HOLLOW SPECIFIC PLAN. THE GRAND VISION OF THE DEVELOPMENT IS A DESIGN THAT ENHANCES THE EXISTING INDUSTRIAL AESTHETIC OF THE NEIGHBORHOOD BY PRESERVING FACADES AND UTILIZING SIMILAR INDUSTRIAL BUILDING MATERIALS AND TECHNIQUES TO CREATE A COHESIVE ARCHITECTURAL EXPRESSION BETWEEN THE EXISTING AND THE PROPOSED DEVELOPMENTS. THIS MIX OF UNIQUE OLD AND NEW ECLECTIC BUILDINGS IS ENTICING TO PROSPECTIVE CREATIVE AND KNOWLEDGE-BASED BUSINESSES ACROSS MANY INDUSTRIES. THE LIVELY AND PEDESTRIAN FRIENDLY CREATIVE ATMOSPHERE OF STANDARD WORKS WILL CONTRIBUTE TO THE ONGOING SMOKY HOLLOW TRANSFORMATION TO AN INCUBATOR DISTRICT AND MAJOR ECONOMIC FORCE IN THE CITY.

USE
THE CURRENT USES OF THE EXISTING STRUCTURE IS LIGHT INDUSTRIAL WITH ASSOCIATED ACCESSORY GENERAL OFFICE AND WAREHOUSE. THE USE OF THE EXISTING FLOOR AREA (LEVEL 01) WILL BE CONVERTED TO CREATIVE OFFICE. THE PROPOSED NEW FLOOR AREA SHALL BE A COMBINATION OF LIGHT INDUSTRIAL AND TECHNOLOGICAL USES INCLUDING R&D.

FLOOR AREA
THE PROJECT PROPOSES 44,604 SF IN ADDITION TO THE EXISTING 19,311 SF, FOR A TOTAL OF 63,915 SF. AT THE COMPLETION OF THE PROPOSED PROJECT THE SITE WILL HAVE A FLOOR AREA RATIO OF 1.5.

PARKING
THE COMPLETED PROJECT WILL CONTAIN APPROXIMATELY 42 ON GRADE PARKING SPACES AND UTILIZE IT'S REMAINING REQUIRED PARKING COUNT IN THE RECENTLY COMPLETED PARKING GARAGE.

MISCELLANEOUS
THE HOURS OF OPERATION FOR THE DEVELOPMENT ARE STANDARD BUSINESS HOURS FIVE DAYS A WEEK WITH OCCASIONAL WEEKEND HOURS.

THE EXISTING BRICK STRUCTURE OF 19,311 SF SHALL BE ENTIRELY PRESERVED AND REHABILITATED WITH LARGER OPENINGS FOR WINDOWS AND ACCESSIBLE ENTRANCES.

CONCLUSION
THE PROPOSED PROJECT DESIGN IS COMPATIBLE AND INTEGRATED WITH, AND NOT DETRIMENTAL TO, THE EXISTING DEVELOPMENT ON ADJACENT AND SURROUNDING NEIGHBORING PROPERTIES AND FURTHERMORE PAYS HOMAGE TO THE NEIGHBORHOOD'S INDUSTRIAL PAST AND ENCOURAGES LOOKING FORWARD TO THE FUTURE OF WHAT THE NEIGHBORHOOD WILL TRANSFORM INTO IN THE NEAR FUTURE.

TIER II COMMUNITY BENEFIT PLAN (CBP) PER SECTION 4.5.2 AND TABLE 4-1 OF SHSP:
1. BUILDING HEIGHT: REQUEST FOR UP TO 60 FEET
2. FLOOR AREA RATIO (FAR): REQUEST FOR FAR TO 1.5 (65,949 SF).

SHSP DEVELOPMENT STANDARDS AND ESMC SECTION 15-15:
1. OFF-SITE PARKING COVENANT FOR 123 PARKING SPACES “OFF-SITE” IN ADJACENT LOT PARKING STRUCTURE PER ESMC SECTION 15-15-3(H) AND SHSP DEVELOPMENT STANDARDS TABLE 2-2(H).

FLOOR AREA AND PARKING CALCULATIONS

PROJECT INFORMATION TABLE

	PARCEL A - SOUTH SITE 1475 E. EL SEGUNDO BLVD APN: 4139-002-025		PARCEL C 1301 E. EL SEGUNDO BLVD APN: 4139-002-023		PARCEL B 1325 E. EL SEGUNDO BLVD		PARCEL D 136-142 OREGON STREET APN: 4139-002-056		PARCEL E - NORTH SITE 1320 - 1330 E. FRANKLIN AVE.			
GROSS LOT AREA (PRE DEDICATIONS)	43,966.00		58,318.00		191,896 SF							
FLOOR AREA ALLOWED **(1:1)**	43,966.00		58,318.00		191,896 SF							
USE	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**	**EXISTING**	**PROPOSED**		
INDUSTRIAL	12,064.00		10,967.00		19,398 SF		19,007 SF		10,428 SF			
GENERAL OFFICE	7,247.00	18,780.00	17,608.00		8,206 SF		8,204 SF	23,243 SF	9,065 SF	19,226 SF		
STORAGE		14,788.00			2,064 SF			21,022 SF		15,381 SF		
		7,187.00						9,149 SF		7,318 SF		
		15,984.00						21,784 SF		15,052 SF		
		7,176.00						9,688 SF		7,318 SF		
CAFE										766 SF		
FLOOR AREA EXISTING	19,311.00		28,575.00		29,668 SF		27,211 SF		19,493 SF		**124,258 SF**	FLOOR AREA EXISTING
FLOOR AREA PROPOSED		63,915.00						84,886 SF		65,061 SF	**179,615 SF**	TOTAL PROPOSED FLOOR AREA
TOTAL FAR		1.45								0.94		
PARKING											**PARKING REQUIRED**	
REQUIRED	160		69*		69 **		212 ***		163 ****		**673**	PARKING REQUIRED
PROVIDED ON GRADE	42		69		40		44		38		**233**	PARKING PROVIDED ON GRADE
ADDITIONAL SPACES REQUIRED	118		0		29		168		125		**440**	ADDITIONAL SPACES REQUIRED
											398 ******	TOTAL GARAGE PARKING SPACES
											61 ***	ADDITIONAL GARAGE LIFT PARKING
											15 *****	ADDITIONAL GARAGE LIFT PARKING
BICYCLE PARKING											**34**	REMAINING/UNUSED GARAGE PARKING SPACES
[(TOTAL FAR - 15,000 SF) / 400] * 0.05% + 4	10				2		13		10		**35**	TOTAL BICYCLE PARKING SPACES REQUIRED

* 1301 E. El Segundo - B0423-17 (69 Spaces Required)
** 1325 E. El Segundo - B0559-17 (69 Spaces Required)
*** 140 Oregon - EA-1233 and C0092-19 (212 Spaces Required)
**** 1320-1330 E. Franklin - EA-1282
***** 1310 E. Franklin - B0421-20 (Scope of work = 61 additional parking spaces on level 1 of the parking garage)
****** 1310 E. Franklin - B0182-18 (Scope of work = 398 Space 4 level parking garage)
******* 1310 E. Franklin - Field Change 1 to B0421-20 (Scope of work = 15 additional parking spaces on grade south of 140 Oregon)
A minimum of 4 spaces for buildings up to 15,000 square feet, plus a minimum of 5 percent of the required vehicle spaces for the portion above 15,000 square feet. Maximum of 25 spaces

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

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BALIAN

ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

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SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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+ 1.213.377.5500
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+ 1.213.377.5500
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SMOKY HOLLOW INDUSTRIES

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SMOKY HOLLOW INDUSTRIES

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PERSPECTIVE

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ZONING ANALYSIS

(SHSP TABLE 2-3) C. LOT STANDARDS

	REQUIRED	PROVIDED
1. MINIMUM LOT AREA	11,200 SF	43,966 SF
2. MINIMUM LOT FRONTAGE	50'	198' - 9 1/64"

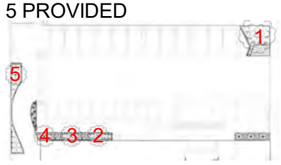
(SHSP TABLE 2-3) D. BUILDING DESIGN STANDARDS

	REQUIRED	PROVIDED
1. BUILDING ORIENTATION FRANKLIN AVENUE	LOTS ADJOINING FRANKLIN AVENUE SHALL PROVIDE A MINIMUM OF ONE PRIMARY ENTRY FACING FRANKLIN AVENUE. PRIMARY ENTRY DOORS SHALL BE VISIBLE AND ACCESSIBLE FROM THE PUBLIC SIDEWALK	N/A
2. BUILDING TRANSPARENCY: FRANKLIN AVENUE FRONTAGE	FOR NEW BUILDINGS OR NEW ADDITIONS FRONTING FRANKLIN AVENUE, A MINIMUM **15% FACADE** TRANSPARENCY SHALL BE PROVIDED AT THE GROUND LEVEL OR FIRST 12 FEET OF HEIGHT ABOVE GRADE, WHICHEVER IS LESS, THROUGH THE UTILIZATION OF WINDOWS, ENTRIES, OR SIMILAR OPENINGS.	N/A

(SHSP TABLE 2-3) E. SETBACK STANDARDS

	REQUIRED	PROVIDED
1. FRONT YARD	NONE	3' - 2 1/2"
2. SIDE YARD (WESTERLY)	NONE	18' - 11 3/4"
3. REAR YARD (NORTHERLY)	NONE	77' - 11 3/4"
4. SIDE YARD (KANSAS ST)	NONE	0' - 0" (TO FACE OF CURB)
5. ADJOINING ALLEY	MIN. 10'	N/A
6. ALL STRUCTURES	COMPLY WITH CORNER, DRIVEWAY, & ALLEY VISIBILITY REQUIREMENTS IN ESMC SECTIONS 15-2-6 (CORNER CLEARANCE) & 15-2-11 DRIVEWAY VISIBILITY).	EXISTING NON-CONFORMING

(SHSP TABLE 2-4) F. OPEN SPACE & LANDSCAPING STANDARDS

	REQUIRED	PROVIDED
1. OPEN SPACE, 10% OF LOT, REQUIRED OPEN SPACE MAY BE PROVIDED ON BUILDING ROOFTOPS; HOWEVER, AT LEAST 50% OF REQUIRED OPEN SPACE SHALL HAVE DIRECT ACCESS FROM THE EXISTING GROUND ELEVATION.	43,966 x 0.1 = 4,397 SF 50% = 2,199 SF	1. LANDSCAPING AT GRADE = 3,120 2. VERTICAL LANDCAPING = 480 3. ROOFTOP OPEN SPACE = 4,765 4. ROOFTOP LANDSCAPING = 2,043 **TOTAL = 10,408 SF**
2. SURFACE PARKING LOT LANDSCAPING. ON SITES LARGER THAN 22,400 SF, A MINIMUM OF 1 TREE SHALL BE PROVIDED ON SITE FOR EVERY 4 AT-GRADE, OPEN-TO-THE-SKY SURFACE PARKING SPACES	18 SURFACE PARKING SPACES / 4 = 5	5 PROVIDED 
3. IRRIGATION	ALL LANDSCAPED AREAS, INCLUDING TREES AT SURFACE PARKING LOTS, SHALL BE PROVIDED WITH APPROPRIATE PERMANENT WATERING FACILITIES.	IRRIGATION SHALL BE PROVIDED AS A DEFERRED SUBMITTAL

JURISDICTION:	CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA
SPECIFIC PLAN:	SMOKY HOLLOW SPECIFIC PLAN
ZONING:	SH-E (SMOKY HOLLOW EAST)
PREVIOUS USE:	LIGHT INDUSTRIAL
PROPOSED USE:	GENERAL OFFICE / LIGHT INDUSTRIAL / RESEARCH & DEVELOPMENT
OCCUPANCY CLASS:	B (GENERAL OFFICE, R&D)
CHANGE OF USE:	YES (EXISTING FLOOR AREA)

ZONING MAP

Figure 2-1: Zoning Districts



(SHSP TABLE 2-2) A. ALLOWABLE GROSS FLOOR AREA

	ALLOWED	PROVIDED
BASE ALLOWED:	1.0 = 43,966 x 1.0 = 43,966 SF	65,949 (1.5 FAR)

B. HEIGHT STANDARDS

	ALLOWED	PROVIDED
BASE ZONING	35'-0"	
COMMUNITY BENEFITS TIER II	ADDITIONAL 24'-6" = 59'-6"	59'-6"
HEIGHT EXCEPTIONS	ELEVATOR SHAFT HOUSING IS EXEMPT FROM HEIGHT REQUIREMENTS	
PARAPET HEIGHT	MAY EXCEED MAXIMUM BUILDING HEIGHT BY 5'-0"	

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
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OFFICE 310.616.5040

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SMOKY HOLLOW SPECIFIC PLAN ZONING ANALYSIS

ZONING ANALYSIS

(SHSP TABLE 2-6) H. PRIVATE PARKING STANDARDS

	REQUIRED	PROVIDED
1. NEW CONSTRUCTION & CHANGE OF OCCUPANCY	(2.5 / 1,000 GROSS SF) CHANGE OF USE: 19,311 SF / 400 = 48 SPACES	**165 SPACES** NOTE: ALSO SEE PARKING ANALYSIS CHART ON PAGE 2 FOR EXISTING PARKING REQUIREMENTS FOR UNIFIED SITE DEVELOPMENT
2. ADDITIONS TO BUILDINGS	(2.5 / 1,000 GROSS SF) NEW CONSTRUCTION: 44,604 SF 44,604 / 400 = 112	
SUB-TOTAL REQUIRED	48 + 112 = **160 SPACES**	
3. TANDEM PARKING	TANDEM SPACES SHALL HAVE A MAXIMUM LENGTH OF 40 FEET (PARKING FOR 2 VEHICLES MAXIMUM).	24 PROVIDED
4. BICYCLE PARKING ALL LONG TERM AND SHORT TERM BICYCLE PARKING IS PROVIDED IN SECURE AND ACCESSIBLE AREAS IN THE GARAGE PERMITTED SEPARATELY. LONG-TERM PARKING: 41 PARKING SPACES X 0.05 = 2 BIKE STATIONS SHORT-TERM PARKING: 41 PARKING SPACES X 0.05 = 2 BIKE STATIONS	CONSISTENT WITH SECTION 5.106.4 OF THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE: NEW PROJECTS ANTICIPATED TO GENERATE VISITOR TRAFFIC SHALL PROVIDE ONE 2-BIKE CAPACITY RACK FOR 5% OF NEW VISITOR MOTORIZED VEHICLE PARKING SPACES BEING ADDED, WITH A MINIMUM OF ONE 2-BIKE CAPACITY RACK. ADDITIONS OR ALTERATIONS THAT ADD 9 OR FEWER VISITOR VEHICLE PARKING SPACES ARE EXCLUDED. NEW BUILDINGS WITH 10 OR MORE TENANT-OCCUPANTS OR ADDITIONS OR ALTERATIONS THAT ADD 10 OR MORE TENANT VEHICLE PARKING SPACES SHALL PROVIDE SECURE BICYCLE PARKING FOR 5% OF THE TENANT VEHICLE PARKING SPACES BEING ADDED, WITH A MINIMUM OF ONE SECURE BICYCLE PARKING SPACE. ACCEPTABLE PARKING FACILITIES SHALL BE CONVENIENT FROM THE STREET AND SHALL MEET ONE OF THE FOLLOWING: A. COVERED, LOCKABLE ENCLOSURES WITH PERMANENTLY ANCHORED RACKS FOR BICYCLES; B. LOCKABLE BICYCLE ROOMS WITH PERMANENTLY ANCHORED RACKS; OR C. LOCKABLE, PERMANENTLY ANCHORED BICYCLE LOCKERS.	THE PROPOSED PROJECT HEREIN PROPOSES 42 NEW PARKING SPACES 42X.05 = 3 SHORT TERM AND 2 LONG TERM PARKING SPACES. SEE LEVEL 01 PLAN  THE PROJECT ALSO REQUIRES 118 SPACES IN THE RECENTLY COMPLETED PARKING GARAGE (B0182-18). THIS GARAGE INCLUDES 398 PARKING SPACES SHARED BETWEEN SEVERAL BUILDINGS. THIS PERMIT INCLUDED SHORT TERM AND LONG TERM BICYCLE PARKING AS REQUIRED BY CGC WHICH IS ALSO 5%. THEREFORE, ALL REQUIRED PARKING SPACES INCLUDE ASSOCIATED SHORT TERM AND LONG TERM BICYCLE PARKING.
5. OTHER PARKING AREA DEVELOPMENT STANDARDS	REFER TO ESMC SECTION 15-15-1 THROUGH 15-15-5.	PROVIDED

(SHSP TABLE 2-5) G. ACCESS, LOADING AND TRASH STANDARDS

	REQUIRED	PROVIDED
1. VEHICULAR ACCESS	A. LOTS ADJOINING AN ALLEY ARE PROHIBITED FROM PROVIDING CURB CUTS ALONG STREET FRONTAGES.	N/A
	B. FOR LOTS NOT ADJOINING AN ALLEY, A MAXIMUM OF 1 CURB CUT IS ALLOWED FOR EACH 150 FT OF LOT FRONTAGE ALONG A PUBLIC STREET.	PROVIDED, SEE SITE PLAN
	C. NEW CURB CUTS ALONG FRANKLIN AVENUE ARE PROHIBITED.	N/A
	D. CURB CUTS SHALL NOT BE MORE THAN 25 FT IN WIDTH EXCEPT WHERE REQUIRED BY THE CITY TO BE LARGER FOR SAFETY PURPOSES.	EXISTING NON CONFORMING
2. LOADING	A. NOT REQUIRED IF GROSS BUILDING AREA < 50,000 SF.	SEE B BELOW
	B. REQUIRED IF GROSS BUILDING AREA ≥ 50,000 SF AND/OR REQUIRED FOR THE FOLLOWING USES WHEN THE USE EXCEEDS 2,500 SF IN SIZE: RESTAURANT OR OTHER FOOD SALES AND SERVICE.	PROVIDED, SEE LEVEL 01
	C. ON-SITE LOADING AREAS SHALL BE AT LEAST 18 FT LONG AND 10 FT WIDE. FOR LOTS ADJOINING AN ALLEY, LOADING AREAS SHALL ADJOIN OR HAVE ACCESS FROM THE ALLEY. LOADING SPACES MAY ENCROACH INTO ANY REQUIRED ALLEY SETBACK.	PROVIDED, SEE LEVEL 01
3. REFUSE COLLECTION	A. REFUSE COLLECTION SERVICE SHALL BE CONTRACTED WITH AN APPROVED LOCAL SERVICE PROVIDER. REFUSE COLLECTION AREAS SHALL BE SCREENED PER ESMC SECTION 15-2-8 D.	FULLY SCREENED 200 SF TRASH & RECYCLING AREA BEING CONSTRUCTED AT THE NORTHWEST CORNER OF THE GROUND FLOOR
	B. ON LOTS ADJOINING AN ALLEY, REFUSE COLLECTION STORAGE AREAS SHALL BE ORIENTED TO AND ACCESSED FROM THE ALLEY.	N/A (NO ALLEY)

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
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PROJECT #		17.019

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SMOKY HOLLOW SPECIFIC PLAN ZONING ANALYSIS

11



1 EXISTING AERIAL PLAN
1" = 160'-0"

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ARCHITECTS
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LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

STANDARD WORKS
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SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
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CONTACT: MARK TELESZ
OFFICE 310.616.5040

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EXISTING AERIAL PLAN



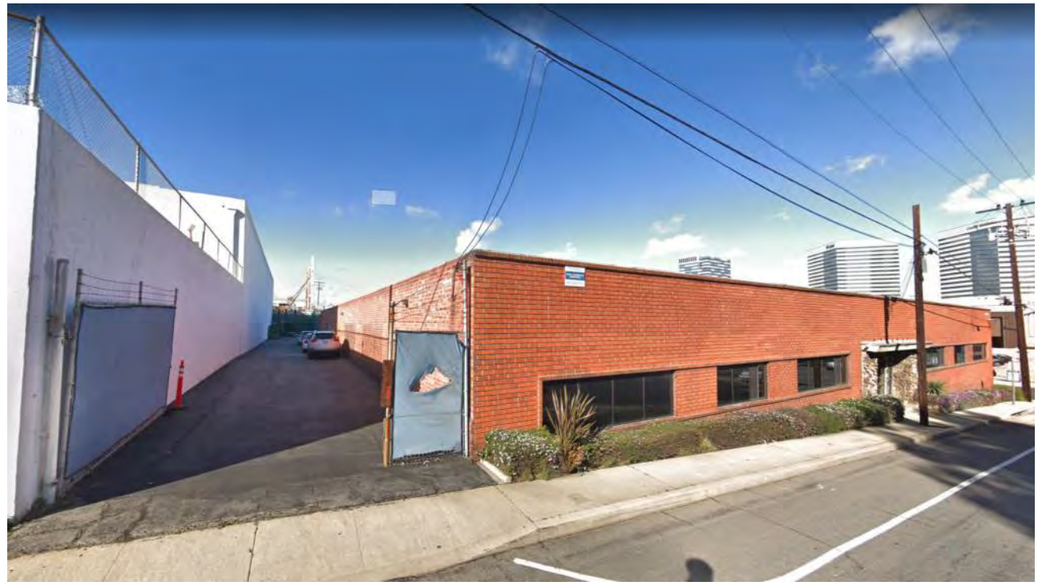
VIEW FROM NORTHEAST



VIEW FROM NORTHWEST



VIEW FROM SOUTHEAST



VIEW FROM SOUTHWEST

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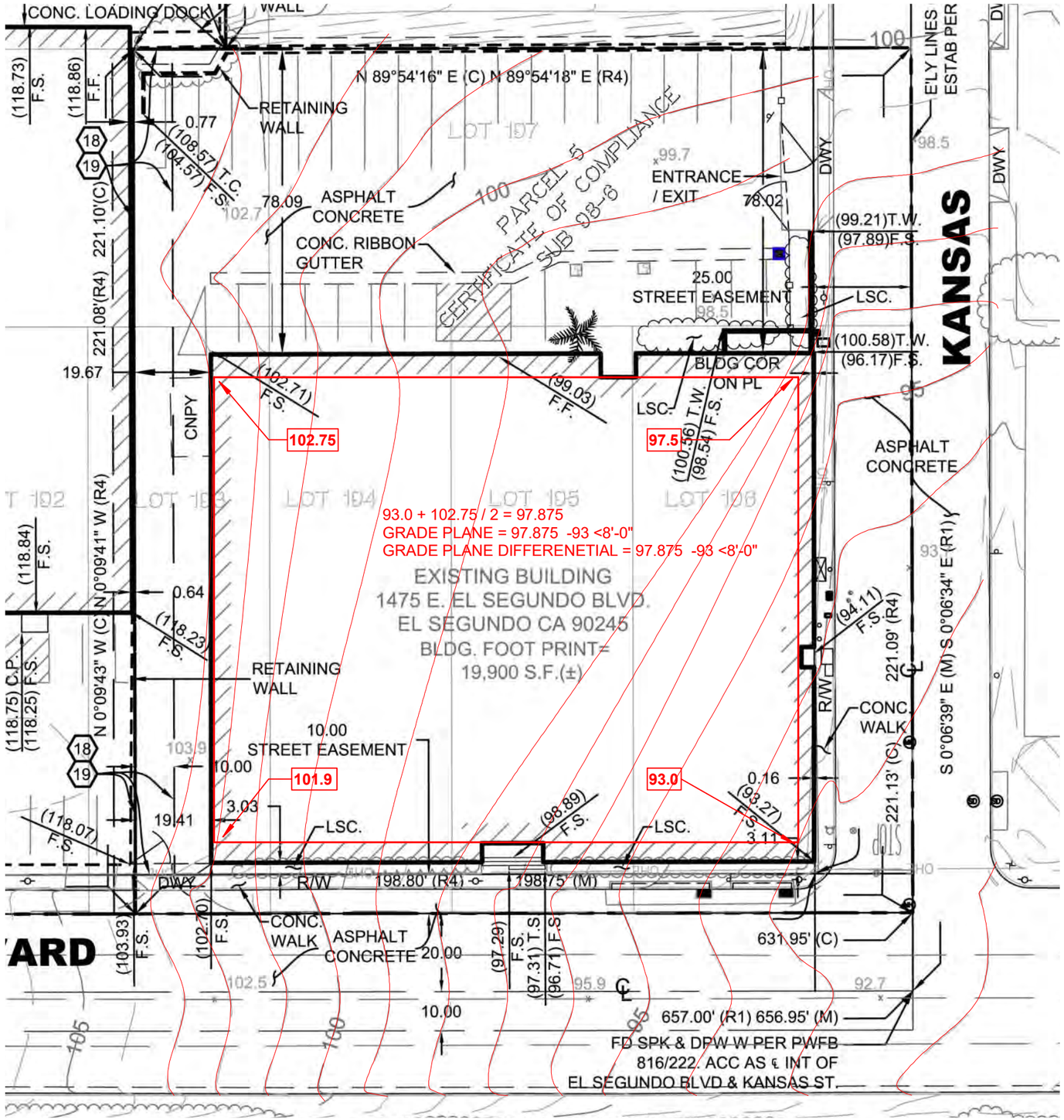
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EXISTING BUILDINGS



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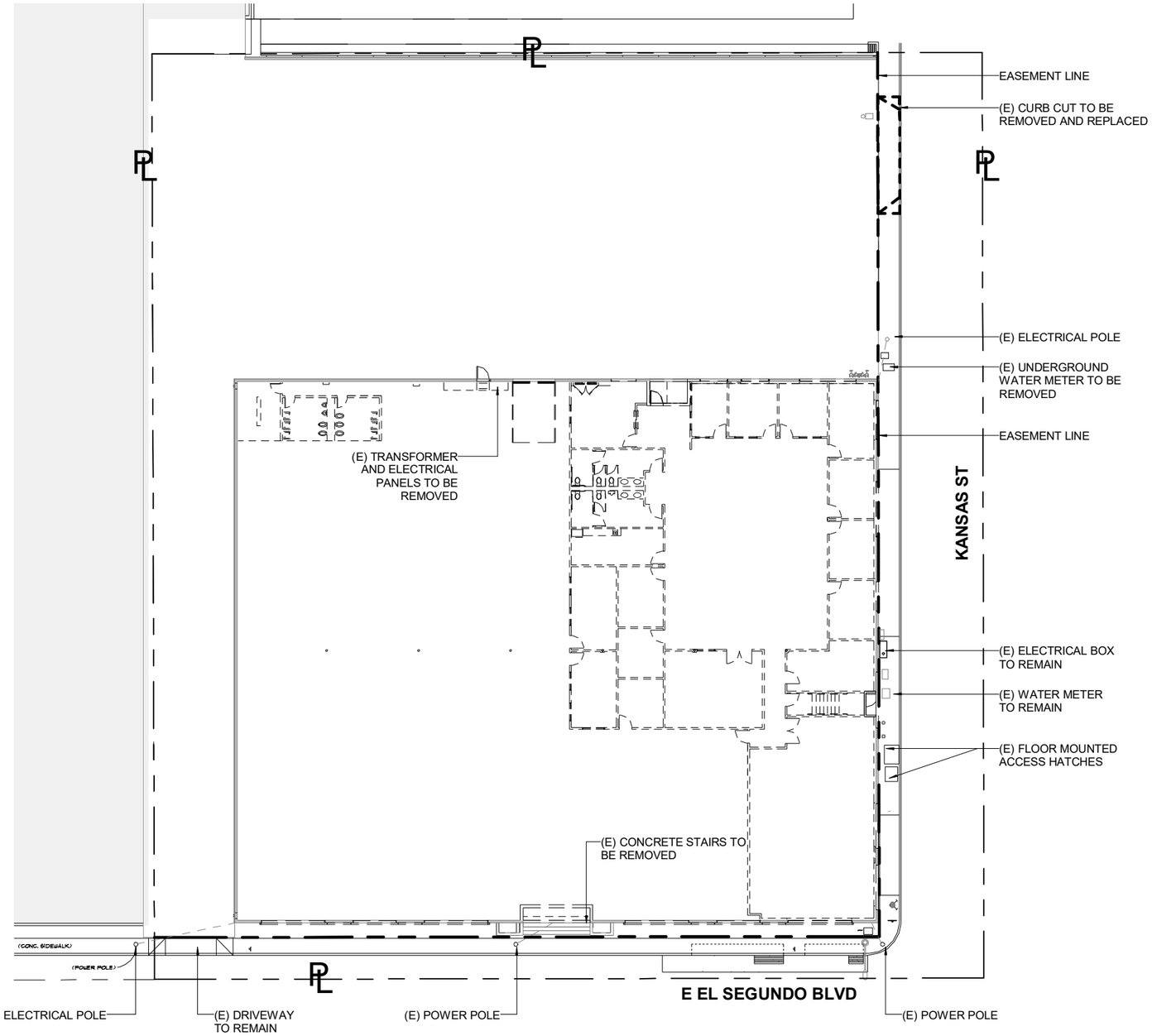
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EXISTING SURVEY & GRADE PLANE



1 SITE PLAN - EXISTING
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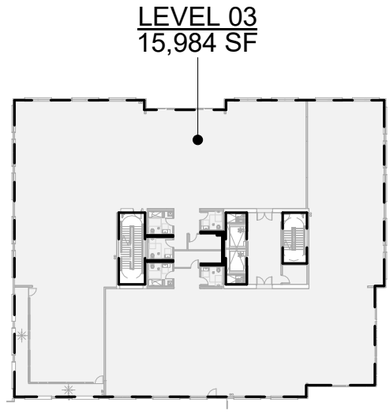
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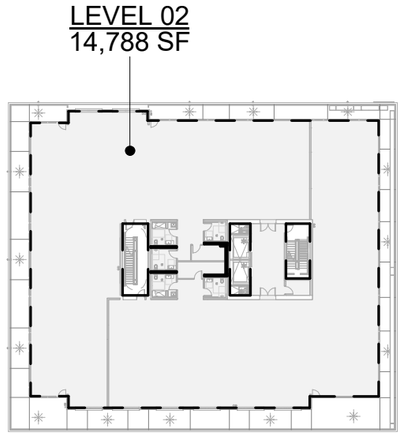
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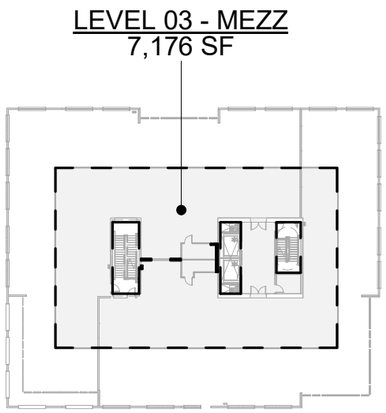
EXISTING SITE PLAN



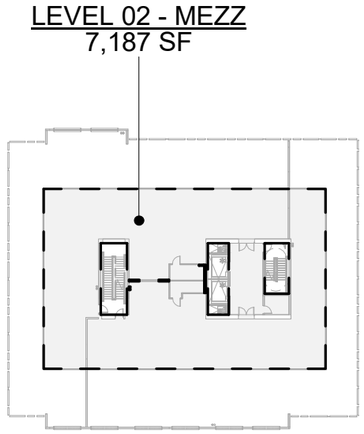
4 LEVEL 03 - FLOOR AREA
1" = 60'-0"



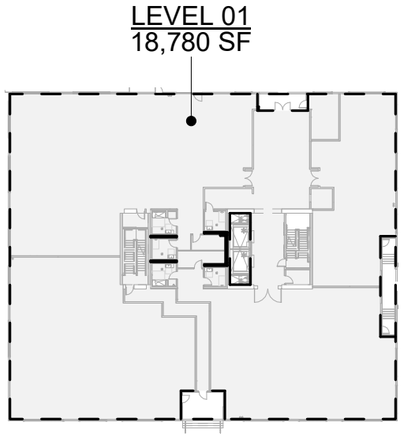
2 LEVEL 02 - FLOOR AREA
1" = 60'-0"



5 LEVEL 03 - MEZZ - FLOOR AREA
1" = 60'-0"



3 LEVEL 02 - MEZZ - FLOOR AREA
1" = 60'-0"



1 LEVEL 01 - FLOOR AREA
1" = 60'-0"

FLOOR AREA SCHEDULE

NAME	AREA
LEVEL 01	18,780 SF
LEVEL 02	14,788 SF
LEVEL 02 - MEZZ	7,187 SF
LEVEL 03	15,984 SF
LEVEL 03 - MEZZ	7,176 SF
Grand total	63,915 SF

SMOKY HOLLOW SPECIFIC PLAN - GLOSSARY

FLOOR AREA (GROSS): The area included within the surrounding exterior walls of a building or portion thereof, exclusive of garages, vent shafts and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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STANDARD WORKS
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OFFICE 310.616.5040

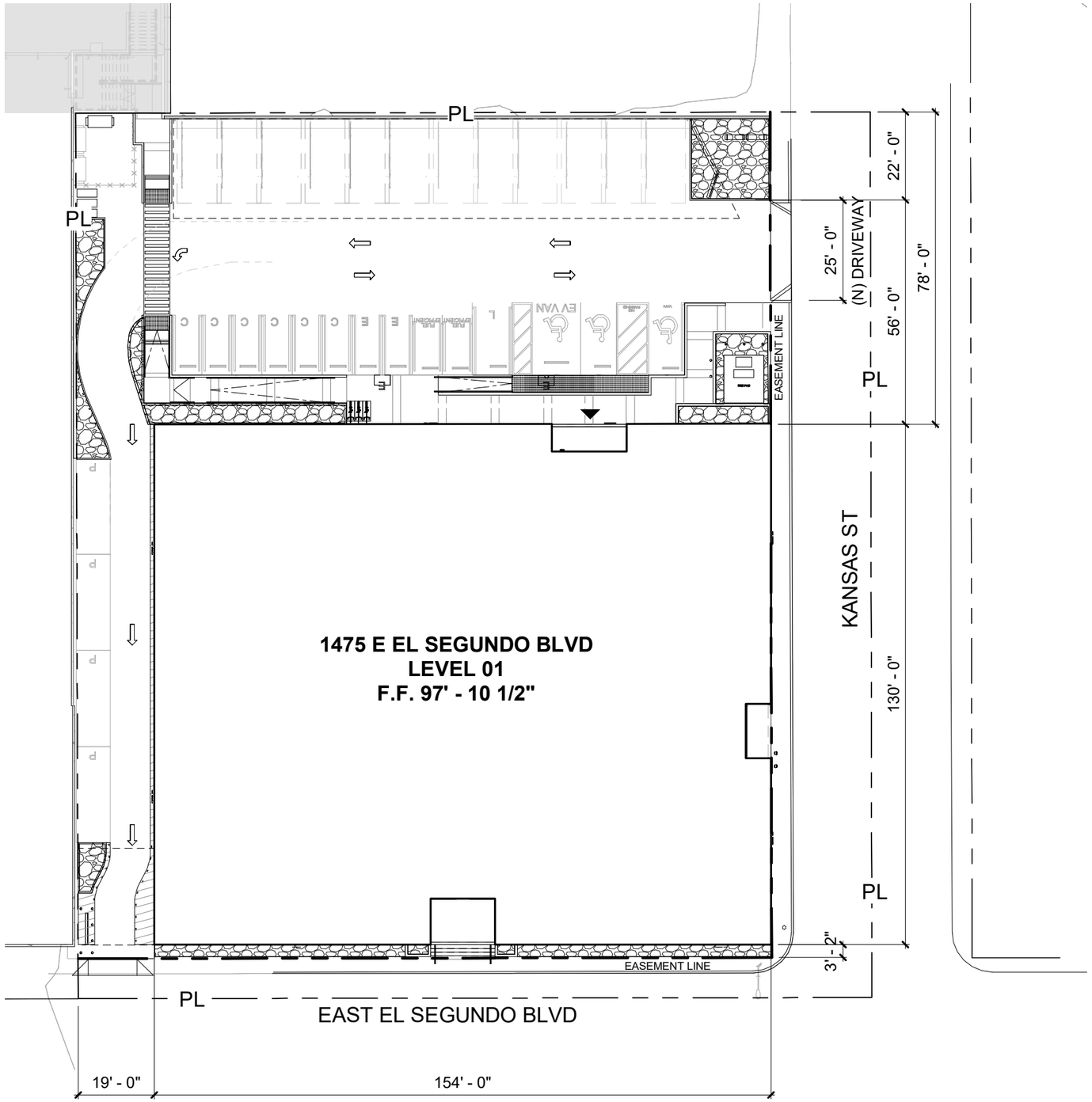
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"FLOOR AREA" DIAGRAMS



1 SITE PLAN
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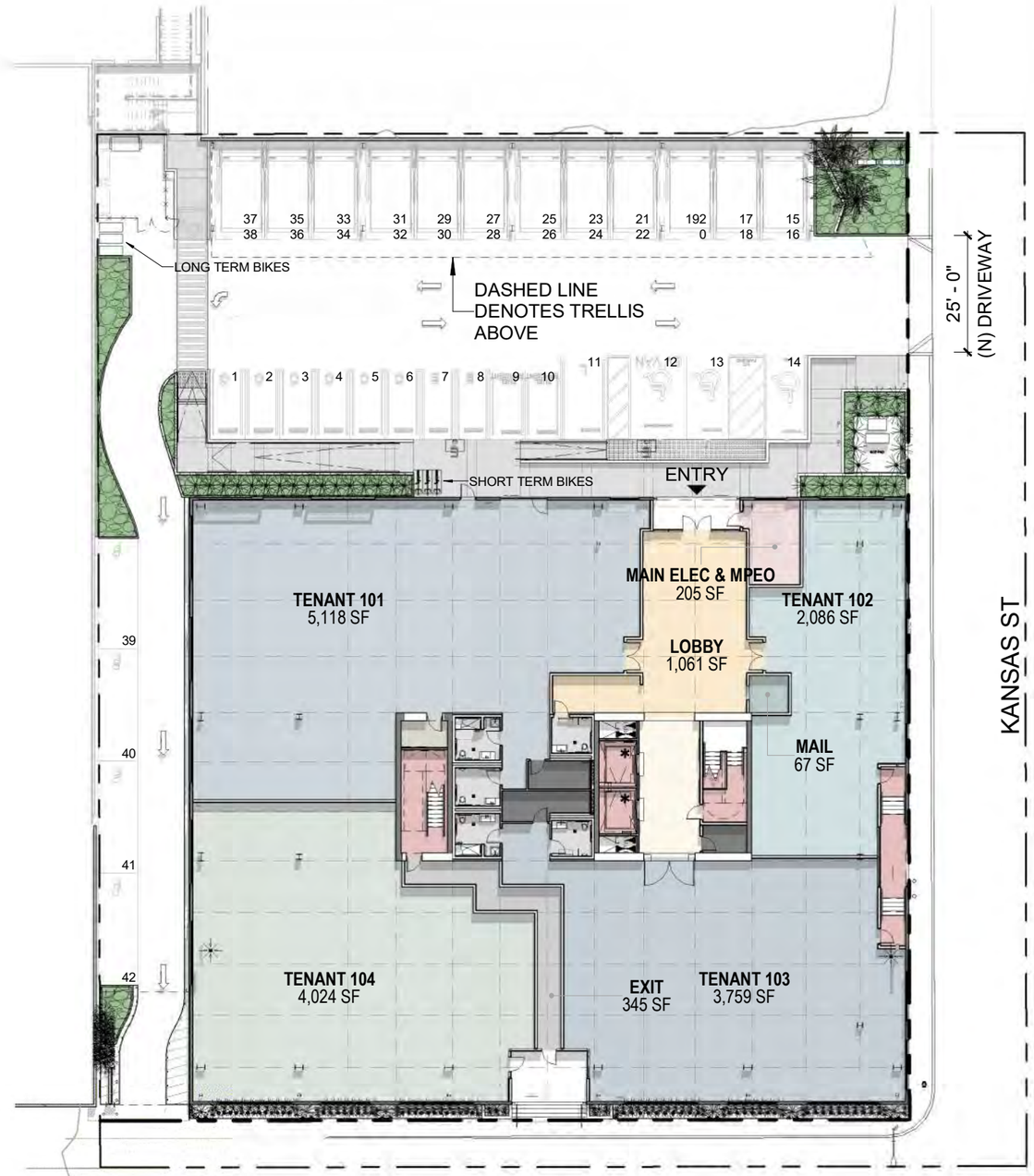
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PROPOSED SITE PLAN



PARKING STALL BREAKDOWN:

STANDARD	=	00
COMPACT	=	10
ACCESSIBLE	=	02
PARALLEL	=	04
TANDEM	=	24
VAN EV	=	01
LOADING	=	01
TOTAL	=	42

1 LEVEL 01
1" = 30'-0"

0' 15' 30' 60'

N

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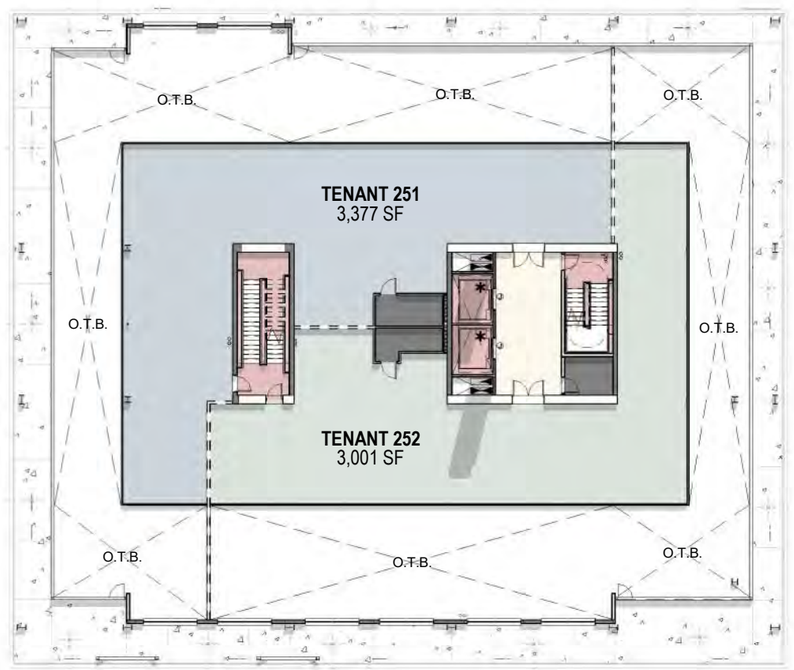
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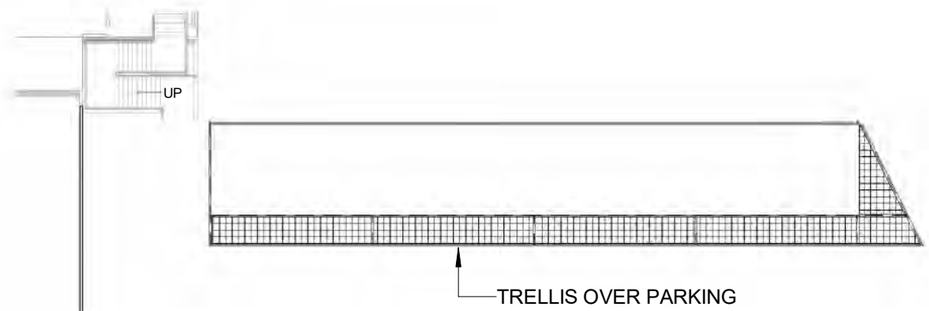
FLOOR PLAN
LEVEL 01

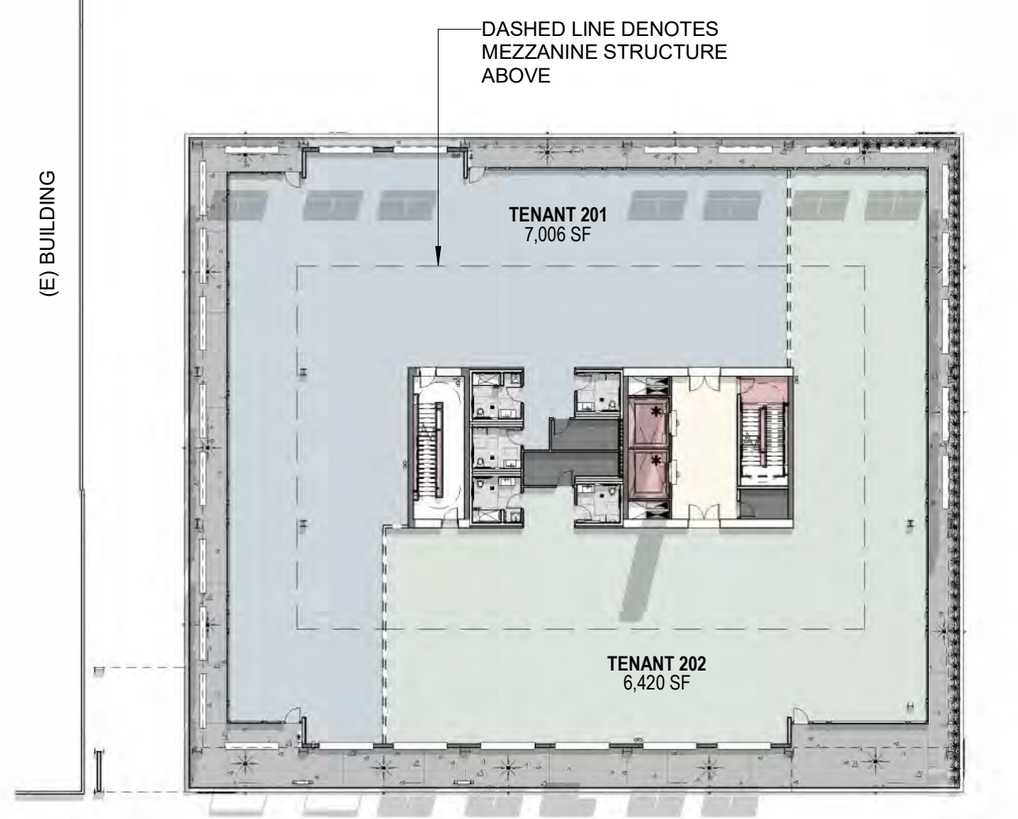


2 LEVEL 02 MEZZ
1" = 30'-0"



0' 15' 30' 60'





1 LEVEL 02
1" = 30'-0"

0' 15' 30' 60'

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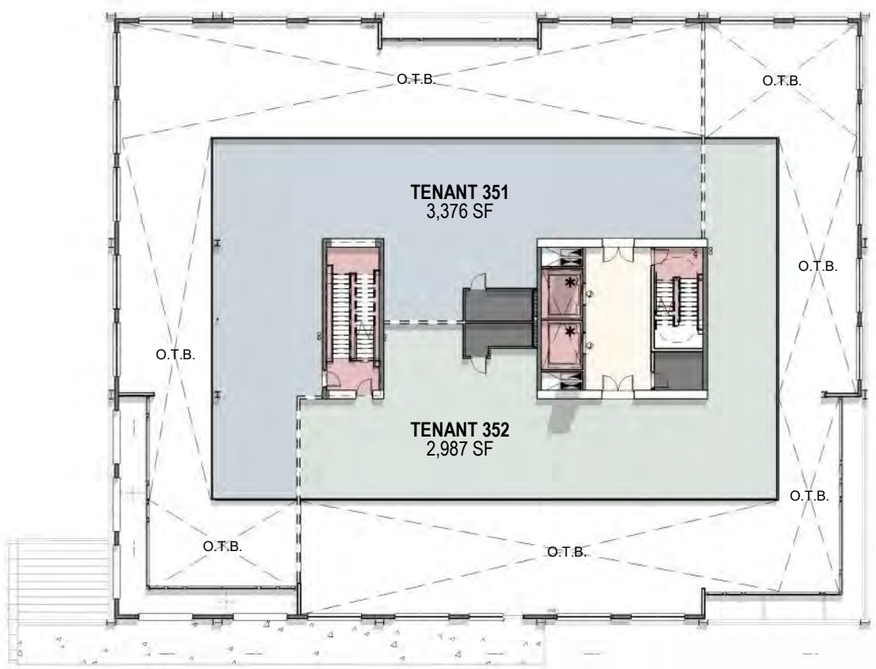
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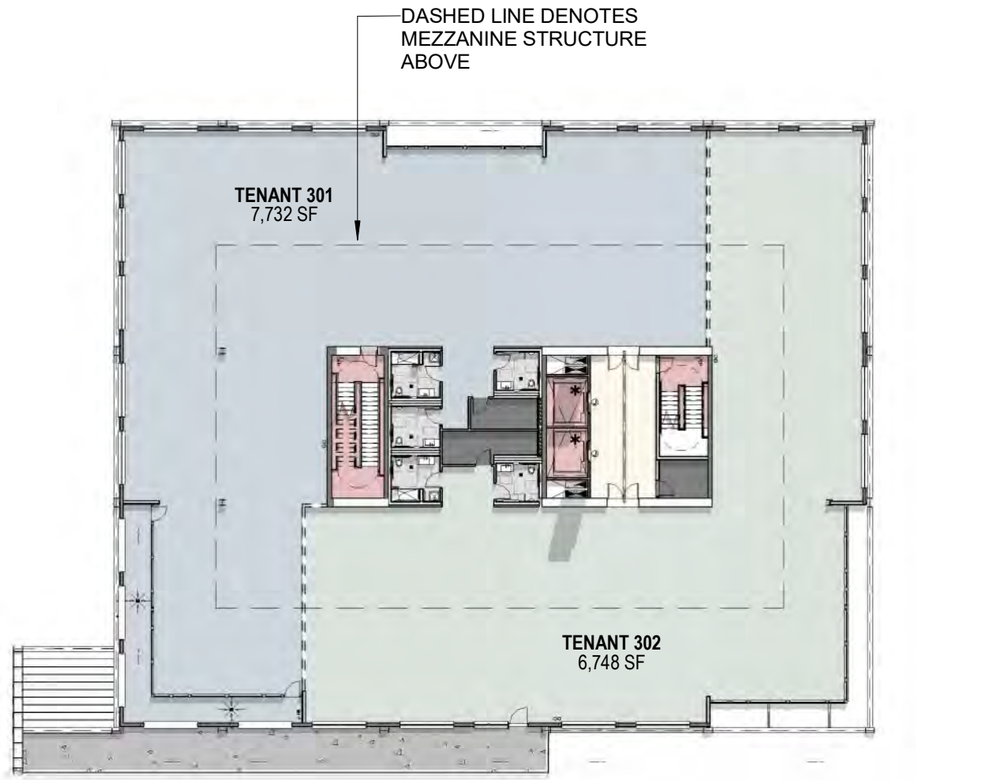
FLOOR PLANS
LEVELS 02 &
MEZZANINE



2 LEVEL 03 - MEZZ
1" = 30'-0"

N

0' 15' 30' 60'



1 LEVEL 03
1" = 30'-0"

N

0' 15' 30' 60'

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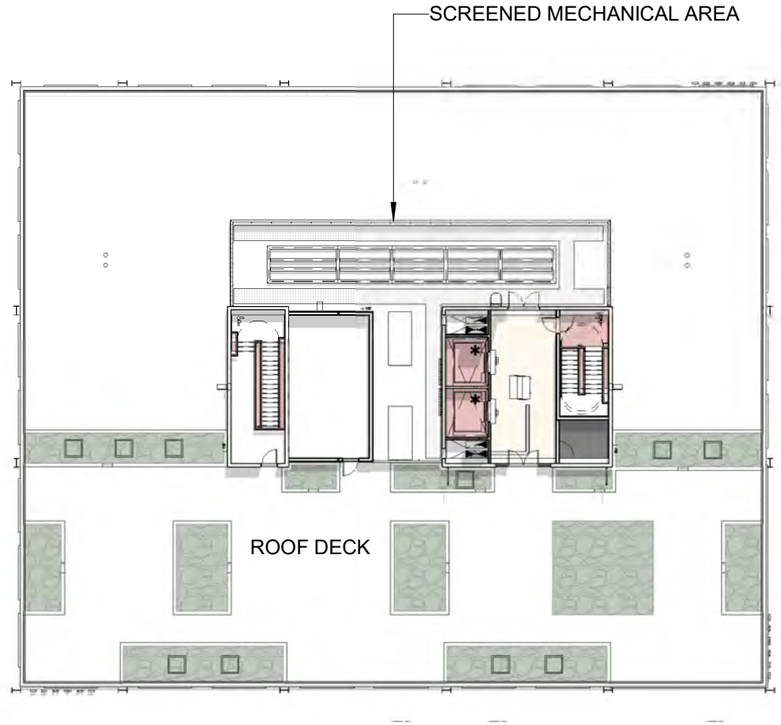
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FLOOR PLANS
LEVELS 03 &
MEZZANINE



1 ROOF
1" = 30'-0"

N

0' 15' 30' 60'

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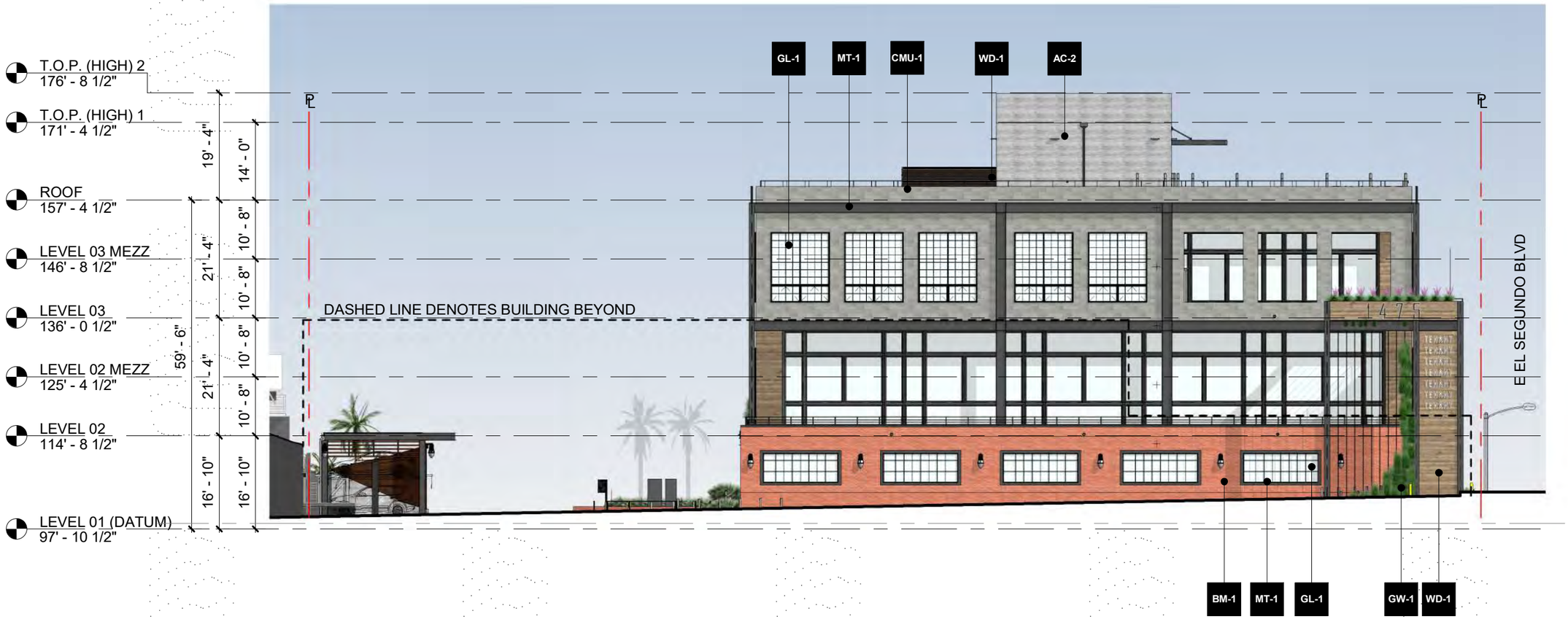
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INITIAL SUBMITTAL	-	12.19.2019
CBP SUBMITTAL	-	05.16.2020
REVISED SUBMITTAL	-	01.06.2021
CEQA SUBMITTAL	-	05.06.2021
FINAL SUBMITTAL	-	01.20.2022
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ROOF PLAN



1 WEST ELEVATION
1" = 20'-0"



SOLITAIRE-LED BY KING LUMINARES

		LF-4	PERIOD WALL SCONCE	GW-1	CLIMBING VINES	MT-1	TNEMEC COATING	AC-2	BOARD FORMED CONCRETE	WD-1	WOOD PLANKS	CMU-1	CMU BLOCK	BM-1	(E) BRICK

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

PARCEL A - 98'

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

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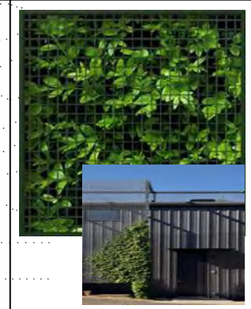
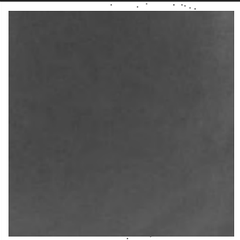
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ELEVATION - WEST



1 NORTH ELEVATION
1" = 20'-0"

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STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

PARCEL A -

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
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OFFICE 310.616.5040

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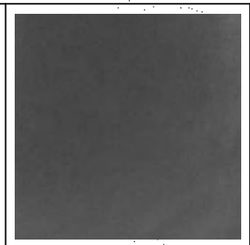
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ELEVATION - NORTH



1 SOUTH ELEVATION (EAST EL SEGUNDO BLVD)
1" = 20'-0"

		 SOLITAIRE-LED BY KING LUMINARES	LF-4	PERIOD WALL SCONCE		GW-1	CLIMBING VINES		MT-1	TNEMEC COATING		AC-2	BOARD FORMED CONCRETE
	WD-1	WOOD PLANKS		CMU-1	CMU BLOCK		BM-1	(E) BRICK					

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SMOKY HOLLOW INDUSTRIES

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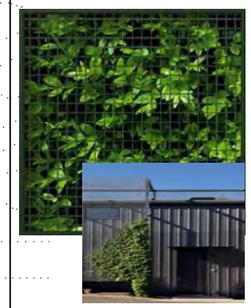
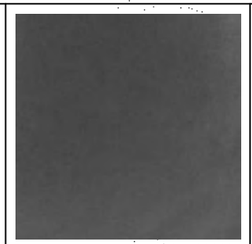
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ELEVATION - SOUTH (E EL SEGUNDO)



1 EAST ELEVATION (KANSAS STREET)
1" = 20'-0"

		 SOLITAIRE-LED BY KING LUMINARES	LF-4 PERIOD WALL SCONCE		GW-1 CLIMBING VINES		MT-1 TNEMEC COATING		AC-2 BOARD FORMED CONCRETE		WD-1 WOOD PLANKS		CMU-1 CMU BLOCK		BM-1 (E) BRICK

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STANDARD WORKS
EL SEGUNDO, CA

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ELEVATION - EAST (KANSAS ST)

SMOKY HOLLOW COMMUNITY BENEFITS TABULATION WORKSHEET

GROUP A

		yes	no	n/a	criteria	
Enhance Building Character	A1	1			Build on the quality industrial character	The proposed design is a complimenting contemporary industrial esthetic with the use of exposed steel and large industrial windows and other industrial characteristic features.
	A2	1			Convey a sense of old and new	The proposed design entirely preserves the existing red brick building at the ground level and proposes a complimenting industrial structure that embraces the existing structure and builds out of it a new 2nd and 3rd floor with a setback on all sides.
	A3	1			Build upon existing context	The proposed structure stays within the existing footprint and creates accessible decks at the roof level of the existing structure preserving and adding to the original architecture.
	A4	1			Conserve and retain the character-defining features	The proposed design entirely preserves the existing red brick building at the ground level and also retains and enhances the existing entries and openings on three sides.
	A5	1			Encourage additions that complement (E) character-defining features	The proposed design complements the existing large industrial window openings and exposed steel and is an overall complimenting mid-century architecture above with the use of stacked bond block with exposed aggregate and stain coloring rather than paint and other similar industrial materials and finishes throughout.
	A6	1			Incorporate small, medium, and large scales	The proposed design includes several interlocking scale elements. The exposed super-structure creates a large grid in which large window openings are located in which smaller window grids are utilized creating a sort of Russian nesting doll architectural effect with scale. Additionally, there are large cut-outs and setbacks on multiple levels with balconies extending forward breaking up the facade in large and small scales.
	A7	1			Emphasize design at the pedestrian level	The proposed design includes new landscaping the entire length of El Segundo Blvd. Additionally vertical landscaping is proposed at the SW corner and West lot line creating a portal experience surrounded on 2 sides with vertical and horizontal landscaping. On Kansas all new landscaping is proposed on both sides of the driveway with seating for the public. Furthermore, existing utility equipment is to be removed on Kansas to provide a wider sidewalk.
	A8	1			Specify 360° architecture	The proposed architecture is developed at a similar design on all four sides creating a 360 degree architectural expression.
	A9	1			Enhance entry expression	The proposed design creates a new landscaped portal on the SW corner of the lot creating a double height entry and exit experience from the street. Additionally, a new larger pedestrian entry is proposed in the middle of the building on Kansas street with a covered setback. The existing entry from the north is also enlarged and enhanced with pedestrian access from the street and landscaping.
	A10	1			Encourage the use of roll-up doors & sliding walls at street frontages	The proposed design includes a roll-up door at the north elevation which is the building's primary frontage and where the primary entry is and where most visitors will arrive.
	A11	1			Orient secondary entries to alleys	The proposed design includes secondary entries toward the north of the property. Although not a public alley the neighborhood includes many "private alleys" such as the ones on the north and west side of this project that are open to vehicular and pedestrian public access. These private alleys should be considered.
	A12	1			Incorporate different materials, colors, and textures	The proposed design includes several differing materials, colors and textures: Red Brick, Medium Gray Block, Black Steel, Corten, Architectural Board Formed Concrete and glass.
		12	Minimum 4 required in this group			

GROUP B

		yes	no	n/a	criteria	
Facilitate Gathering	B1	1			Form an active street wall	The proposed design includes three entries, one on El Segundo Blvd, one on Kansas St and one facing North towards the site's at grade parking in the middle of the building which is the primary building facade wall. The entry on Kansas is recessed and glazed creating a break in the Kansas facade. The entire El Segundo Blvd frontage will include low landscaping and large windows. The double story entry portal with vertical landscaping will also create a very experiential space. Furthermore, on El Segundo Blvd a 3rd story balcony projects forward with sloped V shaped columns creating an interesting overhang to activate the south facade. Finally, at level 2 there is a setback on all sides creating a 360-degree occupied deck separating the existing and new structure.
	B2			1	Provide street corner plazas	No street corner to earn this point.
	B3	1			Develop outdoor gathering spaces	The proposed design includes a pocket park on the property at the NE corner with public seating
	B4			1	Provide alley-facing gathering spaces	No public alley to earn this point.
	B5	1			Provide ease of access	The proposed design includes 3 pedestrian entries on 3 sides as well as 2 vehicular entries and a controlled traffic pattern for safety. Additionally, the tenants on the ground floor will each have separate entries and exists from El Segundo and Kansas elevations.
	B6	1			Enhance surface parking	The proposed design includes all new landscaping on the East and South side of the parking areas as well as an architecturally complimenting shade structure of the parking area. Additionally, providing stacked parking is another way to enhance surface parking areas with efficient parking solutions that utilize state of the art technology.
	B7		1		Use enduring, quality paving materials	
	B8	1			Provide street furniture	The proposed design includes street furniture at the NE pocket park.
	B9	1			Use exterior lighting to accentuate safety and design	The proposed project will include period lighting throughout the site on all sides creating lighting for pedestrians for added safety.
	B10		1		Provide Wi-Fi hotspots	
		6	Minimum 3 required in this group			

GROUP C

		yes	no	n/a	criteria	
Incorporate Landscape & Environmental Design	C1	1			Design layered and lush landscaping	The proposed landscaping design includes layered and lush planting throughout.
	C2	1			Select drought-tolerant and native plants	The proposed landscaping includes drought-tolerant and native planting throughout.
	C3	1			Utilize planters and pots to provide greenery	The proposed landscaping includes pots & planters on level 2 and 3 decks and balconies and on the rooftop.
	C4	1			Improve landscaping in parking areas	The proposed parking area includes landscaping on the east and south sides.
	C5	1			Use fences and walls as an extension of the architecture	The proposed design includes an architecturally complimenting monument/wall for signage an extension of the architectural materiality.
	C6	1			Utilize natural light	The proposed design utilizes large windows for double story spaces with mezzanines pushing natural light from all sides deep into the building.
		6	Minimum 2 required in this group			

GROUP D

		yes	no	n/a	criteria	
Encourage Connectivity	D1	1			Install bike facilities. If "yes," total bike storage spaces provided:	4
		1			Required:	4
					EXTRA	

GROUP E

		yes	no	n/a	criteria	
Signage, Way Finding, & Public Art	E1	1			Design signs as an integral component	The proposed design includes integrated tenant signage.
	E2	1			Incorporate way-finding through integral design	The proposed design includes architecturally integrated way-finding signage for vehicular and pedestrian traffic.
	E3	1			Encourage public art	A large-scale art wall is proposed on the entire west façade of the property.
		3				

PUBLIC REALM

		yes	no	n/a	criteria
Public Realm	PR1			1	Undergrounding Utilities
	PR2			1	Approved Public Infrastructure

BALIAN

ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
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EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

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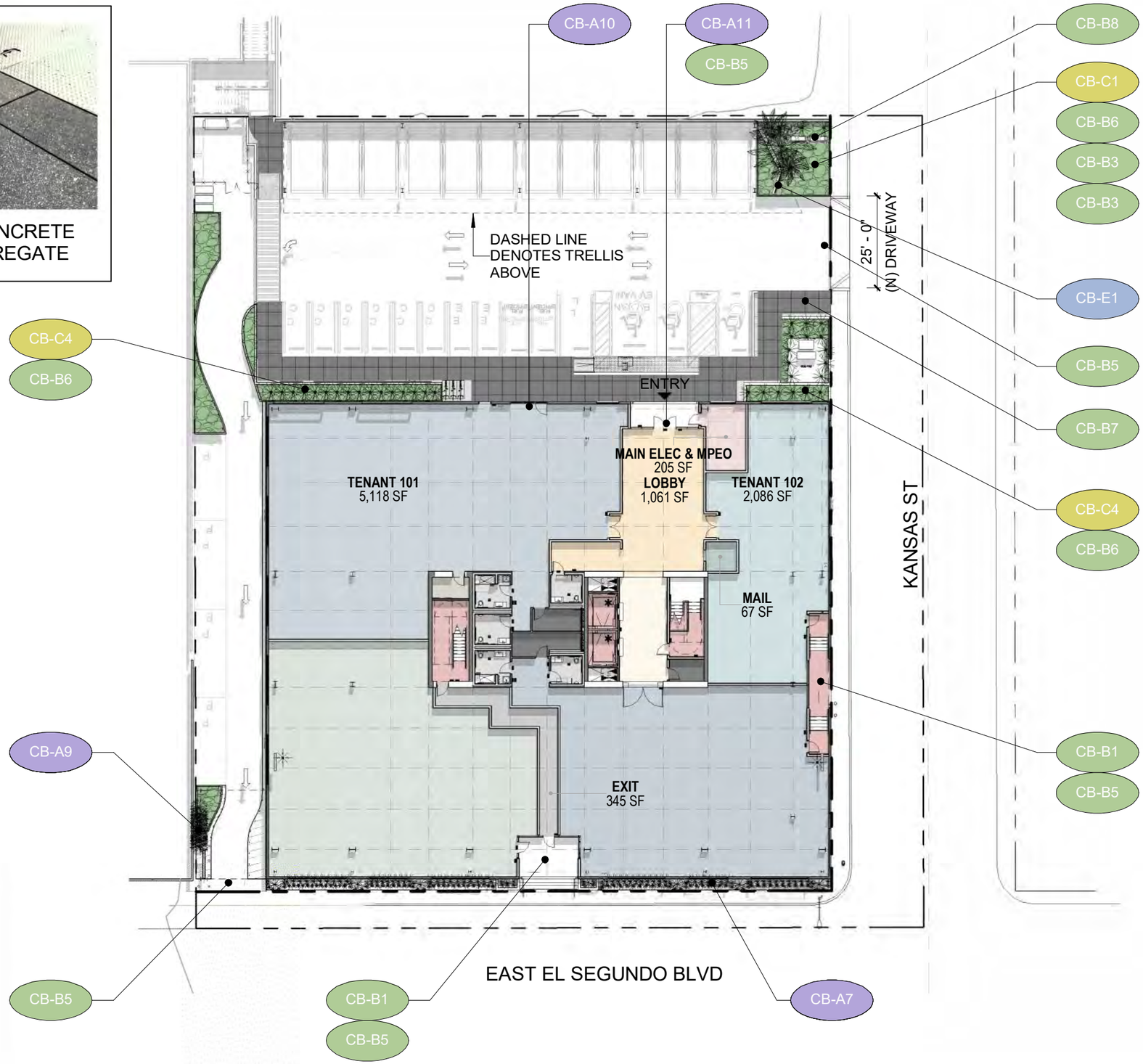
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COMMUNITY BENEFITS TABULATION WORKSHEET



INTEGRAL COLORED CONCRETE
WITH CRYSTALINE AGGREGATE



1 LEVEL 01
1" = 30'-0"

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COMMUNIY BENEFITS - FLOOR PLAN LEVEL 01



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COMMUNITY BENEFITS DIAGRAM



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LOS ANGELES, CA 90071
+ 1.213.377.5500
www . balianarchitects . com

STANDARD WORKS
EL SEGUNDO, CA

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
612 E. FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: MARK TELESZ
OFFICE 310.616.5040

1475 E EL SEGUNDO

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INITIAL SUBMITTAL	-	12.19.2019
CBP SUBMITTAL	-	05.16.2020
REVISED SUBMITTAL	-	01.06.2021
CEQA SUBMITTAL	-	05.06.2021
FINAL SUBMITTAL	-	01.20.2022
PROJECT #		17.019

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COMMUNITY BENEFITS DIAGRAM



BALIAN

ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
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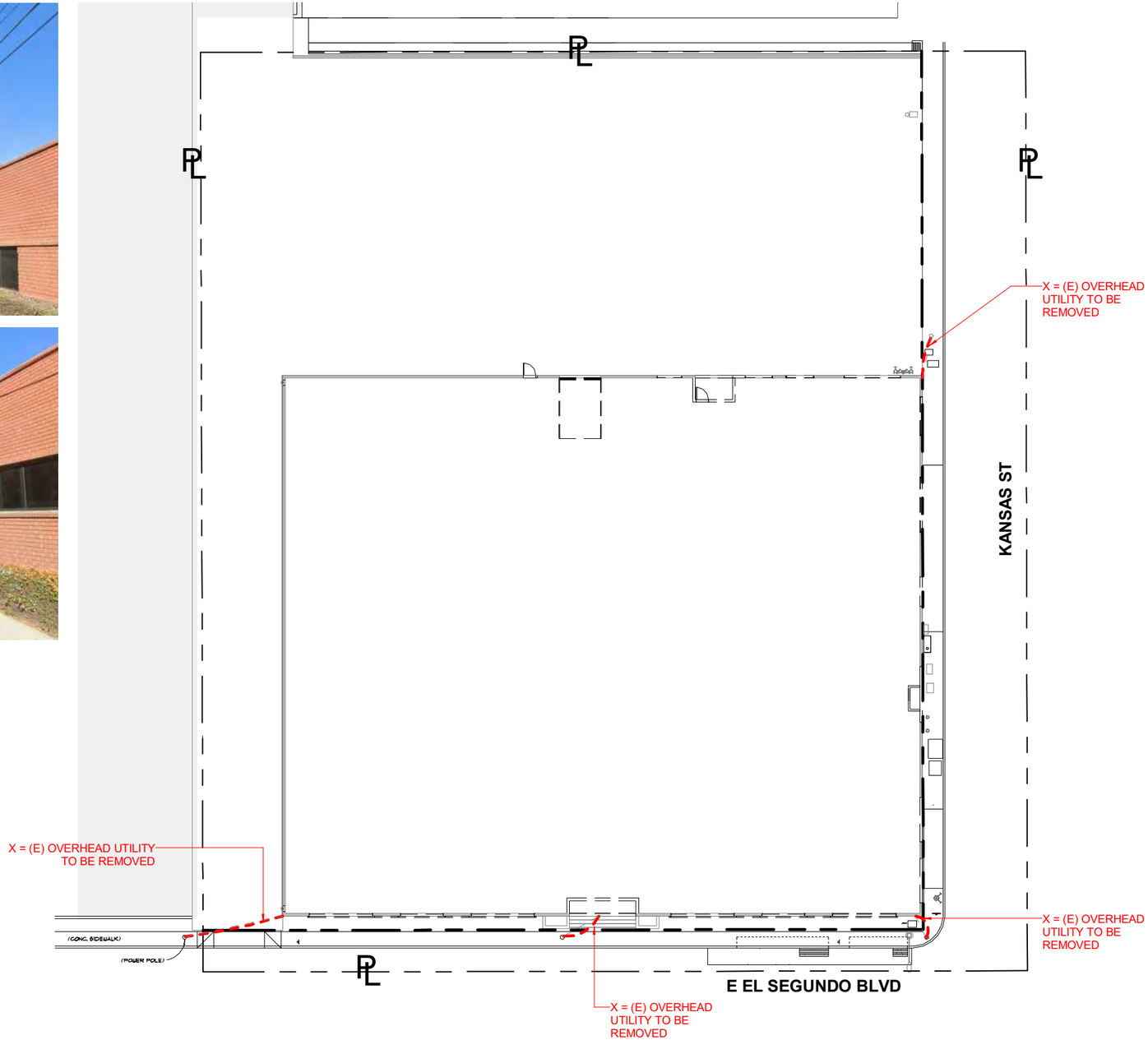
COMMUNITY BENEFITS DIAGRAM











1 SITE PLAN - PUBLIC UTILITIES
1" = 30'-0"

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ARCHITECTS
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LOS ANGELES, CA 90071
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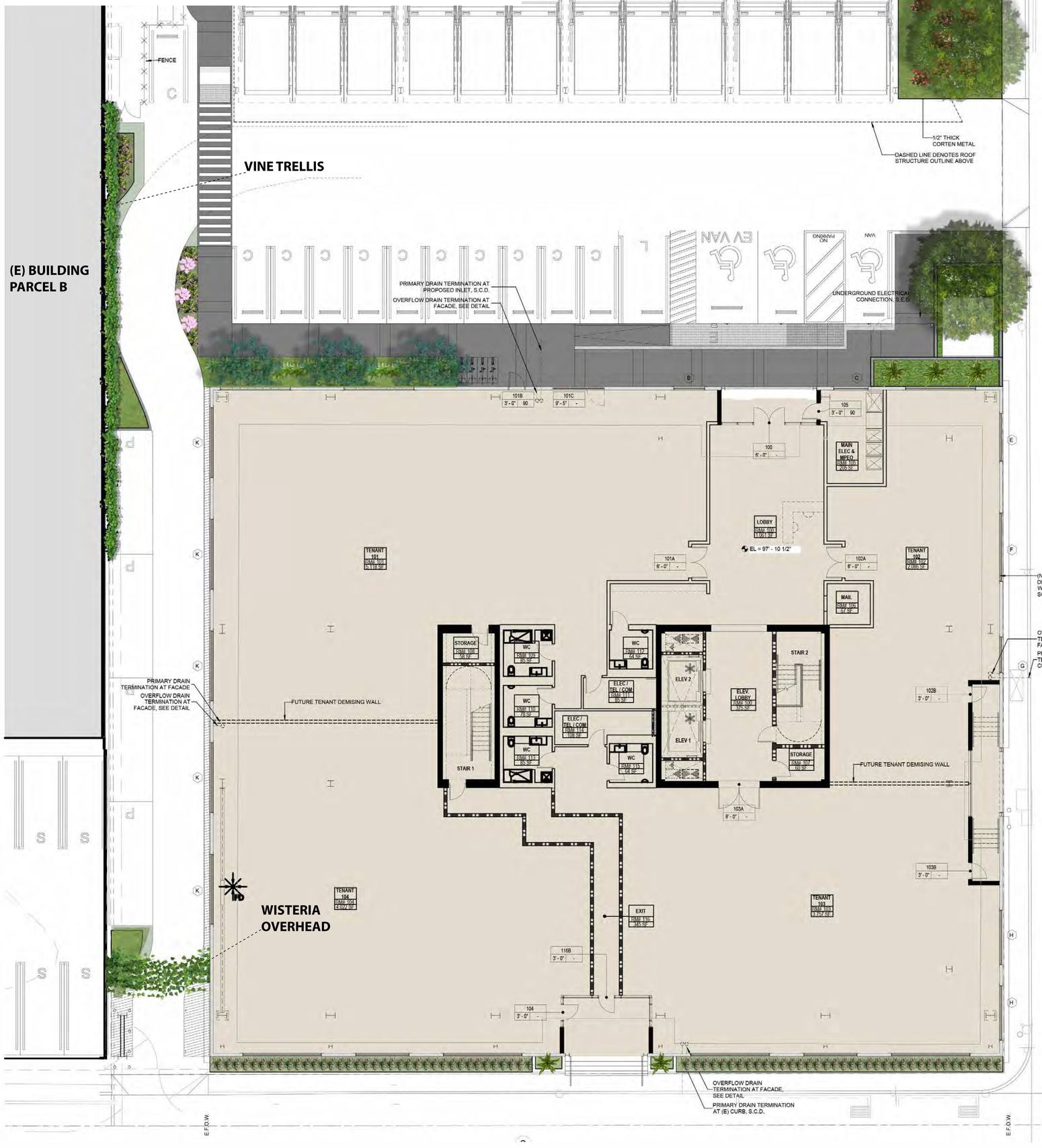
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COMMUNITY BENEFITS - PUBLIC REALM

CONCEPTUAL 1ST FLOOR LANDSCAPE PLAN



FIRST FLOOR PLANTING LEGEND

TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY LIST*	SIZE	MATURE SIZE	WATER USE (WUCOLS)	NOTES
	Melaleuca linariifolia	Snow in Summer	2	36" BOX	30' H&W	LOW	
	Podocarpus elongatus 'Monmal'	Icee Blue	3	36" BOX	25' H&W	MOD	
SUCCULENTS / SHRUBS / GROUNDCOVER							
	Hesperaloe 'Brakelights'	Brakelights Red Yucca	74		2-3' H&W	LOW	
	Asparagus densiflorus 'Myers'	Foxtail Fern	18		2' H X 2-3' W	MOD	
	Leucadendron 'Jester'	Jester Conebush	7		4-5' H&W	LOW	
	Muhlenbergia capillaris 'Lendca'	Regal Mist Pink Muhly Grass	3	5G	4' H X 3' W	MOD	
	Yucca rigida	Blue Yucca	5	5G	12' H X 5' W	LOW	
	Westringia fruticosa 'WES05'	Mundi Westringia	34		1-2' H X 4-6' W	LOW	306 SF @ 36" OC TRIANGULAR SPACING
	Rosmarinus officinalis 'Huntington Carpet'	Huntington Carpet Rosemary	69	5G	1-2' H X 8' W	VERY LOW	242 SF @ 24" OC TRIANGULAR SPACING
	Rhapiolepis umbellata 'RutRhaph1'	Southern Moon Yedda Hawthorn	12	5G	5' H X 6-8' W	LOW	96 SF @ 36" OC TRIANGULAR SPACING
	Campsis radicans 'Monbal'	Balboa Sunset Trumpet Vine	3		+30' L	MOD	
	Wisteria sinensis 'Cooke's Purple'	Purple Chinese Wisteria	3		20-30' L	MOD	
		TOTAL LIST	##				
		TOTAL OTHER					

*QUANTITIES LISTED FOR CONVENIENCE ONLY; CONTRACTOR TO VERIFY

**PLANTS OVER STRUCTURE OR IN PLANTERS RARELY REACH MATURE SIZE

DROUGHT TOLERANT PLANTS (PER LA CO. DROUGHT TOLERANT LIST)	
TOTAL NUMBER PLANTS	##
TOTAL NUMBER ON LA CO. DROUGHT TOLERANT LIST	##
PERCENTAGE PLANTS FROM LA CO DROUGHT TOLERANT LIST	####

TOTAL PLANTS ON LA COUNTY DROUGHT TOLERANT LIST EXCEED 75%, THEREFORE PROJECT IS IN COMPLIANCE

***DROUGHT TOLERANT LIST EXCEEDS 75% AFTER INCLUDING OTHER FLOOR PLANS

TREES PROVIDED (PER SHSP TABLE 2-4)	
TREES WITH A PROJECTED GROWTH TO A MINIMUM OF 25' H&W (8 REQUIRED)	9
ADDITIONAL TREES LESS THAN 25' H&W	7
TOTAL TREES PROVIDED	16
IRRIGATION (PER SHSP TABLE 2-4)	
ALL LANDSCAPED AREAS, INCLUDING TREES AT SURFACE PARKING LOTS, SHALL BE PROVIDED WITH APPROPRIATE PERMANENT WATERING FACILITIES	

LANDSCAPE SHEET INDEX

L010 CONCEPTUAL 1ST FLOOR LANDSCAPE PLAN
L020 CONCEPTUAL 2ND FLOOR LANDSCAPE PLAN
L030 CONCEPTUAL 3RD FLOOR LANDSCAPE PLAN
L040 CONCEPTUAL ROOF LANDSCAPE PLAN
L100 MATERIALS & FURNITURE
L210 1ST FLOOR PLANTING PALETTE
L240 ROOF PLANTING PALETTE

N

0 2' 4' 8' 16'

SCALE: 1/8" = 1'

LAND IMAGES LANDSCAPE ARCHITECTURE

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

OWNER: SMOKY HOLLOW INDUSTRIES
1601 N. Sepulveda Blvd Suite 629
Manhattan Beach, CA 90266
Contact: Mark Telesz
T: 310.616.5040 E-Mail: mt@smokyhollowindustries.com

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515 South Figueroa Street, Suite 1970
Los Angeles, CA 90071
www.balianarchitects.com Contact: David Balian
T: 213.377.5500 E-Mail: david@balianarchitects.com

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Torrance, California 90504
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Los Angeles, CA 90017
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T: 213.596.4609 E-Mail: OMoreno@bjpce.com

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9530 Corbin Avenue Suite 300
Tarzana, CA 91356
www.shamimengineering.com Contact: Mark Shamim
T: 818.788.6778 E-Mail: mark@shamimengineering.com

STRUCTURAL: THORNTON TOMASETTI
707 Wilshire Blvd Suite 4450
Los Angeles, CA 90017
www.ThorntonTomasetti.com Contact: Michael Cochran
T: 1.213.330.7000 E-Mail:MCochran@ThorntonTomasetti.com

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
1601 N SEPULVEDA BLVD SUITE 629
MANHATTAN BEACH, CA 90266
CONTACT: MARK TELESZ
OFFICE 310.616.5040

STANDARD WORKS
PARCEL A
1475 E. EL SEGUNDO BLVD
EL SEGUNDO, CA 90245

LICENSED LANDSCAPE ARCHITECT SCOTT VAN SOOY RENEWAL 08/31/2022 STATE OF CALIFORNIA

Signature
05-31-22
Renewal Date
Date

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

ISSUE DATE:
PROJ.#: 18.011
TIME STAMP:
FILE:

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SHEET TITLE :

CONCEPTUAL 1ST FLOOR LANDSCAPE PLAN

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SHEET NO:
L010

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CONCEPTUAL 2ND FLOOR LANDSCAPE PLAN



2ND FLOOR PLANTING LEGEND							
SUCCULENTS / SHRUBS / GROUNDCOVER							
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY LIST*	SIZE	MATURE SIZE	WATER USE (WUCOLS)	NOTES
	Evergreen Miscanthus	Evergreen Eulalia	TBD		3-4' H&W	MOD	
		TOTAL LIST	##				
		TOTAL OTHER					

*QUANTITIES LISTED FOR CONVENIENCE ONLY; CONTRACTOR TO VERIFY

**PLANTS OVER STRUCTURE OR IN PLANTERS RARELY REACH MATURE SIZE

DROUGHT TOLERANT PLANTS (PER LA CO. DROUGHT TOLERANT LIST)	
TOTAL NUMBER PLANTS	##
TOTAL NUMBER ON LA CO. DROUGHT TOLERANT LIST	##
PERCENTAGE PLANTS FROM LA CO DROUGHT TOLERANT LIST	####

TOTAL PLANTS ON LA COUNTY DROUGHT TOLERANT LIST EXCEED 75%, THEREFORE PROJECT IS IN COMPLIANCE

***DROUGHT TOLERANT LIST EXCEEDS 75% AFTER INCLUDING OTHER FLOOR PLANS



Miscanthus transmorrisonensis
Evergreen Miscanthus

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

OWNER: SMOKY HOLLOW INDUSTRIES
1601 N. Sepulveda Blvd Suite 629
Manhattan Beach, CA 90266
Contact: Mark Telesz
T: 310.616.5040 E-Mail: mt@smokyhollowindustries.com

ARCHITECT: BALIAN ARCHITECTS, INC.
515 South Figueroa Street, Suite 1970
Los Angeles, CA 90071
www.balianarchitects.com Contact: David Balian
T: 213.377.5500 E-Mail: david@balianarchitects.com

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9530 Corbin Avenue Suite 300
Tarzana, CA 91356
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T: 818.788.6779 E-Mail: mark@shamimengineering.com

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MANHATTAN BEACH, CA 90266
CONTACT: MARK TELESZ
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STANDARD WORKS
PARCEL A
1475 E. EL SEGUNDO BLVD
EL SEGUNDO, CA 90245

LANDSCAPE ARCHITECT
SCOTT VAN SOOY
No. 5505
Signature
06-30-22
Renewal Date
State

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

ISSUE DATE:
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TIME STAMP:
FILE:

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CONCEPTUAL 3RD FLOOR LANDSCAPE PLAN



3RD FLOOR PLANTING LEGEND							
SUCCULENTS / SHRUBS / GROUNDCOVER							
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY LIST*	SIZE	MATURE SIZE	WATER USE (WUCOLS)	NOTES
	Uncinia 'Everflame'	Everflame Red Hood Sedge	8	1G	17" H&W	VERY LOW	
	Rosmarinus officinalis 'Huntington Carpet'	Huntington Carpet Rosemary	9	5G	1-2' H X 8' W	VERY LOW	37 SF @ 24" OC RECTANGULAR SPACING
		TOTAL LIST	##				
		TOTAL OTHER					

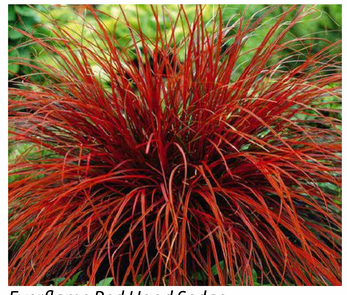
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**PLANTS OVER STRUCTURE OR IN PLANTERS RARELY REACH MATURE SIZE

DROUGHT TOLERANT PLANTS (PER LA CO. DROUGHT TOLERANT LIST)	
TOTAL NUMBER PLANTS	##
TOTAL NUMBER ON LA CO. DROUGHT TOLERANT LIST	##
PERCENTAGE PLANTS FROM LA CO DROUGHT TOLERANT LIST	####

TOTAL PLANTS ON LA COUNTY DROUGHT TOLERANT LIST EXCEED 75%, THEREFORE PROJECT IS IN COMPLIANCE

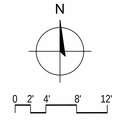
***DROUGHT TOLERANT LIST EXCEEDS 75% AFTER INCLUDING OTHER FLOOR PLANS



Everflame Red Hood Sedge
Uncinia rubra 'Everflame'



Rosmarinus officinalis 'Huntington Carpet'
Huntington Carpet Rosemary



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LANDSCAPE ARCHITECTURE

BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
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STANDARD WORKS
PARCEL A
1475 E. EL SEGUNDO BLVD
EL SEGUNDO, CA 90245

REGISTERED LANDSCAPE ARCHITECT SCOTT VAN SOOY
Signature
05-31-22
Renewal Date
Date
STATE OF CALIFORNIA

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

ISSUE DATE:
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CONCEPTUAL ROOF LANDSCAPE PLAN



ROOF PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY LIST*	SIZE	MATURE SIZE	WATER USE (WUCOLS)	NOTES
TREES							
	Arbutus unedo 'Compacta'	Dwarf Strawberry Tree	6	36" BOX	6-8' H X 5-6' W	MOD	MULTI TRUNK
	Agonis Flexuosa 'After Dark'	After Dark Peppermint Willow	4	36" BOX	15-25' H X 10-15' W	MOD	
SUCCULENTS / SHRUBS / GROUNDCOVER							
	Pedilanthus Cymbiferus	Mini Lady Slippers	66	5G	1-2' H&W	LOW	
	Euphorbia hypericifolia 'Breathless'	Breathless Euphorbia	232	5G	10-12" H X 24-28" W	LOW	
	Asparagus densiflorus 'Nana'	Dwarf Asparagus Fern	82	5G	15" H&W	MED/MOD	
	Senecio serpens	Blue Chalksticks	34	1G	1' H X 2-3' W	LOW	78 SF @ 18" OC RECTANGULAR SPACING
	Rosmarinus officinalis 'Huntington Carpet'	Huntington Carpet Rosemary	195	5G	1-2' H X 8' W	VERY LOW	678 SF @ 24" OC TRIANGULAR SPACING
MODULAR GREEN ROOF TRAYS							
	Sedum nussbaumerianum	Orange Delight	TBD	1G	4" H X 15" W	LOW	72 SF @ 15" OC RECTANGULAR SPACING
	Calandrinia spectabilis	Rock Purslane	TBD	1G	1' H&W	LOW	96 SF @ 10" OC RECTANGULAR SPACING
	Delosperma 'P0015'	Fire Spinner Ice Plant	TBD	1G	2-4" H X 12-18" W	LOW	72 SF @ 18" OC RECTANGULAR SPACING
	Euphorbia rigida	Upright Myrtle Spurge	TBD	1G	1-2' H X 3' W	LOW	84 SF @ 20" OC RECTANGULAR SPACING
	Euphorbia resinifera	Moroccan Mound	TBD	1G	1-2' H X 4' W	LOW	72 SF @ 18" OC RECTANGULAR SPACING
		TOTAL LIST	##				
		TOTAL OTHER					

*QUANTITIES LISTED FOR CONVENIENCE ONLY; CONTRACTOR TO VERIFY

**PLANTS OVER STRUCTURE OR IN PLANTERS RARELY REACH MATURE SIZE

DROUGHT TOLERANT PLANTS (PER LA CO. DROUGHT TOLERANT LIST)	
TOTAL NUMBER PLANTS	##
TOTAL NUMBER ON LA CO. DROUGHT TOLERANT LIST	##
PERCENTAGE PLANTS FROM LA CO DROUGHT TOLERANT LIST	####

TOTAL PLANTS ON LA COUNTY DROUGHT TOLERANT LIST EXCEED 75%, THEREFORE PROJECT IS IN COMPLIANCE

***DROUGHT TOLERANT LIST EXCEEDS 75% AFTER INCLUDING OTHER FLOOR PLANS

FURNISHINGS

- PATIO TABLE WITH UMBRELLA
- SOFA LOUNGE W/ TABLES
- COFFEE TABLE
- LARGE TABLE
- BENCH

N

0 2' 4' 8' 16'

SCALE: 1/8" = 1'

LAND IMAGES LANDSCAPE ARCHITECTURE

BALIAN ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

OWNER: SMOKY HOLLOW INDUSTRIES
1601 N. Sepulveda Blvd Suite 629
Manhattan Beach, CA 90266
Contact: Mark Telesz
T: 310.616.5040 E-Mail: mt@smokyhollowindustries.com

ARCHITECT: BALIAN ARCHITECTS, INC.
515 South Figueroa Street, Suite 1970
Los Angeles, CA 90071
www.balianarchitects.com Contact: David Balian
T: 213.377.5500 E-Mail: david@balianarchitects.com

OWNER'S CONSULTANTS

SURVEY: DCA CIVIL ENGINEERING GROUP
17625 Crenshaw Blvd. Suite 300.
Torrance, California 90504
www.dcacivileng.com Contact:
T: 310.327.0016 E-Mail:

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700 South Flower Street , Suite 1900
Los Angeles, CA 90017
www.bjpce.com Contact: Orlando Moreno
T: 213.596.4609 E-Mail: OMoreno@bjpce.com

MEP&T24: SHAMIM ENGINEERING CONSULT., INC
9530 Corbin Avenue Suite 300
Tarzana, CA 91356
www.shamimengineering.com Contact: Mark Shamim
T: 818.788.6779 E-Mail: mark@shamimengineering.com

STRUCTURAL: THORNTON TOMASETTI
707 Wilshire Blvd Suite 4450
Los Angeles, CA 90017
www.ThorntonTomasetti.com Contact: Michael Cochran
T: 1.213.330.7000 E-Mail:MCochran@ThorntonTomasetti.com

SMOKY HOLLOW INDUSTRIES

SMOKY HOLLOW INDUSTRIES, LLC
1601 N SEPULVEDA BLVD SUITE 629
MANHATTAN BEACH, CA 90266
CONTACT: MARK TELESZ
OFFICE 310.616.5040

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1475 E. EL SEGUNDO BLVD
EL SEGUNDO, CA 90245

LICENSED LANDSCAPE ARCHITECT SCOTT VAN SOOY
Signature
06-01-22
Renewal Date
Date

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

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PROJ #: 18.011
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FILE:

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CONCEPTUAL ROOF LANDSCAPE PLAN

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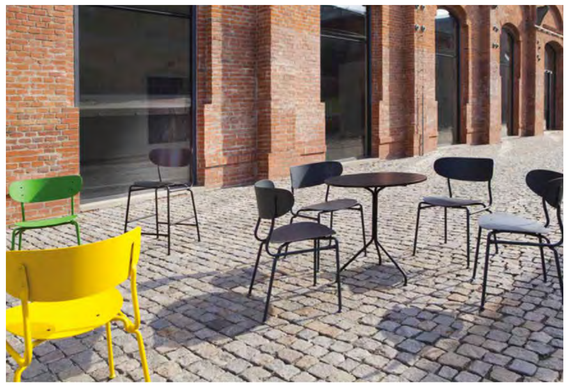




BIKE AMENITIES







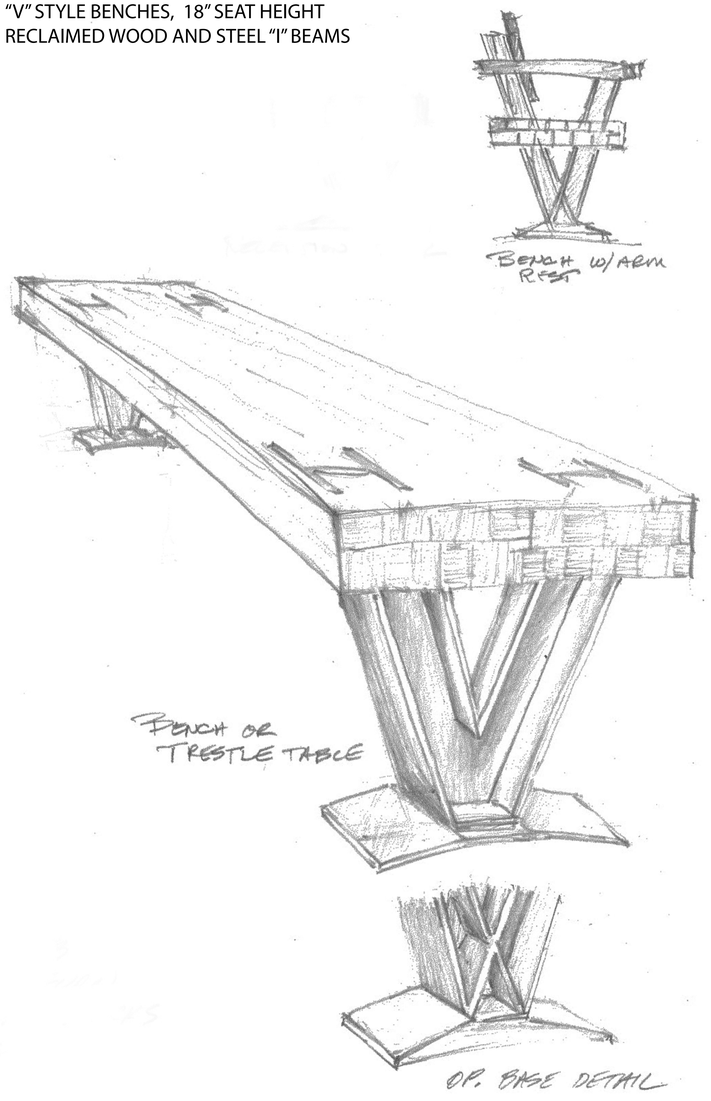


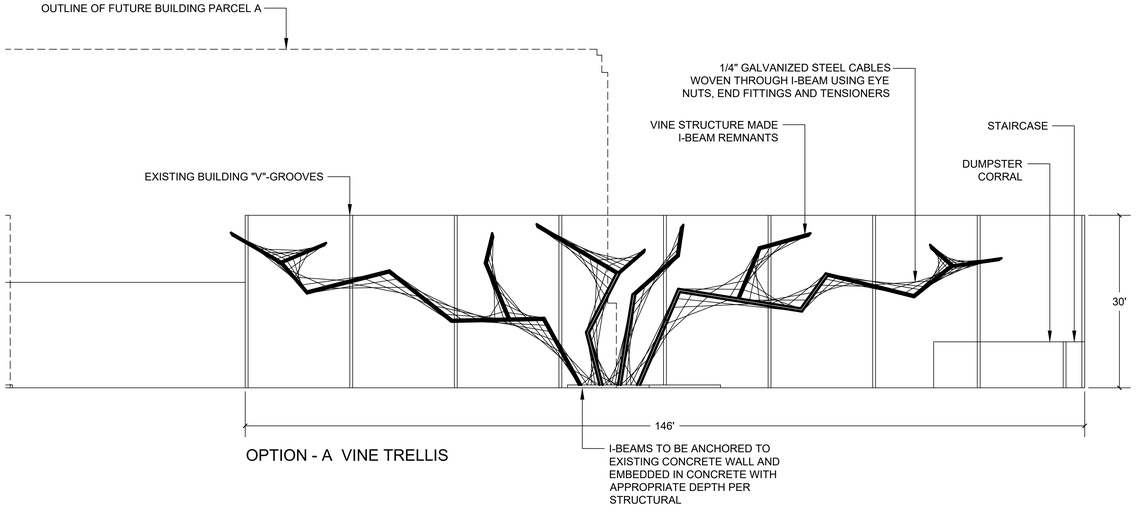
SHADE STRUCTURE





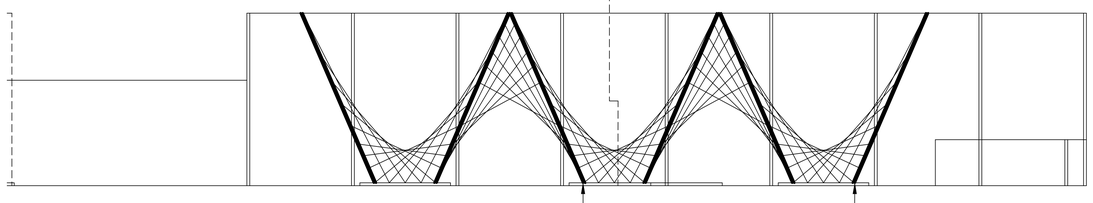
"V" STYLE BENCHES, 18" SEAT HEIGHT
RECLAIMED WOOD AND STEEL "I" BEAMS





OPTION - A VINE TRELLIS





OPTION - B VINE TRELLIS

I-BEAMS TO BE ANCHORED TO EXISTING CONCRETE WALL AND EMBEDDED IN CONCRETE WITH APPROPRIATE DEPTH PER STRUCTURAL

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BALIAN
ARCHITECTS
515 S. FIGUEROA ST. STE 1970
LOS ANGELES, CA 90071
+ 1.213.377.5500
www.balianarchitects.com

OWNER: SMOKY HOLLOW INDUSTRIES
1601 N. Sepulveda Blvd Suite 629
Manhattan Beach, CA 90266
Contact: Mark Telesz
T: 310.616.5040 E-Mail: mt@smokyhollowindustries.com

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515 South Figueroa Street, Suite 1970
Los Angeles, CA 90071
www.balianarchitects.com Contact: David Balian
T: 213.377.5500 E-Mail: david@balianarchitects.com

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T: 213.596.4609 E-Mail: OMoreno@bjpce.com

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5030 Corbin Avenue Suite 300
Tarzana, CA 91356
www.shamimengineering.com Contact: Mark Shamim
T: 818.788.6779 E-Mail: mark@shamimengineering.com

STRUCTURAL: THORNTON TOMASETTI
707 Wilshire Blvd Suite 4450
Los Angeles, CA 90017
www.ThorntonTomasetti.com Contact: Michael Cochran
T: 1.213.330.7000 E-Mail:MCochran@ThorntonTomasetti.com

SMOKY HOLLOW INDUSTRIES, LLC
1601 N SEPULVEDA BLVD SUITE 629
MANHATTAN BEACH, CA 90266
CONTACT: MARK TELESZ
OFFICE 310.616.5040

STANDARD WORKS
PARCEL A
1475 E. EL SEGUNDO BLVD
EL SEGUNDO, CA 90245

REGISTERED LANDSCAPE ARCHITECT
SCOTT VAN SOOY
Signature
05-31-22
Renewal Date
Date
STATE OF CALIFORNIA

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

ISSUE DATE:
PROJ.# 18.011
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1ST FLOOR PLANTING PALETTE



Snow in Summer
Melaleuca linariifolia



Podocarpus elongatus 'Monmal'
Icee Blue



Hesperaloe 'Brakelights'
Brakelights Red Yucca



Leucadendron 'Jester'
Jester Conebush



Rosmarinus officinalis 'Huntington Carpet'
Huntington Carpet Rosemary



Asparagus densiflorus 'Nana'
Dwarf Asparagus Fern



Campsis radicans 'Monbal'
Balboa Sunset, Trumpet Vine



Wisteria siensis 'Cooke's Purple'
Purple Chinese Wisteria



Westringia fruticosa 'Mundi'
Low Coast Rosemary



Yucca rigida
Blue Yucca

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ARCHITECTS
515 S. FIGUEROA ST. STE 1970
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OWNER: SMOKY HOLLOW INDUSTRIES
1601 N. Sepulveda Blvd Suite 629
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Contact: Mark Telesz
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1601 N SEPULVEDA BLVD SUITE 629
MANHATTAN BEACH, CA 90266
CONTACT: MARK TELESZ
OFFICE 310.616.5040

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PARCEL A
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EL SEGUNDO, CA 90245

SCOTT VAN SOOY LANDSCAPE ARCHITECT
Signature
06.11.20
Renewal Date
Date
STATE OF CALIFORNIA

NAME: SCOTT VAN SOOY
LICENSE NUMBER: 5505
SIGNATURE DATE:

ISSUE DATE:
PROJ #: 18.011
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FILE:

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1ST FLOOR PLANTING PALETTE

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ROOF PLANTING PALETTE



STEEL PLANTERS



PEDESTAL PAVING SYSTEM



SHADE STRUCTURE



Arbutus unedo 'Compacta'
Dwarf Strawberry Tree



Pedilathus cymbiferus
Mini Lady Slippers



Sedum nussbaumerianum
Orange Delight



Agonis flexuosa 'After Dark'
After Dark Peppermint Willow



Euphorbia hypericifolia 'Breathless'
Breathless Euphorbia



A. Euphorbia rigida (Upright Myrtle)



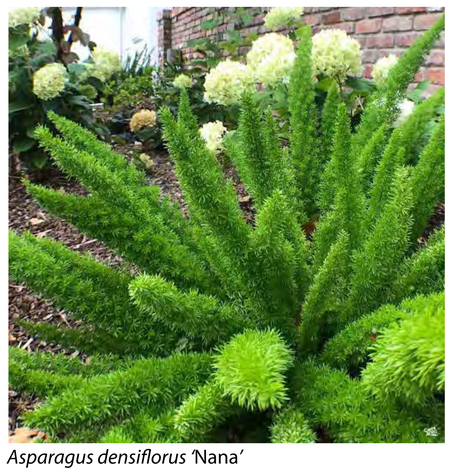
B. Euphorbia Resinifera
Moroccan Mound



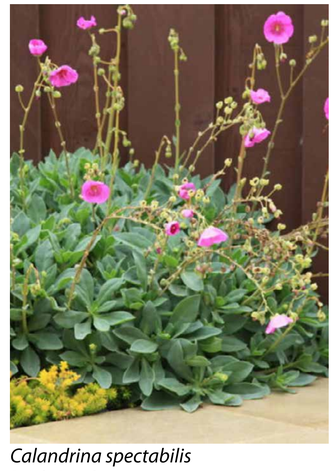
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Huntington Carpet Rosemary



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Dwarf Asparagus Fern



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Rock Purslane



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Fire Spinner, Ice Plant

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Community Benefits Analysis for 1320 E Franklin Ave., prepared by Kosmont, dated November 2021

CITY OF EL SEGUNDO

Community Benefits Analysis
1320 E. Franklin Ave.



Prepared By:

Kosmont Companies
1601 N. Sepulveda Blvd. #382
Manhattan Beach, CA 90266
www.kosmont.com

November, 2021

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

Background and Methodology

Kosmont & Associates, Inc. doing business as Kosmont Companies ("Consultant" or "Kosmont"), operating under the master consulting agreement with the City of El Segundo ("City") for Smoky Hollow Community Benefit Analysis is pleased to submit this report on the comprehensive community benefits as required by the Tier 1 and Tier 2 application process for the proposed redevelopment application at 1320 E. Franklin Ave. in El Segundo ("Site")

Kosmont was asked to review the Site development application site plan, floor plan and building design and preliminary community benefit proposal. The proposed project is a 67,200 square foot office building that retains the historic integrity of the existing brick building ("Project").

Kosmont reviewed the City's Smoky Hollow Specific Plan ("Specific Plan") to identify planned district wide public improvements and met with City staff to understand:

1. the City's perspective on how the Project design components address those improvements,
2. what other improvements that the City considered community benefits, as opposed to standard development requirements.

The Project has 67,200 gross building area and remains within the 1.5 FAR limit. However, the design exceeds the Specific Plan height limit of 35 feet by approximately 24 feet 6 inches with a proposed height of 59 feet six inches.

Project Value Add Analysis

Kosmont gathered construction cost data from the Project Applicant. Kosmont performed high level market research to estimate current land value and baseline rent for "as is" use, future market rent for the proposed new tenant spaces, and building valuation assumptions. This will inform a financial pro forma model that Kosmont developed to analyze the incremental development profit above the estimated profit from the "by right" permitted development. For example, an increase in gross building area would require an analysis of the marginal increase in operating income and stabilized investment value. Marginal costs of construction would be deducted to derive the incremental profit.

Community Benefits Analysis

Kosmont **has not yet** reviewed proposed Project components with City staff to confirm project elements that are eligible as a community benefit. Staff will request a complete project description before finalizing the report. The community benefits are based on information provided by the Applicant and some items were adjusted by Kosmont. It is important to recognize that the Applicant will realize some financial benefits from many of these items.

Fiscal/Economic Benefits Analysis

Kosmont also analyzed the proposed Project to estimate construction period jobs, as well as stabilized operation jobs, and incremental City General Fund tax revenues (i.e. increase in property tax, sales tax, business taxes) above current use. In order to estimate the value of economic benefits for comparison to the development profit added, Kosmont used a financial cash flow approach assuming a 25-year life.

The attached report analyzes the increased financial benefits received from exceeding the Specific Plan limits, compared against the estimated the value of proposed community benefits, as well as fiscal/economic benefits. We are available to answer any questions regarding our methodology and conclusions.

Disclaimer

This Analysis is confidential and client privileged and is not to be used for any purpose other than for negotiating an acceptable Community Benefit Agreement. This Analysis is based on estimated figures and Kosmont's professional opinion, using available market and development cost information. Actual results may differ from those expressed in this analysis, as results are difficult to predict as a function of market conditions, natural disasters, pandemics, significant economic impacts, legislation and administrative actions.

Executive Summary

The City Planning Division received an application to allow the construction of a 46,000 square-foot addition on the Site. The Applicant is requesting to exceed the maximum height of 35 feet up to 54 feet 6 inches through the Specific Plan Community Benefit process.

As shown in the following report, the Project is expected to generate economic and community benefits in excess of the Project value added accruing to the Applicant resulting from the requested height variance. Per the City's request Kosmont has illustrated the fiscal and economic benefits from the incremental development, as well as for the entire Project as proposed.

Summary of Value Add / City Benefits

Project Value Added	Proposed Community Benefits	Fiscal Benefits	Economic Benefits Const & Perm Jobs
$964,000	$4,070,000	$902,000	150+190 jobs
Incremental above	35 foot height limit	$293,000	60+70 jobs

Source: Kosmont Companies

Project Value Add

Kosmont has prepared an illustrative development pro forma to show the stabilized value under three scenarios:

1. As Is Building (19,493 Sq. Ft.)
2. As Proposed (65,061 Sq. Ft. – 56,400 Sq. Ft. rentable)
3. As Permitted by Specific Plan (42,900 Sq. Ft. – 36,400 Sq. Ft. rentable)

Based on the estimated land value and development costs, the proforma analysis indicates a Project value add of approximately $0.96 million over a similar building within the allowable 35-foot height.

Community Benefits

Kosmont estimated the marginal cost associated with the following community benefit items to be $4.07 million, with the vast majority coming from the transformative architecture treatments, as summarized below:

- Architecture that enhances building character ($2.8 million)
- Open space that facilitates gathering ($750,000)
- Landscaping and environmental design ($180,000)

- Wayfinding & Signage ($60,000)
- Undergrounding utilities ($150,000)
- Coffee kiosk ($130,000)

It is important to note that many of these items also provide value to the project by making the building more attractive to new tenants.

Fiscal Benefits

The existing 1320 E. Franklin Ave. office/industrial building had a 2019 assessed value of $1,013,000. It houses two different tenants with approximately 30 employees. Following redevelopment, Kosmont estimates the assessed value will increase by $23.5 million based on the construction budget, yielding $14,100 per year to the City General Fund. The incremental assessed value from building above the 35 foot would be $9.4 million, yielding $5,600 in annual taxes.

The new building is expected to house 220 professional office/design employees, for a net increase of 190 employees. These employees are estimated to generate approximately $900,000 in incremental annual retail sales at City establishments. The onsite coffee kiosk is estimated to generate $300,000 in annual sales for a total of $12,000 in annual sales taxes. In addition to retail sales taxes, the Project will generate additional business license taxes from the office tenancy, estimated at almost $34,000 per year for a total annual surplus of $56,800.

Over a 25-year period with 3% inflation, the Project will generate an estimated $1,893,000 in City tax revenue, with a net present value of approximately $903,000. The *incremental* fiscal benefit generated by building above 35-foot height limit is estimated to be $614,000 over the 25-year period with an NPV of approximately $293,000.

Economic Benefits

Development of the new creative office/commercial building will generate an estimated 150 full time equivalent ("FTE") jobs during construction period, including direct, indirect and induced, generating $13 million in labor income. At stabilized occupancy, the Project tenants are expected to employ 220 full time positions, an increase of 190 jobs over current level.

The *incremental* economic benefit generated by building above 35 foot height limit is estimated to be 60 FTE jobs during construction period, providing $5 million in labor income.

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

Project Description

The City Planning Division received an application for Environmental Assessment No. EA-1282 and Tier II Community Benefit Plan No. 19-03 to allow the construction of a 46,000 square-foot addition to exceed the maximum permitted building height by approximately 25 feet. The Site is located at 1320 E. Franklin Ave., in the Smoky Hollow East (SHE) zone within the Specific Plan.

The subject 1320 Franklin Site is located within a larger parcel totaling 191,000 square foot (4.4 acres). The Site contains three mid-century Industrial brick buildings. The current building uses at the are light industrial with warehouse, general office, and research and development. The Site was purchased by the current owner in 2015.

Exhibit 1 – Site Plan



Off-Street Parking

Vehicular access to a new five-story parking structure is provided from a 28-foot wide driveway facing Franklin Avenue. The Specific Plan requires one parking space for every 400 square feet of gross floor area. The completed Project will have 168 spaces, with 34 surface parking spaces and 134 spaces (from the existing 398 space parking structure).allocated to 1320 E. Franklin Ave. The new building's 134 spaces in the structure have an allocated cost of $2.6 million.

Tier II Community Benefits Plan

The Applicant is requesting to exceed the maximum height of 35 feet in the Specific Plan. The Applicant is requesting 25 additional feet (total of 60 feet) in order to build a 3rd story with mezzanine. The Project will not exceed the FAR of 1.5. Projects proposed at a building height must provide a Community Benefits Plan which requires approval from the City Council. In order to approve the project the City Council must find the value of the proposed Tier II Community Benefits adequate in implementing the objectives of the Specific Plan, in exchange for allowing the additional height, and must make the required findings indicated in the Smoky Hollow Specific Plan.

Exhibit 2
Elevation Illustration



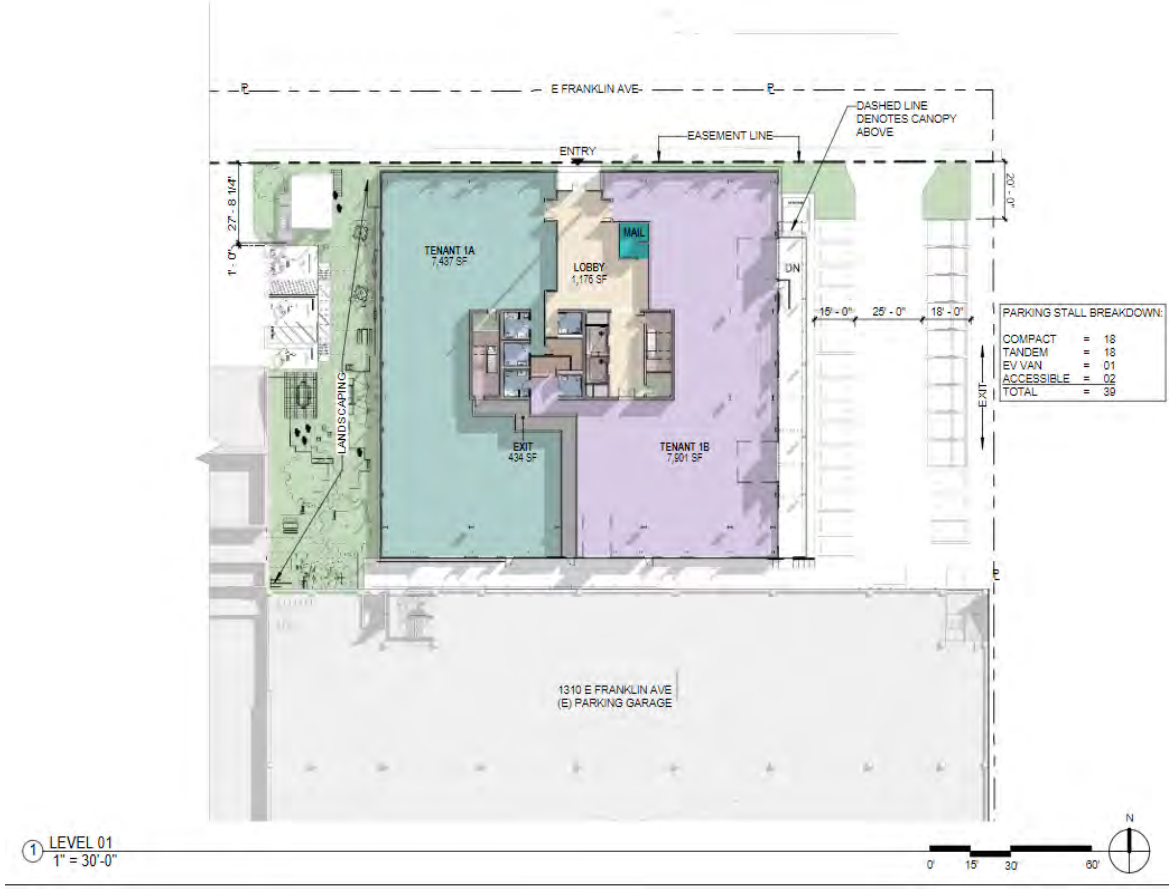
Environmental Review

A Historic Resource Evaluation Report was prepared by a qualified professional to assess the building located at 1320 E. Franklin Ave., since the existing one-story industrial brick building was constructed in the 1950's and is greater than 50 years of age. None of the three buildings on the property are listed under the national historic, state or local landmark programs. City Staff concluded that none of the buildings appear eligible for individual listing in any Historic Register or eligible for local designation as a cultural resource.

Floor Plan

The proposed addition to the building is 46,000 square feet for a gross building area of 65,061 square feet. The additional floor area is for creative office uses that engage in research, with some accessory retail, and a coffee kiosk containing a small outdoor seating area. See ground floor plan below. Level 3 floor plan/mezzanine level are illustrated in Exhibit 4 on the following page.

Exhibit 3
Ground Floor Plan



The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

The City rules for mezzanine space limits total area to less than 50% of the 22,600 square foot main floor area, or 10,000 square feet. However, due to the extensive vertical penetration for stairways, elevators and restrooms the net rentable area is only 7,600 square feet.

Exhibit 4
3rd Floor & Mezzanine



Project Value Add

Capital investment in real estate development is a high-risk private sector venture. In order to obtain financing commitments, developers must be able to demonstrate sufficient financial returns to offset the risks related to construction cost overruns and changes in the local economy during the construction period that could affect market rents and occupancy following construction. The key development cost components include land, site development, building construction, permits and fees, design and other soft costs, and financing costs. The Net Operating Income (NOI) calculation accounts for gross rents, vacancy factor, and all operating expenses.

To estimate the Project value added, as a result of the Specific Plan variance requested, Kosmont developed a financial feasibility simulation model in Excel for this Analysis to provide a reasonable estimate of expected development costs and annual net operating income a project would earn. It also shows the value at completion, which after deducting the total development costs, yields the developer profit.

Kosmont's analysis shows the stabilized value under three scenarios:

- As Is Building (19,493 Sq. Ft.)
- As Proposed (65,061 Sq. Ft. – 56,400 Sq. Ft. rentable)
- As Permitted by Specific Plan (42,900 Sq. Ft. – 36,400 Sq. Ft. rentable)

Key Assumptions

Rental Income
Kosmont surveyed local real estate brokers to estimate market rents for the new creative office space planned. Unimproved mezzanine levels are primarily used as amenity space:

- Monthly rent of $2.85 psf triple net are most likely for high quality office space
- Monthly rent for mezzanine space would be $2.00 psf triple net
- Structured parking for 2.5 employees per 1,000 square feet is included in base rent

To determine potential rental income, we calculated the net rentable area for each level from the detailed floor plans as summarized below:

- Ground floor – 15,300 sq. ft. (excludes lobby and restrooms)
- Level 2 – 13,800 sq. ft. (plus Mezzanine 6,500 sq. ft.)
- Level 3 – 13,500 sq. ft. (plus Mezzanine 6,500 sq. ft.)

Development Costs

Kosmont reviewed development cost estimates provided by Applicant and architect. Total allocated costs for the new building are estimated at $26.1 million broken down as follows:

- $18.7 million for base building plus
- $1.5 million in soft costs plus
- $1.8 million in landscape and hardscape costs plus
- $1.6 million for future tenant improvements plus
- $2.5 million for the 134 allocated parking structure spaces.

Capitalization Rates

Capitalization rate is an economic measure of the average annual return on total costs expected by investors. It varies by type of property and geographic location. In order to estimate value of the new Project at completion, the estimated stabilized net operating income is divided by the capitalization rate. For this analysis the capitalization rate was estimated at 5.0%.

Development Value

As shown in the pro forma in Exhibit 5 on the following page, the As Is value for existing building is estimated at approximately $2.8 million. This establishes the opportunity cost of land for the redevelopment analysis.

The Project "as proposed" has an estimated value of $33.1 million at stabilized occupancy. Reducing that value by the estimated $2.8 million "as is" land value and the total development costs totaling $29 million, yields estimated development profit of $4.13 million, or 14.3% of costs.

A hypothetical project subject to the 35-foot height limit has an estimated value of $21.7 million, reflecting the loss of 24,300 square feet from the 3rd level. The development costs are reduced by $10.5 million, reflecting the loss of rentable area and a reduction in the community benefits, resulting in an estimated development profit of $3.17 million, or 17.1% of costs.

Project Value Add Conclusion

Based on the land value and development costs, the proforma analysis indicates the Project has a value add of approximately $0.96 million over a similar building within the allowable 35-foot height ($4.13 million - $3.17 million).

Disclaimer

This Analysis is confidential and client privileged and is not to be used for any purpose other than for negotiating an acceptable Community Benefit Agreement. This Analysis is based on estimated figures and Kosmont's professional opinion, using available market and development cost information. Actual results may differ from those expressed in this analysis, as results are difficult to predict as a function of market conditions, natural disasters, pandemics, significant economic impacts, legislation and administrative actions.

Exhibit 5
1320 E. Frankin Ave
Pro Forma Comparison

	As Is	As Proposed	Per SP
Gross SF	19,493	65,061	42,900
Industrial SF	10,428	-	-
Coffee Kiosk		770	770
Office Rentable SF	9,065	42,600	29,100
Mezzanine Rentable SF	-	13,000	6,500
Industrial Rent PSF	$1.00	$0.00	$0.00
Kiosk Rent	$0.00	$2.00	$2.00
Office rent	$1.00	$2.85	$2.85
Mezzanine Rent	$0.00	$2.00	$2.00
Vacancy Rate	10%	7.5%	7.5%
Mthly Parking Income	$0	$0	$0
Net Operating Income	$210,524	$1,654,731	$1,083,359
Cap Rate	7.5%	5.00%	5.00%
Stabilized value	$2,810,000	$33,090,000	$21,670,000
Land Value Contribution	*n/a*	$2,810,000	$2,810,000
Parking Structure Pro Rata %	*n/a*	$2,546,000	$1,530,000
Financing , Marketing & Overhead	*n/a*	$1,500,000	$900,000
Design & Hard Costs	*n/a*	$20,300,000	$12,180,000
Landscaping & Hardscaping	*n/a*	$1,800,000	$1,080,000
Total Development Costs	*n/a*	$28,956,000	$18,500,000
Development Profit	*n/a*	$4,134,000	$3,170,000
Profit as % of Costs		14.3%	17.1%

Source: Kosmont Companies, Applicant

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Community Benefits

The Specific Plan requires new development to provide 3% of the lot as open space and if the lot exceeds 22,400 square feet, a minimum of 10% of the lot. Lots greater than 22,400 square feet must provide a minimum of 1 tree for every 4 at grade surface parking spaces open-to-the-sky and each tree must be a minimum of 24-inch box tree. The proposed front and side yard setbacks contain soft landscaping areas, which complies with the minimum required open space and number of trees.

List of Benefits

As part of the Applicant's submittal package, they identified numerous physical improvements that were considered eligible Community Benefits. Kosmont reviewed with the Applicant to gather data to estimate the marginal cost (i.e. value) of each item.

- Architecture that enhances building character ($2.8 million)
- Open space that facilitates gathering ($750,000)
- Landscaping and environmental design ($180,000)
- Wayfinding & Signage ($60,000)
- Undergrounding utilities ($150,000)
- Coffee kiosk ($150,000)

Architectural Enhancements
The architectural design incorporates 1950's era materials, large scale steel windows, exterior balconies and exposed steel structural systems. Based on Kosmont's review of the plans and discussions with the architect, Kosmont estimates these features represent 15% of the $18.7 million in direct construction costs, or $2.8 million.

Open Space and Public Gathering
The proposed design provides three pedestrian entryways and two vehicular entries. The design includes a large public park and a raised shaded deck area. It also provides street furniture at the public park and near the coffee kiosk. The design includes period lighting on all sides and throughout the site. The applicants estimated cost for these improvement is $1.5 million. Given that some open space/public gathering is required for a basic office building, Kosmont assumed a 50% factor for extraordinary improvements of $750,000.

Landscaping
The design includes horizontal and vertical landscaping with drought tolerant and native plants throughout, including balcony and rooftop and along the parking areas. The estimated cost for these improvement is $180,000.

Wayfinding & Signage

The project design provides integrated tenant signage and architecturally integrated signage for pedestrian and vehicular traffic at an estimated cost of $60,000.

Undergrounding Utilities

Incoming power and data cables will be consolidated into a single location and undergrounded with an estimated cost of $150,000.

Coffee Kiosk

Applicant indicates providing a 770 square foot coffee kiosk with outdoor seating to serve the business community. Kosmont estimates that such space will cost over $600 per square foot to build or a total of $460,000. Assuming a monthly rent of $2.00 per square foot, Kosmont estimates it would yield a capitalized value of $330,000, resulting in a subsidy of $130,000.

Total Value of Community Benefits

Combining the value of each building component listed above, results in a combined marginal cost increase of approximately $4.07 million. It is important to note that many of the community benefit items also add value to the Project by making the building more attractive to tenants.

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Fiscal Benefits

In addition to the Project-specific Community Benefits, the City has requested an analysis of the incremental fiscal revenues expected from the stabilized operation of the Project. In order to quantify the value of economic benefits for comparison to the development profit added, Kosmont used a discounted financial cash flow approach assuming a 25-year life.

This Analysis is based on information provided by the Applicant, the City, Los Angeles County ("County") Property Tax Auditor-Controller's Office, California Department of Finance ("DOF"), California Board of Equalization ("BOE"), U.S. Census, U.S. Bureau of Labor Statistics ("BLS"), and ESRI.

General Assumptions

Unless otherwise noted, the subsequent analysis maintains the following assumptions.

- Dollar amounts are expressed in 2021 dollars.
- Fiscal impacts are estimated at stabilized occupancy.
- Employment figures are permanent FTE jobs.

Fiscal Revenue Analysis

Property Tax

Secured property tax revenues are estimated based on the anticipated assessed value of the Project upon full build-out and the applicable property tax rates for the City. Existing value was not included as part of the analysis, as the subject property is already on the tax rolls.

The City general fund receives an approximate 6% share of the annual 1.0% secured property tax general levy placed by the County on the assessed value of the property ($0.06 of each $1.00 of secured property tax revenue).

Unsecured property taxes are collected based on the assessed value of real property not affixed to the underlying land, such as business fixtures, and some types of vehicles. The rate of taxation and apportionment is generally the same as for secured property taxes.

The 2019 assessed value of the Site was $1.13 million. Market value of the property is significantly higher, but until there is a change in ownership no reassessment is likely to occur. The total development cost for the building and the pro rata allocated cost of the parking structure totals approximately $26.1 million. Assuming a 90% assessed value taxable factor, there will be a $23.5 million increase in assessed value, for which the City would receive approximately $14,100 in additional annual property taxes. (*Incremental* property taxes from the larger building are estimated at $5,600 per year).

If at some point in the future, the Site is sold, the estimated market value would be approximately $33 million in 2021 dollars, increasing the assessed value by approximately $10 million.

Sales Tax (On-Site / Direct)

None of the new business tenants are expected to generate taxable retail sales, except for the approximate 769 square foot coffee kiosk designed to provide takeout food. Based on annual sales of $400 psf, Kosmont estimates annual sales of $300,000, yielding $3,000 in sales taxes to the City General Fund.

Offsite Sales Tax (Indirect)

In addition to onsite sales, employees and business owners will generate off-site / indirect sales. Kosmont utilized ICSC surveys of employee spending near places of work to estimate $5,000 in annual sales per employee. At stabilized occupancy the Project is expected to result in approximately $900,000 in annual offsite taxable sales, which would result in $9,000 in annual sales tax revenues for the City. (*Incremental* offsite sales taxes from the larger building are estimated at $3,000 per year).

Business Taxes

Current business tax rates are assessed based on the number of employees and square footage. The first 10 employees and initial 5,000 SF are charged a flat fee base tax of $104.40. The business is then charged for each additional employee over 10, at a rate of $129.35 per employee. Additionally, the employer is charged $0.25 for each square foot over 5,000 SF. Assuming three different tenants and a total of 225 employees and approximately 65,000 SF for the proposed office use (less existing 30 employees), Kosmont projects an annual increase in business tax of approximately $33,000. (*Incremental* taxes from the larger building are estimated at $11,000 per year).

Incremental General Fund Tax Revenues

In summary the full Project will likely result in a total increase of $55,800 per year above the existing baseline. The *incremental* benefit by building above 35 foot limit is estimated to be $18,100.

Over a 25-year period with 2% inflation, as shown in Exhibit 6, the Project will generate $1,892,000 in revenue, with a net present value of $902,000. The *incremental* fiscal benefit generated by building above 35-foot height limit is estimated to be $614,000 over the 25-year period with an NPV of approximately $293,000.

Exhibit 6

1320 E. Franklin

Public Revenue Projection

Project Year			Incremental Assessed Value	City Share Property tax	Direct/ind. Sales Tax	Business Tax	Gross City Revenues	Incremental Revenues /1
Const	2023		$23,500,000	0	0	0		
1	2024			14,100	12,000	33,000	59,100	19,200
2	2025			14,382	12,240	33,660	60,282	19,600
3	2026			14,670	12,485	34,333	61,488	20,000
4	2027			14,963	12,734	35,020	62,717	20,400
5	2028			15,262	12,989	35,720	63,972	20,800
6	2029			15,568	13,249	36,435	65,251	21,200
7	2030			15,879	13,514	37,163	66,556	21,600
8	2031			16,196	13,784	37,907	67,887	22,100
9	2032			16,520	14,060	38,665	69,245	22,500
10	2033			16,851	14,341	39,438	70,630	23,000
11	2034			17,188	14,628	40,227	72,043	23,400
12	2035			17,532	14,920	41,031	73,483	23,900
13	2036			17,882	15,219	41,852	74,953	24,400
14	2037			18,240	15,523	42,689	76,452	24,800
15	2038			18,605	15,834	43,543	77,981	25,300
16	2039			18,977	16,150	44,414	79,541	25,900
17	2040			19,356	16,473	45,302	81,132	26,400
18	2041			19,743	16,803	46,208	82,754	26,900
19	2042			20,138	17,139	47,132	84,409	27,400
20	2043			20,541	17,482	48,075	86,098	28,000
21	2044			20,952	17,831	49,036	87,819	28,500
22	2045			21,371	18,188	50,017	89,576	29,100
23	2046			21,798	18,552	51,017	91,367	29,700
24	2047			22,234	18,923	52,038	93,195	29,822
25	2048			22,679	19,301	53,078	95,059	30,419
	Total			$451,627	$384,364	$1,057,000	$1,892,991	$614,341
	NPV @	6%		215,340	183,268	503,987	$902,596	$293,146

/1 revenues above those estimated from a project within the 35-ft height limit

Source: Kosmont Companies

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Economic Benefits

Construction Budget

The total development costs for the construction of the approximately 65,000 gross square foot of creative office and the allocated cost for approximately 130 parking spaces within the new parking structure is estimated at $26.1 million, including soft and hard costs.

IMPLAN Modeling

This analysis uses the IMPLAN (IMpact analysis for PLANning) econometric input/output model developed by the IMPLAN Group to quantify the economic impact to the local region from Project construction / renovation and ongoing operations. This proprietary model estimates the economic benefits on the industries in a given geographic area based on known economic inputs, such as construction costs. The model estimates direct, indirect, and induced benefits expressed in terms of increased economic activity, earnings ("labor income"), and job creation.

Direct Economic Benefits: Direct benefits refer to the short-term business activity of general contractors involved in Project construction and the ongoing business activities of Project tenants.

Indirect Economic Benefits: Indirect benefits will result when local firms directly impacted by the Project purchase materials, supplies or services from other firms.

Induced Economic Benefits: Induced benefits relate to the consumption spending of employees of firms that are directly or indirectly affected by the Project. These would include all of the goods and services normally associated with household consumption (e.g. retail purchases, services).

Inputs for the IMPLAN economic benefit analysis include the development budget provided by the Developer and permanent on-site employment information estimated by Kosmont. The permanent full-time employment estimates were derived from similar projects and industry standard per-square-foot employment densities for corresponding land use types.

Construction Related Economic Benefits

During the construction period, the Project is expected to produce approximately 150 Full Time Equivalent jobs and $13 million in labor income across Los Angeles County, including direct, indirect and induced impacts.

The *incremental* economic benefit generated by building above 35 foot height limit is estimated to be 60 FTE jobs during construction period, providing $5 million in labor income

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

Community Benefits Analysis for 1475 E El Segundo Blvd., prepared by Kosmont, dated November 2021

CITY OF EL SEGUNDO

Community Benefits Analysis
1475 E. El Segundo Blvd.



Prepared By:

Kosmont Companies
1601 N. Sepulveda Blvd. #382
Manhattan Beach, CA 90266
www.kosmont.com

November, 2021

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

Background and Methodology

Kosmont & Associates, Inc. doing business as Kosmont Companies ("Consultant" or "Kosmont"), operating under the master consulting agreement with the City of El Segundo ("City") for Smoky Hollow Community Benefit Analysis is pleased to submit this report on the comprehensive community benefits as required by the Tier 1 and Tier 2 application process for the proposed redevelopment application at 1475 E. El Segundo Blvd. in El Segundo ("Site")

Kosmont was asked to review the Site development application site plan, floor plan and building design and preliminary community benefit proposal. The proposed project is a 63,900 square foot office building that retains the historic integrity of the existing brick building ("Project").

Kosmont reviewed the City's Smoky Hollow Specific Plan ("Specific Plan") to identify planned district wide public improvements and met with City staff to understand:

1. the City's perspective on how the Project design components address those improvements,
2. what other improvements that the City considered community benefits, as opposed to standard development requirements.

The Project has 63,915 gross building area and remains within the 1.5 FAR limit. However, the design exceeds the Specific Plan height limit of 35 feet by approximately 24 feet 6 inches with a proposed height of 59 feet six inches.

Project Value Add Analysis

Kosmont gathered construction cost data from the Project Applicant. Kosmont performed high level market research to estimate current land value and baseline rent for "as is" use, future market rent for the proposed new tenant spaces, and building valuation assumptions. This will inform a financial pro forma model that Kosmont developed to analyze the incremental development profit above the estimated profit from the "by right" permitted development. For example, an increase in gross building area would require an analysis of the marginal increase in operating income and stabilized investment value. Marginal costs of construction would be deducted to derive the incremental profit.

Community Benefits Analysis

Kosmont **has not yet** reviewed proposed Project components with City staff to confirm project elements that are eligible as a community benefit. The community benefits are based on information provided by the Applicant and some items were adjusted by Kosmont. It is important to recognize that the Applicant will realize some financial benefits from many of these items.

Fiscal/Economic Benefits Analysis

Kosmont also analyzed the proposed Project to estimate construction period jobs, as well as stabilized operation jobs, and incremental City General Fund tax revenues (i.e. increase in property tax, sales tax, business taxes) above current use. In order to estimate the value of economic benefits for comparison to the development profit added, Kosmont used a financial cash flow approach assuming a 25-year life.

The attached report analyzes the increased financial benefits received from exceeding the Specific Plan limits, compared against the estimated the value of proposed community benefits, as well as fiscal/economic benefits. We are available to answer any questions regarding our methodology and conclusions.

Disclaimer

This Analysis is confidential and client privileged and is not to be used for any purpose other than for negotiating an acceptable Community Benefit Agreement. This Analysis is based on estimated figures and Kosmont's professional opinion, using available market and development cost information. Actual results may differ from those expressed in this analysis, as results are difficult to predict as a function of market conditions, natural disasters, pandemics, significant economic impacts, legislation and administrative actions.

Executive Summary

The City Planning Division received an application to allow the construction of a 44,600 square-foot addition on the Site. The Applicant is requesting to exceed the maximum height of 35 feet up to 54 feet 6 inches through the Specific Plan Community Benefit process.

As shown in the following report, the Project is expected to generate economic and community benefits in excess of the Project value added accruing to the Applicant resulting from the requested height variance. Per the City's request Kosmont has illustrated the fiscal and economic benefits from the incremental development, as well as for the entire Project as proposed.

Summary of Value Add / City Benefits

Project Value Added	Proposed Community Benefits	Fiscal Benefits	Economic Benefits Const & Perm Jobs
$1,770,000	$3,520,000	$878,000	145+200 jobs
Incremental above	35 foot height limit	$285,000	60+70 jobs

Source: Kosmont Companies

Project Value Add

Kosmont has prepared an illustrative development pro forma to show the stabilized value under three scenarios:

1. As Is Building (19,311 Sq. Ft.)
2. As Proposed (63,915 Sq. Ft. – 55,000 Sq. Ft. rentable)
3. As Permitted by Specific Plan (42,000 Sq. Ft. – 34,500 Sq. Ft. rentable)

Based on the estimated land value and development costs, the proforma analysis indicates a Project value add of approximately $1.77 million over a similar building within the allowable 35-foot height.

Community Benefits

Kosmont estimated the marginal cost associated with the following community benefit items to be $3.52 million, with the vast majority coming from the transformative architecture treatments, as summarized below:

- Architecture that enhances building character ($2.8 million)
- Open space that facilitates gathering ($400,000)
- Landscaping and environmental design ($160,000)

- Wayfinding & Signage ($50,000)
- Undergrounding utilities ($110,000)

It is important to note that many of these items also provide value to the project by making the building more attractive to new tenants.

Fiscal Benefits

The existing 1475 E. El Segundo Blvd. office/industrial building had a 2019 assessed value of $1,157,000. It houses one tenant with approximately 20 employees. Following redevelopment, Kosmont estimates the assessed value will increase by $22.5 million based on the construction budget, yielding $13,500 per year to the City General Fund. The incremental assessed value from building above the 35 foot would be $9 million, yielding $5,400 in annual taxes.

The new building is expected to house 220 professional office/design employees, for a net increase of 190 employees. These employees are estimated to generate approximately $900,000 in incremental annual retail sales at City establishments. The onsite coffee kiosk is estimated to generate $300,000 in annual sales for a total of $12,000 in annual sales taxes. In addition to retail sales taxes, the Project will generate additional business license taxes from the office tenancy, estimated at almost $34,000 per year for a total annual surplus of $56,800.

Over a 25-year period with 3% inflation, the Project will generate an estimated $1,841,000 in City tax revenue, with a net present value of approximately $878,000. The *incremental* fiscal benefit generated by building above 35-foot height limit is estimated to be $598,000 over the 25-year period with an NPV of approximately $285,000.

Economic Benefits

Development of the new creative office/commercial building will generate an estimated 150 full time equivalent ("FTE") jobs during construction period, including direct, indirect and induced, generating $13 million in labor income. At stabilized occupancy, the Project tenants are expected to employ 220 full time positions, an increase of 190 jobs over current level.

The *incremental* economic benefit generated by building above 35 foot height limit is estimated to be 60 FTE jobs during construction period, providing $5 million in labor income.

Project Description

The City Planning Division received an application for Environmental Assessment No. EA-1281 and Tier II Community Benefits Plan No. 19-02 to allow the construction of a 44,600 square-foot addition to exceed the maximum permitted building height of 35 feet by approximately 25 feet. The Site is located at 1475 E. El Segundo Blvd., in the Smoky Hollow East (SHE) zone within the Specific Plan.

The subject Site is located in a parcel totaling 43,969 square feet. The Site contains mid-century Industrial brick buildings. The current building uses at the are light industrial with warehouse, general office, and research and development. The Site was purchased by the current owner in 2019.

Exhibit 1 – Site Plan



Off-Street Parking

Vehicular access to a new five-story parking structure is provided from a 28-foot wide driveway facing Franklin Avenue. The Specific Plan requires one parking space for every 400 square feet of gross floor area. The completed Project will have 169 spaces, with 41 surface parking spaces and 128 spaces (from the existing 398 space parking structure).allocated to 1475 E. El Segundo Blvd. The new building's 128 spaces in the structure have an allocated cost of $2.4 million.

Tier II Community Benefits Plan

The Applicant is requesting to exceed the maximum height of 35 feet in the Specific Plan. The Applicant is requesting 25 additional feet (total of 60 feet) in order to build a 3rd story with mezzanine. The Project will not exceed the FAR of 1.5. Projects proposed at a building height must provide a Community Benefits Plan which requires approval from the City Council. In order to approve the project the City Council must find the value of the proposed Tier II Community Benefits is adequate in implementing the objectives of the Specific Plan in exchange for allowing the additional height and must make the required findings indicated in the Smoky Hollow Specific Plan

Exhibit 2
Elevation Illustration



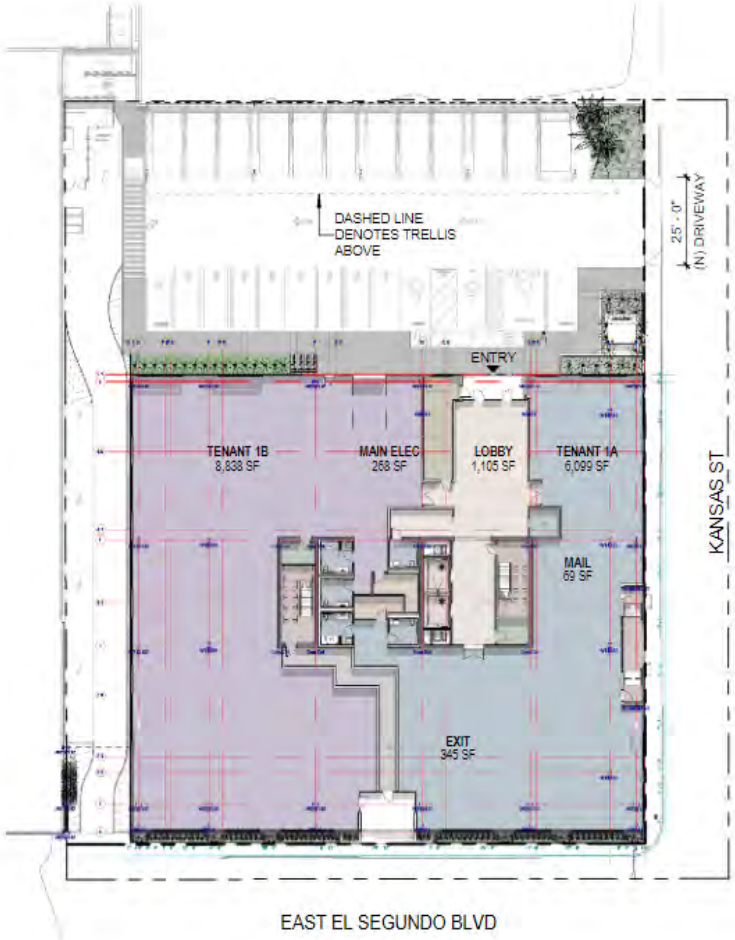
Environmental Review

A Historic Resource Evaluation Report was prepared by a qualified professional to assess the building, since the existing one-story industrial brick building was constructed in the 1950's and is greater than 50 years of age. None of the three buildings on the property are listed under the national historic, state or local landmark programs. City Staff concluded that none of the buildings appear eligible for individual listing in any Historic Register or eligible for local designation as a cultural resource.

Floor Plan

The proposed addition to the building is 44,600 square feet for a gross building area of 63,915 square feet. The additional floor area is for creative office uses that engage in research, with some accessory retail, and a coffee kiosk containing a small outdoor seating area. See ground floor plan in Exhibit 3. Level 3 plan and mezzanine are illustrated in Exhibit 4 on the following page.

Exhibit 3
Ground Floor Plan



The City rules for mezzanine space limits total area to less than 50% of the 22,600 square foot main floor area, or 10,000 square feet. However, due to the extensive vertical penetration for stairways, elevators and restrooms the net rentable area is only 7,600 square feet.

Exhibit 4
3rd Floor & Mezzanine



Project Value Add

Capital investment in real estate development is a high-risk private sector venture. In order to obtain financing commitments, developers must be able to demonstrate sufficient financial returns to offset the risks related to construction cost overruns and changes in the local economy during the construction period that could affect market rents and occupancy following construction. The key development cost components include land, site development, building construction, permits and fees, design and other soft costs, and financing costs. The Net Operating Income (NOI) calculation accounts for gross rents, vacancy factor, and all operating expenses.

To estimate the Project value added, as a result of the Specific Plan variance requested, Kosmont developed a financial feasibility simulation model in Excel for this Analysis to provide a reasonable estimate of expected development costs and annual net operating income a project would earn. It also shows the value at completion, which after deducting the total development costs, yields the developer profit.

Kosmont's analysis shows the stabilized value under three scenarios:

1. As Is Building (19,311 Sq. Ft.)
2. As Proposed (63,915 Sq. Ft. – 55,000 Sq. Ft. rentable)
3. As Permitted by Specific Plan (42,000 Sq. Ft. – 34,500 Sq. Ft. rentable)

Key Assumptions

Rental Income
Kosmont surveyed local real estate brokers to estimate market rents for the new creative office space planned. Unimproved mezzanine levels are primarily used as amenity space:

- Monthly rent of $2.85 psf triple net are most likely for high quality office space
- Monthly rent for mezzanine space would be $2.00 psf triple net
- Structured parking for 2.5 employees per 1,000 square feet is included in base rent

To determine potential rental income, we calculated the net rentable area for each level from the detailed floor plans as summarized below:

- Ground floor – 14,900 sq. ft. (excludes lobby and restrooms)
- Level 2 – 13,100 sq. ft. (plus Mezzanine 6,500 sq. ft.)
- Level 3 – 14,000 sq. ft. (plus Mezzanine 6,500 sq. ft.)

Development Costs

Kosmont reviewed development cost estimates provided by Applicant and architect. Total allocated costs for the new building are estimated at $25.0 million broken down as follows:

- $18.4 million for base building plus
- $1.6 million in soft costs plus
- $1.0 million in landscape and hardscape costs plus
- $1.6 million for future tenant improvements plus
- $2.4 million for the 128 allocated parking structure spaces.

Capitalization Rates

Capitalization rate is an economic measure of the average annual return on total costs expected by investors. It varies by type of property and geographic location. In order to estimate value of the new Project at completion, the estimated stabilized net operating income is divided by the capitalization rate. For this analysis the capitalization rate was estimated at 5.0%.

Development Value

As shown in the pro forma in Exhibit 5 on the following page, the As Is value for existing building is estimated at approximately $2.8 million. This establishes the opportunity cost of land for the redevelopment analysis.

The Project "as proposed" has an estimated value of $32.4 million at stabilized occupancy. Reducing that value by the estimated $2.8 million "as is" land value and the total development costs totaling $25.0 million, yields an estimated development profit of $4.6 million, or 16.7% of costs.

A hypothetical project subject to the 35-foot height limit has an estimated value of $20.6 million, reflecting the loss of 24,300 square feet from the 3rd level. The development costs are reduced by $10 million, reflecting the loss of rentable area and a reduction in the community benefits, resulting in an estimated development profit of $2.85 million, or 16.1% of costs.

Project Value Add Conclusion

Based on the land value and development costs, the proforma analysis indicates the Project has a value add of approximately $1.77 million over a similar building within the allowable 35-foot height ($4.62 million - $2.85 million).

Disclaimer

This Analysis is confidential and client privileged and is not to be used for any purpose other than for negotiating an acceptable Community Benefit Agreement. This Analysis is based on estimated figures and Kosmont's professional opinion, using available market and development cost information. Actual results may differ from those expressed in this analysis, as results are difficult to predict as a function of market conditions, natural disasters, pandemics, significant economic impacts, legislation and administrative actions.

Exhibit 5
1475 E. El Segundo Ave
Pro Forma Comparison

	As Is	As Proposed	Per SP
Gross SF	19,311	63,915	42,000
Industrial SF	12,064	-	-
Office Rentable SF	7,247	42,000	28,000
Mezzanine Rentable SF	-	13,000	6,500
Industrial Rent PSF	$1.00	$0.00	$0.00
Office rent	$1.00	$2.85	$2.85
Mezzanine Rent	$0.00	$2.00	$2.00
Vacancy Rate	10%	7.5%	7.5%
Mthly Parking Income (Net)	$0	$0	$0
Net Operating Income	$208,559	$1,617,270	$1,030,080
Cap Rate	7.5%	5.00%	5.00%
Stabilized value	$2,780,000	$32,350,000	$20,600,000
Land Value Contribution	*n/a*	$2,780,000	$2,780,000
Parking Structure Pro Rata %	*n/a*	$2,451,000	$1,470,600
Financing , Marketing & Overhead	*n/a*	$1,500,000	$900,000
Design & Hard Costs	*n/a*	$20,000,000	$12,000,000
Lnadscaping & Hardscaping	*n/a*	$1,000,000	$600,000
Total Development Costs	*n/a*	$27,731,000	$17,750,600
Development Profit	*n/a*	$4,619,000	$2,849,400
Profit as % of Costs		16.7%	16.1%

Source: Kosmont Companies, Applicant

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ from those expressed in this analysis.

Community Benefits

The Specific Plan requires new development to provide 3% of the lot as open space and if the lot exceeds 22,400 square feet, a minimum of 10% of the lot. Lots greater than 22,400 square feet must provide a minimum of 1 tree for every 4 at grade surface parking spaces open-to-the-sky and each tree must be a minimum of 24-inch box tree. The proposed front and side yard setbacks contain soft landscaping areas, which complies with the minimum required open space and number of trees.

List of Benefits

As part of the Applicant's submittal package, they identified numerous physical improvements that were considered eligible Community Benefits. Kosmont reviewed with the Applicant to gather data to estimate the marginal cost (i.e. value) of each item.

- Architecture that enhances building character ($2.8 million)
- Open space that facilitates gathering ($400,000)
- Landscaping and environmental design ($160,000)
- Wayfinding & Signage (50,000)
- Undergrounding utilities ($110,000)

Architectural Enhancements
The architectural design incorporates 1950's era materials, large scale steel windows, exterior balconies and exposed steel structural systems. Based on Kosmont's review of the plans and discussions with the architect, Kosmont estimates these features represent 15% of the $18.4 million in direct construction costs, or $2.8 million.

Open Space and Public Gathering
The proposed design provides three pedestrian entryways and two vehicular entries. The design includes a pocket park with public seating at the NE corner. The design includes period lighting on all sides and throughout the site. The applicants estimated cost for these improvement is $800,000. Given that some open space/public gathering is required for a basic office building, Kosmont assumed a 50% factor for extraordinary improvements of $400,000.

Landscaping
The design includes horizontal and vertical landscaping with drought tolerant and native plants throughout, including balcony and rooftop and along the parking areas. The design includes an architectural monument wall for signage. The estimated cost for these improvement is $160,000.

kosmont companies
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Wayfinding & Signage

The project design provides integrated tenant signage and architecturally integrated signage for pedestrian and vehicular traffic at an estimated cost of $50,000.

Undergrounding Utilities

Incoming power and data cables will be consolidated into a single location and undergrounded with an estimated cost of $110,000.

Total Value of Community Benefits

Combining the value of each building component listed above, results in a combined marginal cost increase of approximately $3.52 million. It is important to note that many of the community benefit items also add value to the Project by making the building more attractive to tenants.

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Fiscal Benefits

In addition to the Project-specific Community Benefits, the City has requested an analysis of the incremental fiscal revenues expected from the stabilized operation of the Project. In order to quantify the value of economic benefits for comparison to the development profit added, Kosmont used a discounted financial cash flow approach assuming a 25-year life.

This Analysis is based on information provided by the Applicant, the City, Los Angeles County ("County") Property Tax Auditor-Controller's Office, California Department of Finance ("DOF"), California Board of Equalization ("BOE"), U.S. Census, U.S. Bureau of Labor Statistics ("BLS"), and ESRI.

General Assumptions

Unless otherwise noted, the subsequent analysis maintains the following assumptions.

- Dollar amounts are expressed in 2021 dollars.
- Fiscal impacts are estimated at stabilized occupancy.
- Employment figures are permanent FTE jobs.

Fiscal Revenue Analysis

Property Tax

Secured property tax revenues are estimated based on the anticipated assessed value of the Project upon full build-out and the applicable property tax rates for the City. Existing value was not included as part of the analysis, as the subject property is already on the tax rolls.

The City general fund receives an approximate 6% share of the annual 1.0% secured property tax general levy placed by the County on the assessed value of the property ($0.06 of each $1.00 of secured property tax revenue).

Unsecured property taxes are collected based on the assessed value of real property not affixed to the underlying land, such as business fixtures, and some types of vehicles. The rate of taxation and apportionment is generally the same as for secured property taxes.

The 2019 assessed value of the Site was $1.16 million. Market value of the property is significantly higher, but until there is a change in ownership no reassessment is likely to occur. The total development cost for the building and the pro rata allocated cost of the parking structure totals approximately $25.0 million. Assuming a 90% assessed value taxable factor, there will be a $22.5 million increase in assessed value, for which the City would receive approximately $13,500 in additional annual property taxes. (*Incremental* property taxes from the larger building are estimated at $5,400 per year).

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If at some point in the future, the Site is sold, the estimated market value would be approximately $33 million in 2021 dollars, increasing the assessed value by approximately $10 million.

Sales Tax (On-Site / Direct)

None of the new business tenants are expected to generate taxable retail sales.

Offsite Sales Tax (Indirect)

Employees and business owners will generate off-site / indirect sales. Kosmont utilized ICSC surveys of employee spending near places of work to estimate $5,000 in annual sales per employee. At stabilized occupancy the Project is expected to result in approximately $1 million in annual offsite taxable sales, which would result in $10,000 in annual sales tax revenues for the City. (*Incremental* offsite sales taxes from the larger building are estimated at $3,500 per year).

Business Taxes

Current business tax rates are assessed based on the number of employees and square footage. The first 10 employees and initial 5,000 SF are charged a flat fee base tax of $104.40. The business is then charged for each additional employee over 10, at a rate of $129.35 per employee. Additionally, the employer is charged $0.25 for each square foot over 5,000 SF. Assuming three different tenants and a total of 225 employees and 65,000 SF of square footage for the proposed office use (less existing 20 employees), Kosmont projects an annual increase in business tax of approximately $34,000. (*Incremental* taxes from the larger building are estimated at $11,000 per year).

Incremental General Fund Tax Revenues

In summary the full Project will likely result in a total increase of $54,500 per year above the existing baseline. The *incremental* benefit by building above 35 foot is estimated to be $17,700.

Over a 25-year period with 2% inflation, as shown in Exhibit 6, the Project will generate $1,842,000 in revenue, with a net present value of $878,000. The *incremental* fiscal benefit generated by building above 35-foot height limit is estimated to be $598,000 over the 25-year period with an NPV of approximately $285,000.

Exhibit 6

1475 E. El Segundo

Public Revenue Projection

Project Year			Incremental Assessed Value	City Share Property tax	Direct/ind. Sales Tax	Business Tax	Gross City Revenues	Incremental Revenues /1
Const	2023		$22,500,000	0	0	0		
1	2024			13,500	10,000	34,000	57,500	18,700
2	2025			13,770	10,200	34,680	58,650	19,100
3	2026			14,045	10,404	35,374	59,823	19,400
4	2027			14,326	10,612	36,081	61,019	19,800
5	2028			14,613	10,824	36,803	62,240	20,200
6	2029			14,905	11,041	37,539	63,485	20,600
7	2030			15,203	11,262	38,290	64,754	21,000
8	2031			15,507	11,487	39,055	66,049	21,500
9	2032			15,817	11,717	39,836	67,370	21,900
10	2033			16,134	11,951	40,633	68,718	22,300
11	2034			16,456	12,190	41,446	70,092	22,800
12	2035			16,786	12,434	42,275	71,494	23,200
13	2036			17,121	12,682	43,120	72,924	23,700
14	2037			17,464	12,936	43,983	74,382	24,200
15	2038			17,813	13,195	44,862	75,870	24,700
16	2039			18,169	13,459	45,760	77,387	25,200
17	2040			18,533	13,728	46,675	78,935	25,700
18	2041			18,903	14,002	47,608	80,514	26,200
19	2042			19,281	14,282	48,560	82,124	26,700
20	2043			19,667	14,568	49,532	83,767	27,200
21	2044			20,060	14,859	50,522	85,442	27,800
22	2045			20,461	15,157	51,533	87,151	28,300
23	2046			20,871	15,460	52,563	88,894	28,900
24	2047			21,288	15,769	53,615	90,672	29,015
25	2048			21,714	16,084	54,687	92,485	29,595
	Total			$432,409	$320,303	$1,089,030	$1,841,742	$597,710
	NPV @	6%		206,177	152,723	519,260	$878,160	$285,089

/1 revenues above those estimated from a project within the 35-ft height limit

Source: Kosmont Companies

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Economic Benefits

Construction Budget

The total development costs for the construction of the approximately 63,900 gross square foot of creative office and the allocated cost for approximately 128 parking spaces within the new parking structure is estimated at $25.0 million, including soft and hard costs.

IMPLAN Modeling

This analysis uses the IMPLAN (IMpact analysis for PLANning) econometric input/output model developed by the IMPLAN Group to quantify the economic impact to the local region from Project construction / renovation and ongoing operations. This proprietary model estimates the economic benefits on the industries in a given geographic area based on known economic inputs, such as construction costs. The model estimates direct, indirect, and induced benefits expressed in terms of increased economic activity, earnings ("labor income"), and job creation.

Direct Economic Benefits: Direct benefits refer to the short-term business activity of general contractors involved in Project construction and the ongoing business activities of Project tenants.

Indirect Economic Benefits: Indirect benefits will result when local firms directly impacted by the Project purchase materials, supplies or services from other firms.

Induced Economic Benefits: Induced benefits relate to the consumption spending of employees of firms that are directly or indirectly affected by the Project. These would include all of the goods and services normally associated with household consumption (e.g. retail purchases, services).

Inputs for the IMPLAN economic benefit analysis include the development budget provided by the Developer and permanent on-site employment information estimated by Kosmont. The permanent full-time employment estimates were derived from similar projects and industry standard per-square-foot employment densities for corresponding land use types.

Construction Related Economic Benefits

During the construction period, the Project is expected to produce approximately 145 Full Time Equivalent jobs and $12.5 million in labor income across Los Angeles County, including direct, indirect and induced impacts.

The *incremental* economic benefit generated by building above 35 foot height limit is estimated to be 60 FTE jobs during construction period, providing $5 million in labor income

Traffic Memo
dated January 21, 2022

January 21, 2022

Mr. Mark Telesz
Smoky Hollow Industries, LLC
612 E. Franklin Avenue
El Segundo, CA

Subject: *Focused Traffic Analysis Memorandum for 1330 E. Franklin Avenue and 1475 El Segundo Boulevard in the City of El Segundo, CA*

Dear Mr. Telesz:

Kimley-Horn and Associates, Inc. has prepared a Focused Traffic Analysis memorandum, per request from City of El Segundo staff, for the proposed office building expansions located at 1330 E Franklin Avenue (North Site) and 1475 El Segundo Boulevard (South Site). The memorandum has been prepared to evaluate the project-related impacts associated with the proposed project.

EXECUTIVE SUMMARY

- The office building expansion includes the addition of 47,250 square feet to two existing office buildings located at 1330 E Franklin Avenue (North Site) and 1475 El Segundo Boulevard (South Site).
- The entire Standard Works project (North Site and South Site) is estimated to generate 115 total net new trips during the morning peak hour, 114 total net new trips during the evening peak hour, and 1,001 total net new daily trips.
- The project impacts at four (4) study intersections were evaluated for Existing, Horizon Year 2040, and Horizon Year 2040 with Road Diet, including the addition of the project traffic to the Horizon Year scenarios.
- Based on the intersection Level of Service (LOS) analysis, improvements consistent with Smoky Hollow Specific Plan EIR Traffic Study were recommended at the following deficient intersections:
    - #2 – Grand Avenue at Pacific Coast Highway
    - #3 – El Segundo Boulevard at Pacific Coast Highway
- The proposed project would pay a fair-share towards these recommended improvements

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PROJECT DESCRIPTION

The North and South Sites are generally bounded by Franklin Avenue to the north, Kansas Street to the east, El Segundo Boulevard to the south, and Oregon Street to the west. The project sites are within the boundaries of the Smoky Hollow East Zoning District as defined by the Smoky Hollow Specific Plan. The project site location is shown in its regional setting on Figure 1.

The North Site is located just south of the intersection of Franklin Avenue at California Street and is currently developed with an existing 19,950 square-foot (SF) office building and a surface parking lot. The project applicant proposes to expand the existing building by an additional 47,250 SF, for a total building square footage of 67,200 SF. The North Site would include four single-bed caretaker units. Each caretaker unit would have a maximum square footage of 500 SF. Only staff members that occupy the building with their commercial business would be allowed to live in one of the four caretaker units. It should be noted that a caretaker unit is permitted as an accessory use in the Smoky Hollow Specific Plan at the ratio of one per building site or business establishment.

The South Site is located on the northwest corner of Kansas Street and El Segundo Boulevard and is currently developed with an existing 18,311 SF office building and a surface parking lot. The project applicant proposes to expand the existing office building by an additional 48,425 SF, for a total building square footage of 67,736 SF. The South Site would include four single-bed caretaker units. Only staff members that occupy the building with their commercial business would be allowed to live in one of the four caretaker units. A copy of the project site plans for both the North Site and South Site are provided on Figure 2.

ANALYSIS SCENARIOS AND METHODOLOGY

Analysis Scenarios

This focused traffic analysis provides an evaluation of morning and evening peak hour intersection operations for the following scenarios:

- Existing Conditions
- Horizon Year 2040 with Approved Specific Plan
- Horizon Year 2040 with Approved Specific Plan Plus Project
- Horizon Year 2040 with Approved Specific Plan with Road Diet
- Horizon Year 2040 with Approved Specific Plan with Road Diet – Mitigated
- Horizon Year 2040 with Road Diet Plus Project – Mitigated

NOT TO SCALE

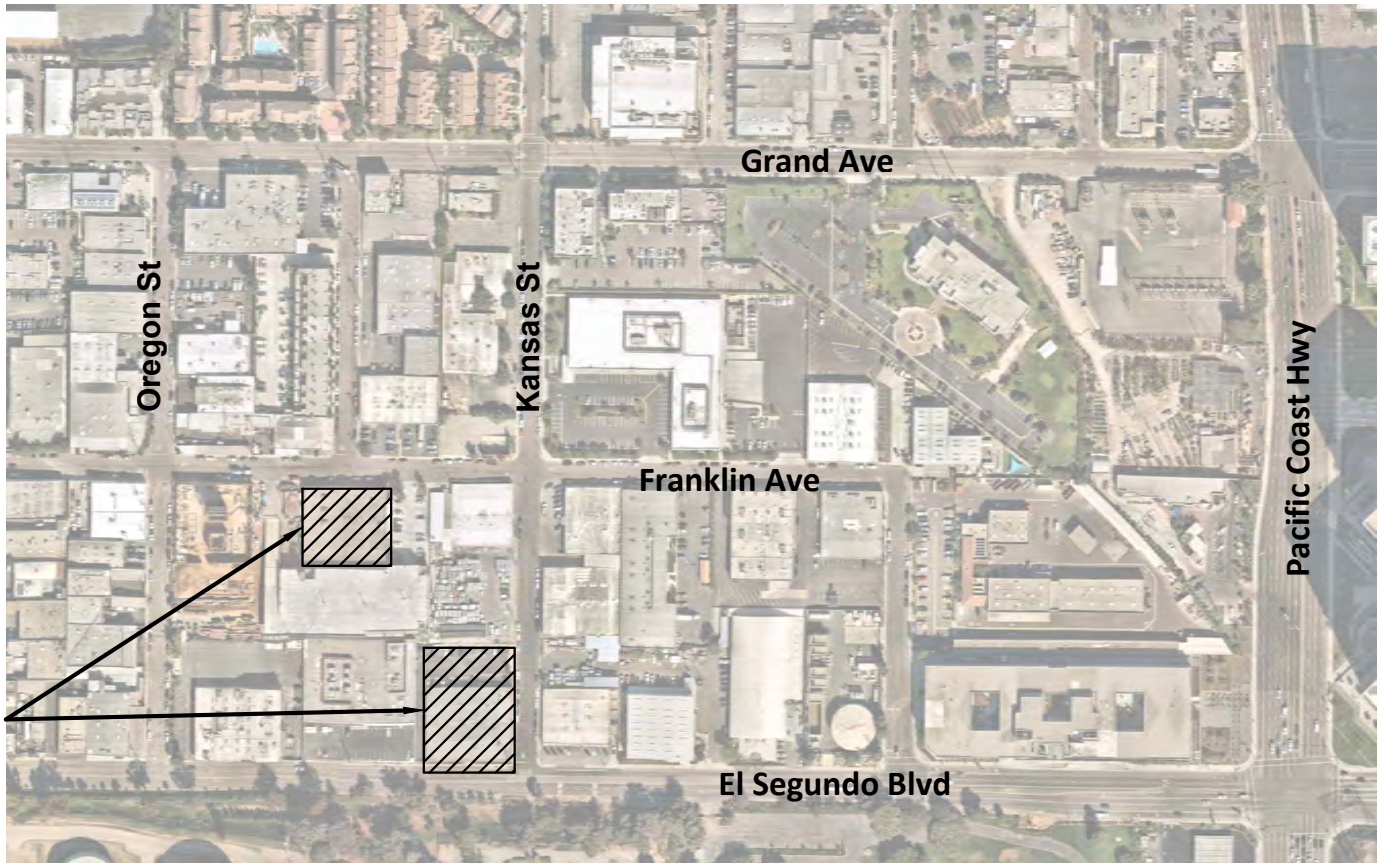
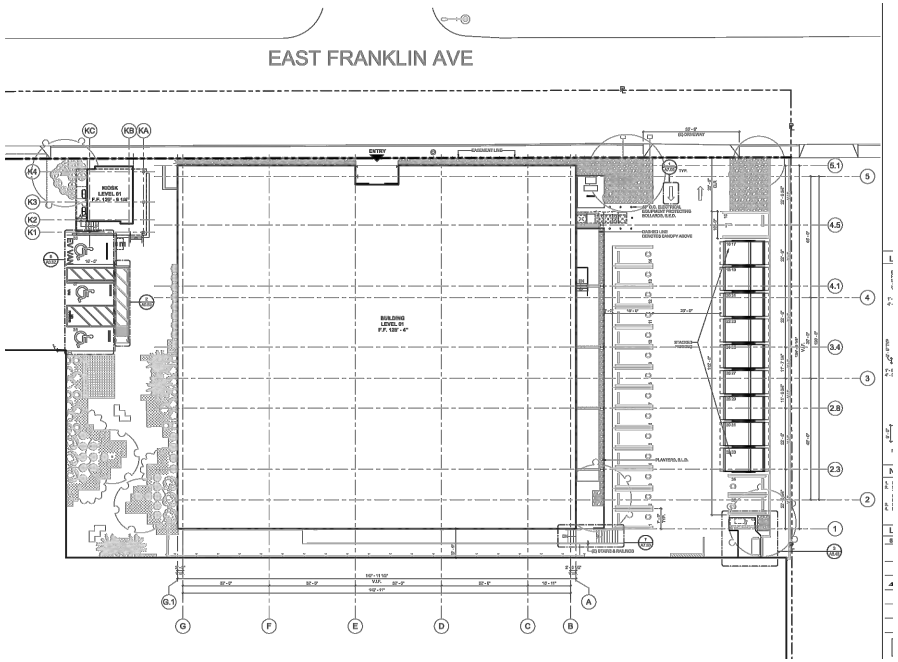
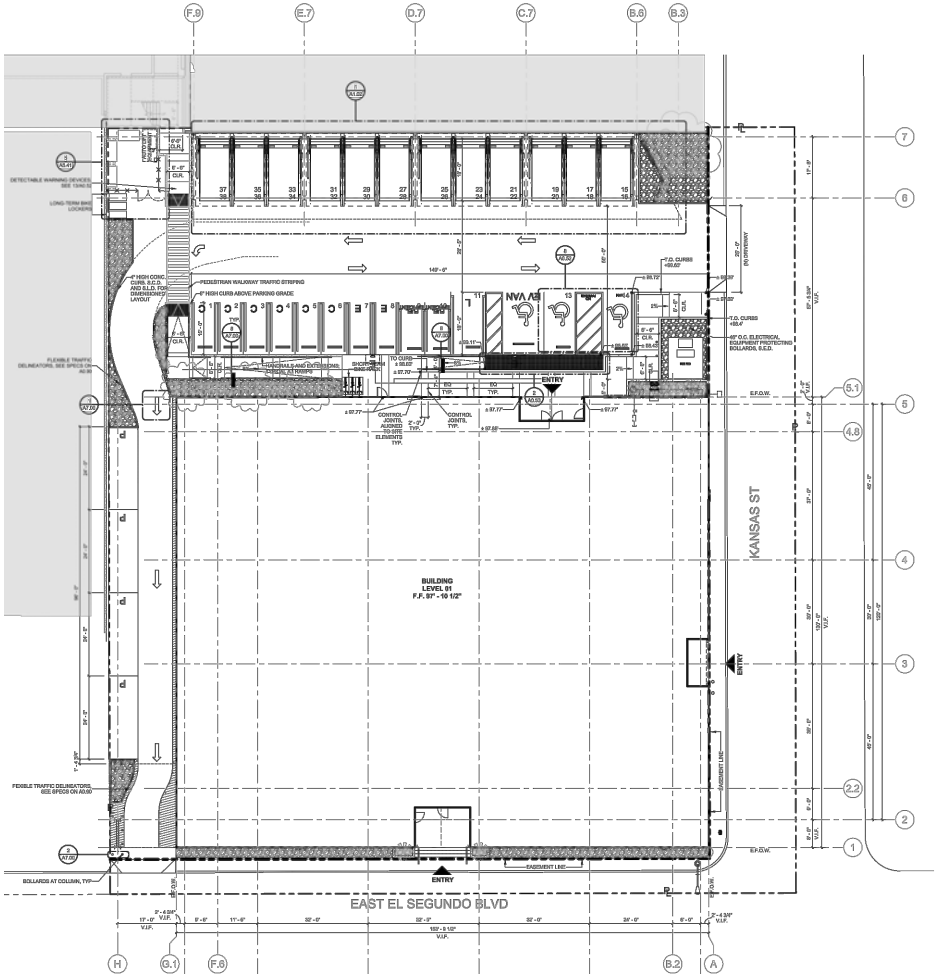


FIGURE 1
VICINITY MAP

NOT TO SCALE

1330 E Franklin Ave (North Site)





1475 E El Segundo Blvd (South Site)

FIGURE 2
PROJECT SITE PLAN

Kimley»Horn

Study Locations

This focused traffic analysis includes documentation of existing conditions, analysis of future conditions, and identification of project-related impacts, if any, at the following study intersections:

1. Grand Avenue at Kansas Street
2. Grand Avenue at Pacific Coast Highway
3. El Segundo Boulevard at Pacific Coast Highway
4. El Segundo Boulevard at Kansas Street

The study locations were established in consultation with City staff.

Intersection Analysis

In accordance with direction from the City of El Segundo staff and the Los Angeles County (LA County) Public Works *Transportation Impact Analysis Guidelines* (July 23,2020), peak hour operating conditions were evaluated using the Highway Capacity Manual (HCM) 6th Edition methodology. The HCM methodology estimates the average delay (in seconds per vehicle) for each of the movements through the intersection, depending on a number of factors, including the number of through and turn lanes, volume of traffic, and signal cycle length and timing. The HCM delay forecast translates to a Level of Service designation, ranging from LOS "A" to LOS "F".

Performance Criteria

The City of El Segundo and Caltrans Level of Service standard for peak hour intersection operation is Level of Service D.

EXISTING CONDITIONS

Existing Traffic Volumes

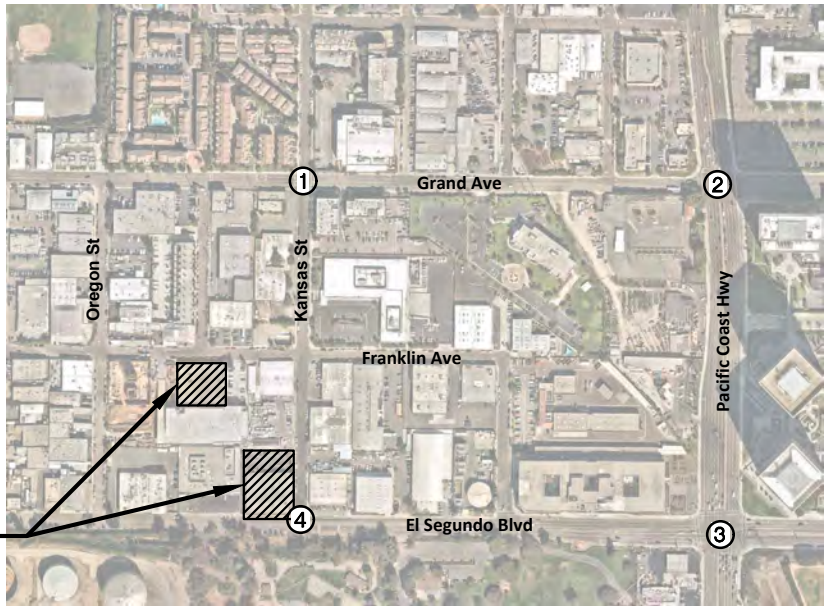
Existing morning and evening peak hour turning movement counts for study intersections #1-3 were used from the Traffic Impact Analysis (TIA) for the Smoky Hollow Specific Plan EIR (2017) and grown to Existing Year 2020 Based on the LA County Congestion Management Program (CMP), the ambient growth rate for Regional Statistical Area (RSA) 18 (South Bay/LAX) would be 0.259% per year. As a conservative approach, an ambient annual growth rate of 1% was applied to develop Existing Year 2020 volumes. For study intersection #4 (El Segundo Boulevard at Kansas Street), new peak hour traffic counts were collected at the study intersection. Due to school and business closures amid the COVID-19 pandemic, an adjustment factor was applied based on a comparison of historical and recent roadway data at Grand Avenue west of Pacific Coast Highway. Based on this data comparison, an adjustment factor of 1.283 was applied to intersection #4 (El Segundo Boulevard at Kansas Street). Existing lane configurations and traffic control for the study intersections are shown on Figure 3. Morning and evening peak hour traffic volumes are shown on Figure 4. Copies of the traffic count data worksheets are provided in *Appendix A*.

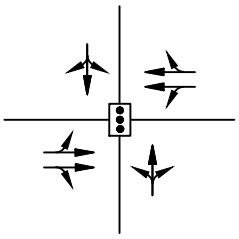
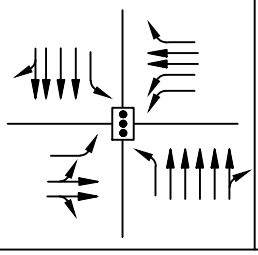
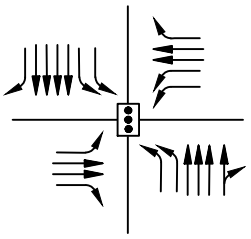
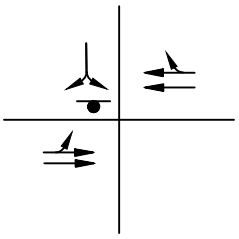
Existing Operating Conditions

Intersection Level of Service analysis was conducted for the morning and evening peak hours and is summarized on Table 1. Intersection analysis worksheets are provided in *Appendix B*. Review of the table shows that the following study intersection currently operates at an unacceptable Level of Service:

- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS E

NOT TO SCALE

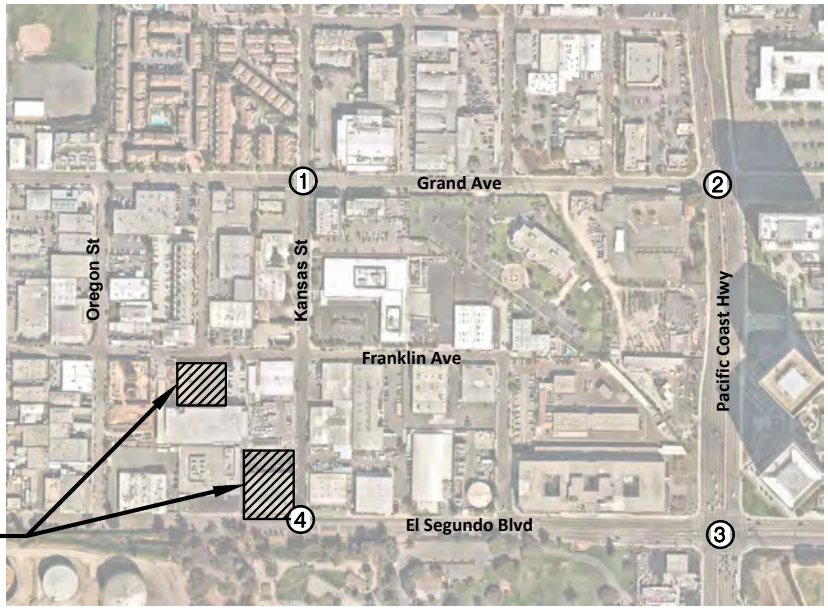


1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
			

LEGEND:
- (X) = Study Intersection
- = Turn or Through Lane
- = Signal
- = Stop Sign

FIGURE 3
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
22/58 ↙ 18/22 ↓ 8/24 ↘ 11/16 ← 374/540 ← 28/20 ↖ 32/29 → 354/448 → 6/8 ↘ 11/12 ↑ 25/20 ↑ 50/38 ↑	245/149 ↙ 1303/2434 ↓ 331/89 ↘ 56/288 ← 50/177 ← 30/385 ↖ 213/296 → 193/160 → 87/177 ↘ 121/180 ↑ 2414/1682 ↑ 347/100 ↑	109/111 ↙ 1108/2675 ↓ 167/177 ↘ 201/270 ← 355/533 ← 159/462 ↖ 108/126 → 365/545 → 230/478 ↘ 336/321 ↑ 2774/1433 ↑ 330/310 ↑	4/1 ↙ 18/36 ↓ 24/19 ← 511/590 ↖ 1/1 → 389/786 →

LEGEND:

Ⓧ = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 4
EXISTING PEAK HOUR TRAFFIC VOLUMES

TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS

HCM Methodology						
		Traffic	AM Peak Hour		PM Peak Hour	
Int. #	Intersection	Control	Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	S	33.2	C	30.9	C
2	Grand Ave at Pacific Coast Highway	S	30.8	C	40.7	D
3	El Segundo Blvd at Pacific Coast Highway	S	31.5	C	66.6	**E**
4	El Segundo Blvd at Kansas St	U	15.5	C	22.2	C

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) for the HCM methodology.

FUTURE CONDITIONS

Horizon Year 2040 with Approved Specific Plan

Future year forecasts for Horizon Year 2040 with Approved Specific Plan were based on the future forecasts from the Smoky Hollow Specific Plan EIR Traffic Study. Future year forecasts for the intersection of Kansas Street at El Segundo Boulevard (#4) were approximated based on future year forecasts of adjacent intersections and existing travel patterns. The peak hour volumes are shown on Figure 5.

The results of the Horizon Year with Approved Specific Plan intersection analysis are summarized on Table 2. Intersection analysis worksheets are provided in *Appendix B*. Review of this table shows that, the following study intersections would operate at an unacceptable Level of Service:

- #2 – Grand Avenue at Pacific Coast Highway: PM – LOS E
- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS F

TRIP GENERATION

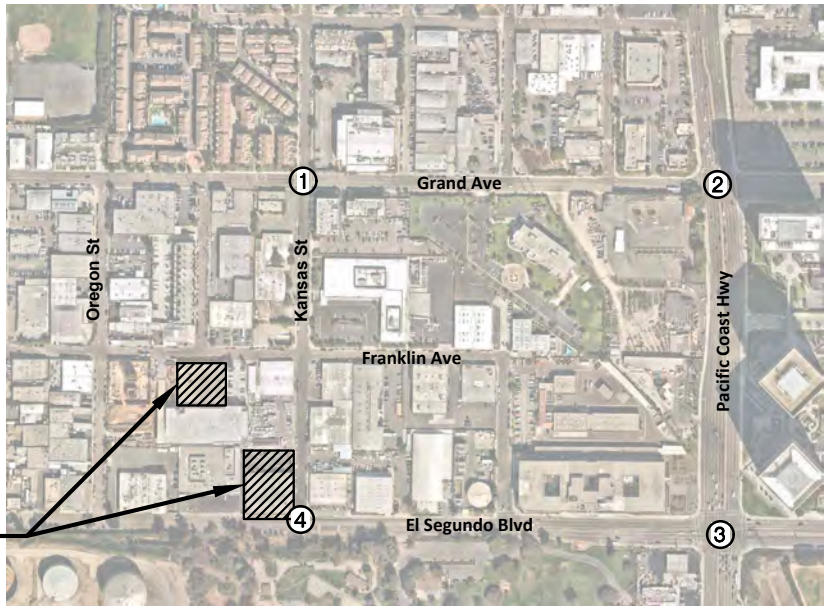
Proposed Project Trip Generation

Trip generation estimates for the proposed project were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) trip rates for General Office Building (Land Use 710) and Multi-Family Housing (Low-Rise; Land Use 220). The trip rates and estimated trip generation are shown on Table 3. Compared to the existing uses, the North Site is estimated to generate 56 net new trips in the morning peak hour, 56 net new trips in the evening peak hour, and 490 net new daily trips. The South Site is estimated to generate 59 net new trips in the morning peak hour, 58 net new trips in the evening peak hour, and 511 net new daily trips. The entire Standard Works project (North Site and South Site) is estimated to generate 115 total net new trips during the morning peak hour, 114 total net new trips during the evening peak hour, and 1,001 total net new daily trips.

Project Trip Distribution and Assignment

Project trip distribution assumptions for the project site were derived from the Smoky Hollow EIR. Trip distribution and assignment assumptions as well as the new trips to be added to the street system by the proposed project are shown on Figure 6.

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
43/75 ← 53/53 ← 12/34 ↖ → 21/20 ← 567/623 ← 113/50 ↖ 49/46 → 432/602 → 23/17 ↘ → 18/25 ↑ 58/47 ↑ 74/104 ↑	494/219 ← 1431/2516 ← 336/91 ↖ → 56/292 ← 96/191 ← 52/399 ↖ 274/492 → 207/197 → 98/220 ↘ → 172/192 ↑ 2489/1791 ↑ 360/117 ↑	239/164 ← 1131/2746 ← 172/193 ↖ → 220/278 ← 476/577 ← 161/470 ↖ 153/226 → 401/642 → 293/661 ↘ → 568/397 ↑ 2853/1463 ↑ 335/315 ↑	6/1 ← 26/45 ↖ → 42/50 ← 856/690 3/3 → 434/985 →

LEGEND:

Ⓧ = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 5
HORIZON YEAR 2040 WITH APPROVED SPECIFIC PLAN PEAK HOUR TRAFFIC VOLUMES

TABLE 2
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 WITH APPROVED SPECIFIC PLAN

HCM Methodology

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	S	26.9	C	22.9	C
2	Grand Ave at Pacific Coast Highway	S	35.3	D	61.7	E
3	El Segundo Blvd at Pacific Coast Highway	S	39.1	D	104.0	F
4	El Segundo Blvd at Kansas St	U	25.0	C	32.2	D

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) for the HCM methodology.

TABLE 3
SUMMARY OF PROJECT TRIP GENERATION
STANDARD WORKS PROJECT - NORTH AND SOUTH SITES

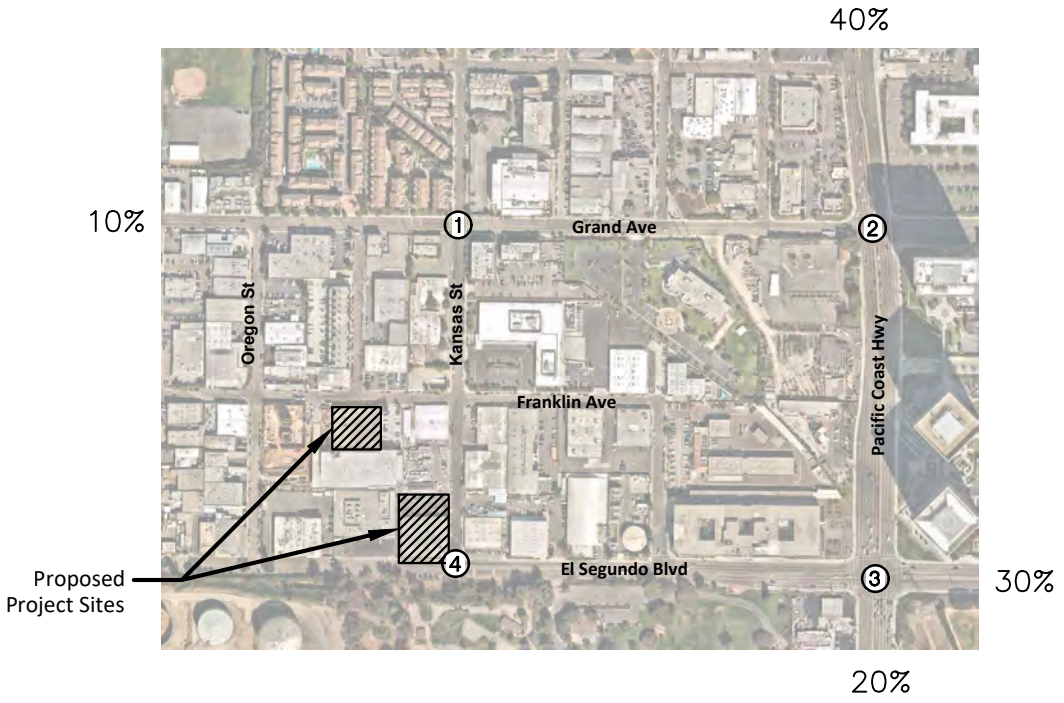
Land Use	ITE Code	Unit	Trip Generation Rates [1]						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
General Office Building	710	KSF	9.740	0.998	0.162	1.160	0.184	0.966	1.150
Multifamily Housing (Low-Rise)	220	DU	7.320	0.106	0.354	0.46	0.353	0.207	0.56

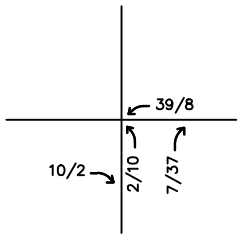
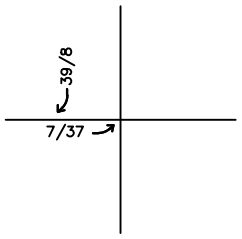
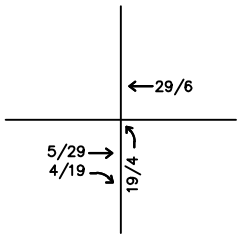
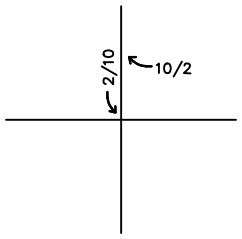
Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
1330 E Franklin Avenue (North Site)									
Existing Use									
General Office Building	19.950	KSF	194	20	3	23	4	19	23
Proposed Use									
General Office Building	67.200	KSF	655	67	11	78	12	65	77
Multifamily Housing (Low-Rise)[2]	4	DU	29	0	1	1	1	1	2
Net Difference (Proposed Minus Existing Trips)			490	47	9	56	9	47	56
1475 El Segundo Boulevard (South Site)									
Existing Use									
General Office Building	18.311	KSF	178	18	3	21	3	18	21
Proposed Use									
General Office Building	67.736	KSF	660	68	11	79	12	65	77
Multifamily Housing (Low-Rise)[2]	4	DU	29	0	1	1	1	1	2
Net Difference (Proposed Minus Existing Trips)			511	50	9	59	10	48	58
Total Net Project Trips (North and South Sites)			1,001	97	18	115	19	95	114

[1] *Source:* Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

[2] Due to the nature of the residential uses for the proposed project (caretaker units), it is anticipated that the residential tripss will be lower than those disclosed in the memorandum. In addition, these trips are unlikely to occur during the peak hours since peak hour traffic for residential uses is generally home-based work trips.

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
			

LEGEND:

- Ⓧ = Study Intersection
- XX/YY = AM/PM Peak Hour Turning Movement Volumes
- YY% = Trip Distribution

FIGURE 6
TRIP DISTRIBUTION AND PROJECT-RELATED PEAK HOUR TRAFFIC VOLUMES

Horizon Year 2040 Plus Project

Project-related peak hour traffic volumes for the proposed project were added to the Horizon Year 2040 with Approved Specific Plan volumes to develop Horizon Year 2040 Plus Project traffic forecast volumes. The resulting peak hour traffic volumes are shown on Figure 7. The results of the Horizon Year Plus Project are summarized on Table 4. Intersection analysis worksheets are provided in *Appendix B*. Review of this table shows that the following study intersections would continue to operate at an unacceptable Level of Service:

- #2 – Grand Avenue at Pacific Coast Highway: PM – LOS E
- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS F

FUTURE CONDITIONS – WITH ROAD DIET

Horizon Year 2040 with Approved Specific Plan with Road Diet

This section analyzes how the intersections would operate under the roadway reconfigurations outlined in the Smoky Hollow EIR Traffic Study. The Road Diet would include the reconfiguration of north-south roadways to provide one-way traffic flow and diagonal on-street parking spaces. The peak hour volumes are shown on Figure 8. The results of the Horizon Year 2040 with Approved Specific Plan with Road Diet are summarized on Table 5. Intersection analysis worksheets are provided in *Appendix B*. Review of this table shows that the following study intersections would operate at an unacceptable Level of Service:

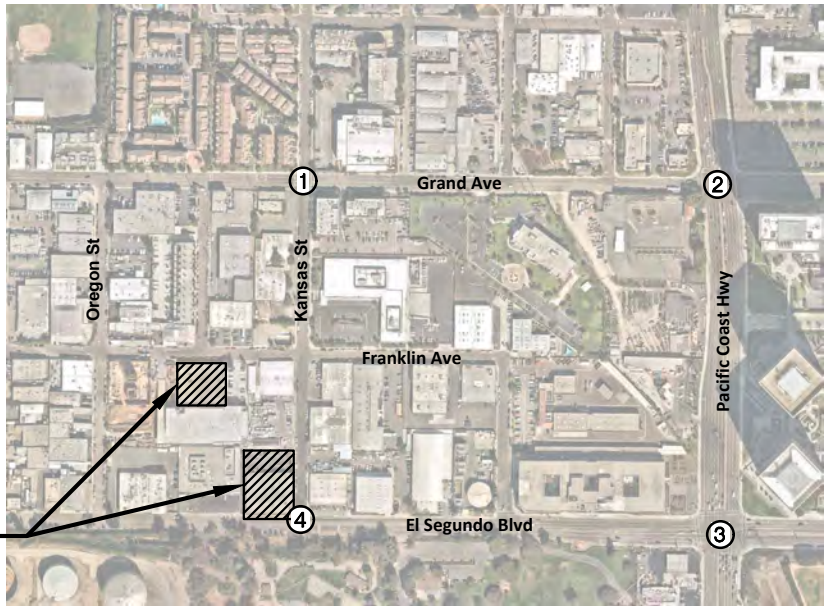
- #2 – Grand Avenue at Pacific Coast Highway: PM – LOS E
- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS F

Horizon Year 2040 with Approved Specific Plan with Road Diet – Mitigated

This section analyzes how the intersections would operate under the roadway reconfigurations and mitigation measures outlined in the Smoky Hollow EIR Traffic Study. The peak hour volumes are shown on Figure 8 (previously mentioned). The results of the Horizon Year 2040 with Road Diet with Mitigation are summarized on Table 6. Intersection analysis worksheets are provided in *Appendix B*. Review of this table shows that the following study intersection would operate at an unacceptable Level of Service:

- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS E

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
43/75 ← 53/53 ← 12/34 ↙ ↑ 21/20 ← 567/623 ← 152/58 ↖	533/227 ← 1431/2516 ← 336/91 ↙ ↑ 56/292 ← 96/191 ← 52/399 ↖	239/164 ← 1131/2746 ← 172/193 ↙ ↑ 220/278 ← 505/583 ← 161/470 ↖	6/1 ← 28/55 ↙ ↑ 52/52 ← 856/690 ↖
49/46 ↘ 432/602 → 33/19 ↗	281/529 ↘ 207/197 → 98/220 ↗	153/226 ↘ 406/671 → 297/680 ↗	3/3 ↘ 434/985 →
20/35 → 58/47 → 81/141 →	172/192 → 2489/1791 → 360/117 →	587/401 → 2853/1463 → 335/315 →	

LEGEND:

Ⓧ = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 7
HORIZON YEAR 2040 PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

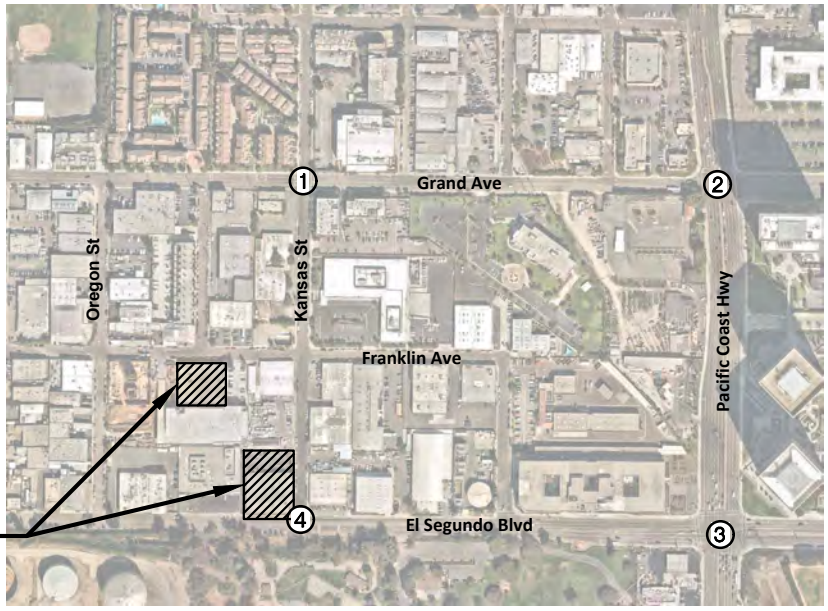
TABLE 4
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 WITH PROJECT

HCM Methodology

Int. #	Intersection	AM Peak Hour				PM Peak Hour			
		Without Project		With Project		Without Project		With Project	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	26.9	C	25.5	C	22.9	C	31.8	C
2	Grand Ave at Pacific Coast Highway	35.3	D	35.5	D	61.7	**E**	65.3	**E**
3	El Segundo Blvd at Pacific Coast Highway	39.1	D	40.1	D	104.0	**F**	105.4	**F**
4	El Segundo Blvd at Kansas St	25.0	C	25.4	D	32.2	D	34.5	D

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) ratio for the HCM methodology.

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
49/79 ↘ 49/53 ↓ 12/35 ↙ 21/21 ← 556/641 ← 133/55 ↖ 48/44 → 457/631 → 25/31 ↘ 34/41 ↑ 60/51 ↑ 76/111 ↑	481/219 ↘ 1516/2636 ↓ 351/95 ↙ 59/305 ← 103/201 ← 47/415 ↖ 292/524 → 214/201 → 101/227 ↘ 186/203 ↑ 2599/1870 ↑ 377/125 ↑	262/173 ↘ 1182/2870 ↓ 180/201 ↙ 229/291 ← 493/601 ← 168/492 ↖ 156/235 → 418/667 → 305/685 ↘ 576/409 ↑ 2991/1532 ↑ 350/329 ↑	6/1 ↓ 27/46 ↙ 48/58 ← 884/712 ↖ 3/3 → 447/1012 →

LEGEND:

Ⓧ = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 8
HORIZON YEAR 2040 WITH ROAD DIET PEAK HOUR TRAFFIC VOLUMES

Kimley»Horn

TABLE 5
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 WITH APPROVED SPECIFIC PLAN WITH ROAD DIET

HCM Methodology

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	S	25.0	C	27.0	C
2	Grand Ave at Pacific Coast Highway	S	38.7	D	78.7	**E**
3	El Segundo Blvd at Pacific Coast Highway	S	42.4	D	116.9	**F**
4	El Segundo Blvd at Kansas St	U	26.4	D	34.7	D

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) for the HCM methodology.

TABLE 6
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 WITH APPROVED SPECIFIC PLAN WITH ROAD DIET - MITIGATED

HCM Methodology						
		Traffic	AM Peak Hour		PM Peak Hour	
Int. #	Intersection	Control	Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	S	24.9	C	32.1	C
2	Grand Ave at Pacific Coast Highway	S	36.2	D	45.4	D
3	El Segundo Blvd at Pacific Coast Highway	S	30.0	C	56.8	**E**
4	El Segundo Blvd at Kansas St	U	26.4	D	34.7	D

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) for the HCM methodology.

Horizon Year 2040 with Road Diet Plus Project

Project-related peak hour traffic volumes for the proposed project were added to the Horizon Year 2040 with Road Diet volumes to develop Horizon Year 2040 with Road Diet Plus Project traffic forecast volumes. The resulting peak hour traffic volumes are shown on Figure 9. The results of the Horizon Year 2040 with Road Diet Plus Project are summarized on Table 7. Intersection analysis worksheets are provided in *Appendix B*. Review of this table shows that the following study intersection would operate at an unacceptable Level of Service:

- #3 – El Segundo Boulevard at Pacific Coast Highway: PM – LOS E
- #4 – El Segundo Boulevard at Kansas Street: PM – LOS E

The Level of Service for an unsignalized intersection is reported based on the single approach movement with the highest delay, which in this case, would be the southbound approach for intersections #4. The traffic on this approach would experience delay during the evening peak hour while waiting for an acceptable gap in traffic on El Segundo Boulevard. While the side street approach operates at a deficient Level of Service based on the highest delay approach, the overall intersection delay would be acceptable. Any queuing that occurs on the side street is contained on the minor intersection approach, would occur for only a limited period of time during the working week, and would not impact the progression of traffic on the main arterial.

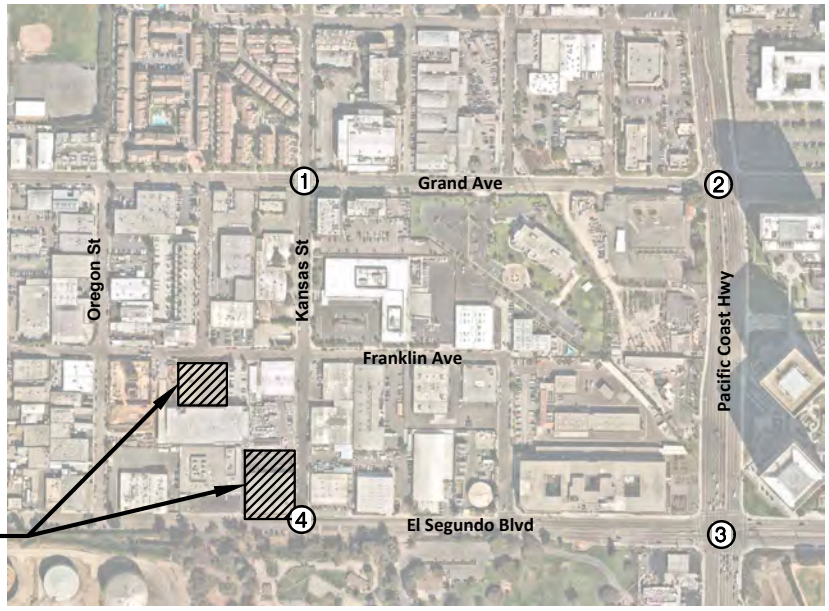
TRAFFIC SIGNAL WARRANT ANALYSIS

A signal warrant analysis was conducted for the intersection of Kansas Street at El Segundo Boulevard (#4), based on the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD). The warrant was conducted using Warrant 3 (Peak Hour Warrant) for the following scenarios:

- Horizon Year 2040 with Approved Specific Plan
- Horizon Year 2040 with Approved Specific Plan Plus Project
- Horizon Year 2040 with Approved Specific Plan with Road Diet
- Horizon Year 2040 with Road Diet Plus Project

Traffic Signal Warrant Analysis worksheets are provided in *Appendix C*. Based on the signal warrant analysis, Warrant 3 was not met for any of the scenarios.

NOT TO SCALE



1. Grand Ave at Kansas St	2. Grand Ave at Pacific Coast Hwy	3. El Segundo Blvd at Pacific Coast Hwy	4. El Segundo Blvd at Kansas St
49/79 ↘ 49/53 ↓ 12/35 ↙ 21/21 ← 556/641 ↖ 172/63	520/227 ↘ 1516/2636 ↓ 351/95 ↙ 59/305 ← 103/201 ↖ 47/415	262/173 ↘ 1182/2870 ↓ 180/201 ↙ 229/291 ← 522/607 ↖ 168/492	6/1 ↘ 29/56 ↙ 58/60 ← 884/712
48/44 ↗ 457/631 → 35/33 ↘ 36/51 ↑ 60/51 ↑ 83/148 ↗	299/561 ↗ 214/201 → 101/227 ↘ 186/203 ↑ 2599/1870 ↑ 377/125 ↗	156/235 ↗ 423/696 → 309/704 ↘ 595/413 ↑ 2991/1532 ↑ 350/329 ↗	3/3 ↗ 447/1012 →

LEGEND:

Ⓧ = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 9
HORIZON YEAR 2040 WITH ROAD DIET PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

TABLE 7
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 WITH ROAD DIET WITH PROJECT

HCM Methodology

Int. #	Intersection	AM Peak Hour				PM Peak Hour			
		Without Project		With Project		Without Project		With Project	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Grand Ave at Kansas St	25.0	C	23.7	C	27.0	C	26.3	C
2	Grand Ave at Pacific Coast Highway	36.2	D	36.7	D	45.4	D	49.9	D
3	El Segundo Blvd at Pacific Coast Highway	30.0	C	34.9	C	56.8	**E**	60.4	**E**
4	El Segundo Blvd at Kansas St	26.4	D	26.8	D	34.7	D	37.3	**E**

LOS shown in Bold and shaded indicates unacceptable Level of Service.
HCM = Highway Capacity Manual
LOS = Level of Service
Intersection operation is expressed in average seconds of delay (sec/veh) ratio for the HCM methodology.

CONCEPT PLANS AND COST ESTIMATES

Based on the Smoky Hollow Specific Plan EIR Traffic Study, below are recommended improvements at deficient intersections:

- #2 – Grand Avenue at Pacific Coast Highway: New right-turn overlap phases on all approaches. With this improvement, the intersection would operate at an acceptable Level of Service. The project will contribute on a fair-share basis to this improvement.
- #3 – El Segundo Boulevard at Pacific Coast Highway: Second eastbound left-turn lane, new right-turn overlap phase at northbound approach. Although the intersection would continue to operate at an unacceptable Level of Service, the improvement would improve the overall delay. The project will contribute on a fair-share basis to this improvement.

The project fair-share proportion of these improvements are shown on Table 8. The project fair-share was based on the net difference in project trips between the proposed uses and existing uses (as noted in Table 3), which would equate to 115 net new trips in the AM peak hour and 114 net new trips in the PM peak hour.

Please contact me if you have any questions or if you need additional information.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Trevor Briggs, P.E. (C87664)



Pranesh Tarikere, P.E.

TABLE 8
SUMMARY OF PROJECT FAIR SHARE FOR MITIGATION MEASURES

Intersection	AM Peak Hour					PM Peak Hour				
	Total Volume		Total	Project		Total Volume		Total	Project	
	2020	2040	Growth	Trips	%-age	2020	2040	Growth	Trips	%-age
#2 - Grand Avenue at Pacific Coast Highway	5,390	6,372	982	46	4.7%	6,117	7,066	949	45	4.7%
#3 - El Segundo Boulevard at Pacific Coast Highway	6,242	7,367	1,125	57	5.1%	7,441	8,543	1,102	58	5.3%

APPENDIX **A**

Traffic Data Collection Worksheets

ITM Peak Hour Summary

Prepared by:

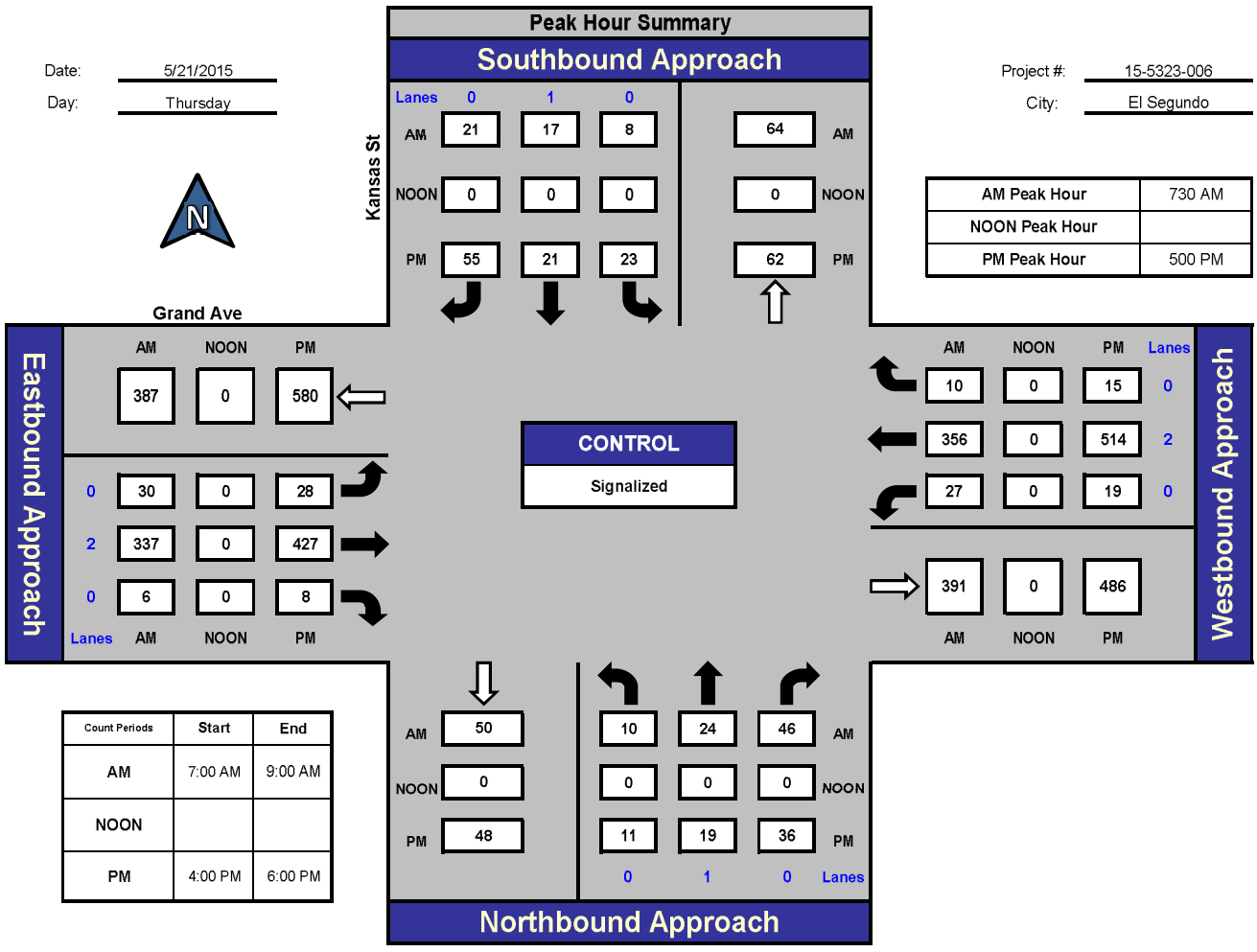
National Data & Surveying Services

Kansas St and Grand Ave , El Segundo

Date: 5/21/2015
Day: Thursday

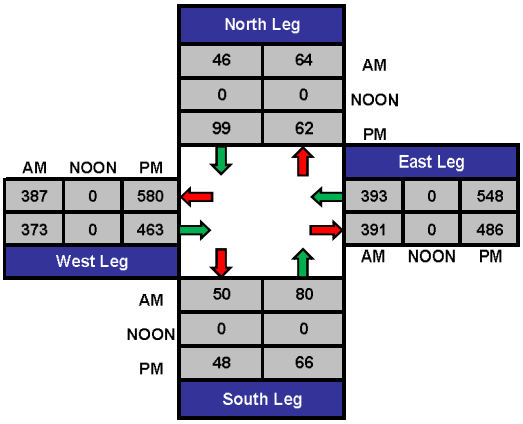
Project #: 15-5323-006
City: El Segundo

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	500 PM

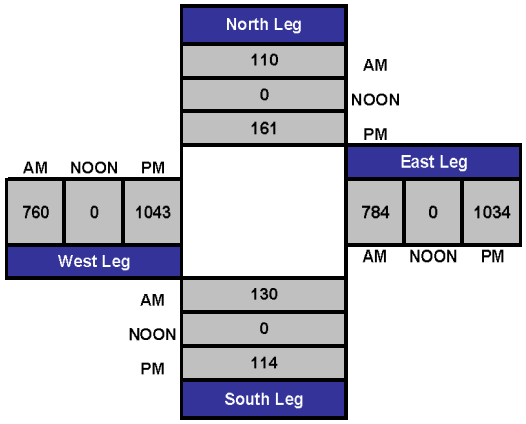


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

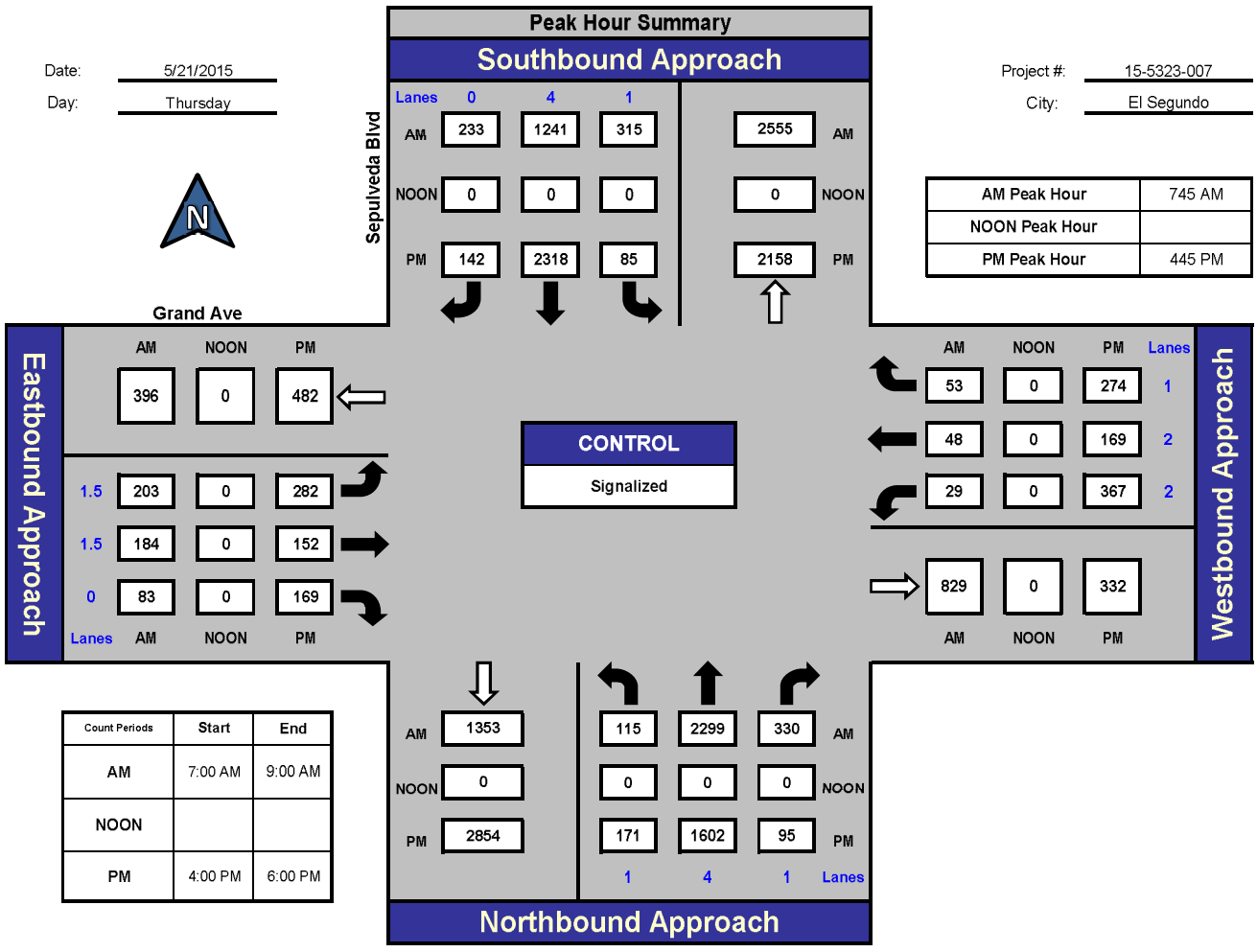
National Data & Surveying Services

Sepulveda Blvd and Grand Ave , El Segundo

Date: 5/21/2015
Day: Thursday

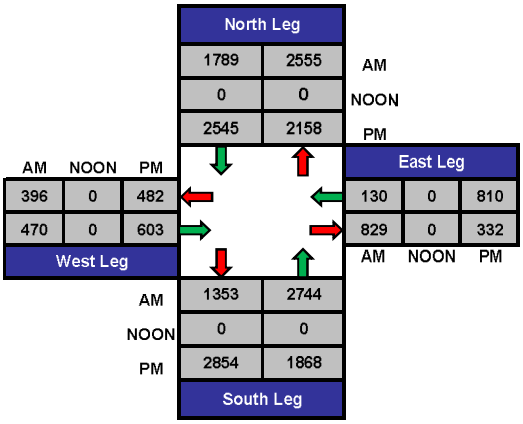
Project #: 15-5323-007
City: El Segundo

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	445 PM

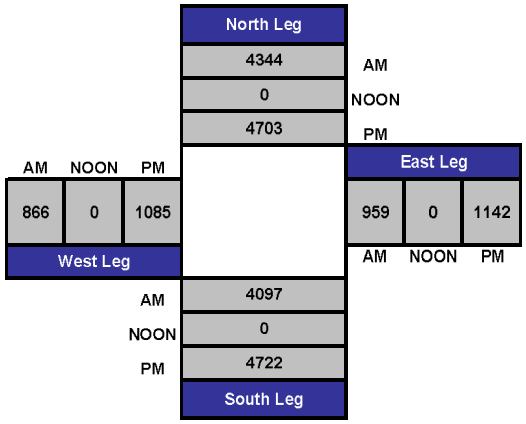


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

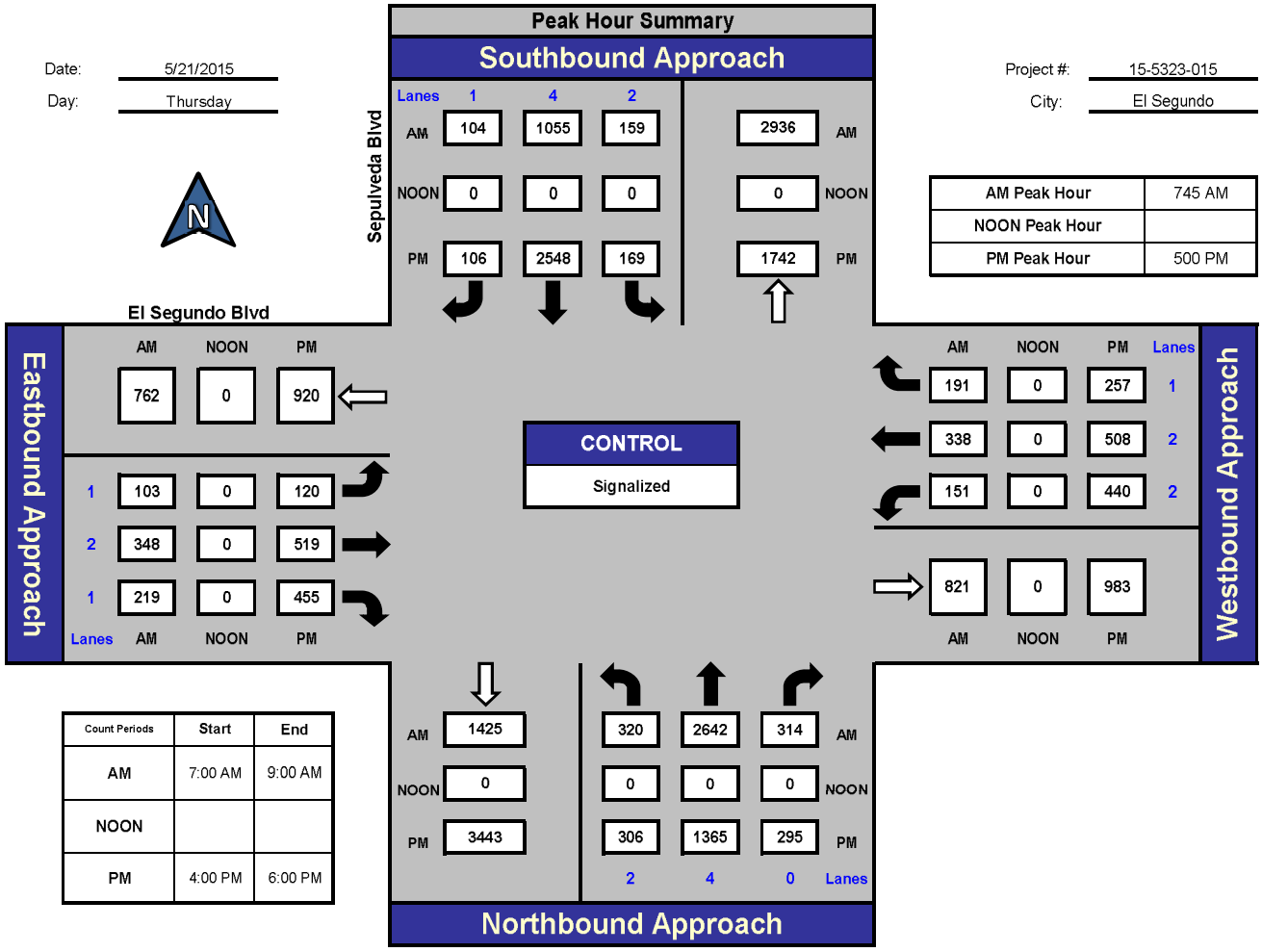
National Data & Surveying Services

Sepulveda Blvd and El Segundo Blvd , El Segundo

Date: 5/21/2015
Day: Thursday

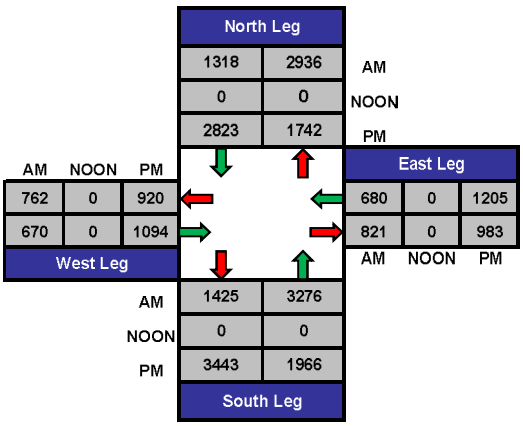
Project #: 15-5323-015
City: El Segundo

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	500 PM

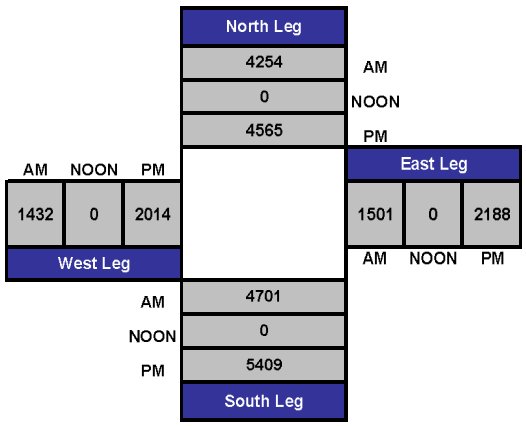


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Prepared by National Data & Surveying Services

Kansas St & El Segundo Blvd

Peak Hour Turning Movement Count

ID: 21-020013-001
City: El Segundo

Day: Thursday
Date: 1/14/2021

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Kansas St)

AM	3	0	14	0	20	AM
NOON	0	0	0	0	0	NOON
PM	1	0	28	0	16	PM

EASTBOUND (El Segundo Blvd)

AM	NOON	PM		
401	0	461		
0	0	0	0	
1	0	1	0	
303	0	613	2	
0	0	0	0	
AM	NOON	PM		

WESTBOUND (El Segundo Blvd)

	PM	NOON	AM
0	15	0	19
2	460	0	398
0	0	0	0
0	1	0	0
	642	0	317
	PM	NOON	AM

NORTHBOUND (Kansas St)

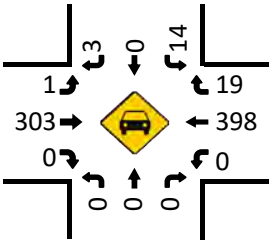
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

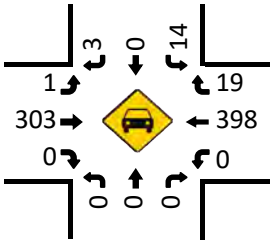
1-Way Stop(SB)

	AM	NOON	PM
TEV	738	0	1119
PHF	0.88		0.92

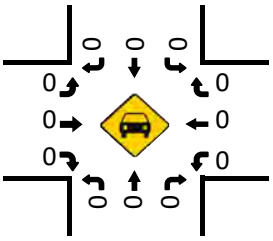
Totals (AM)



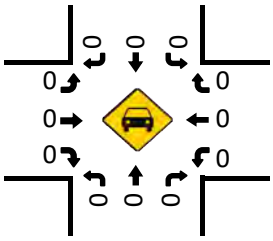
Totals (AM)



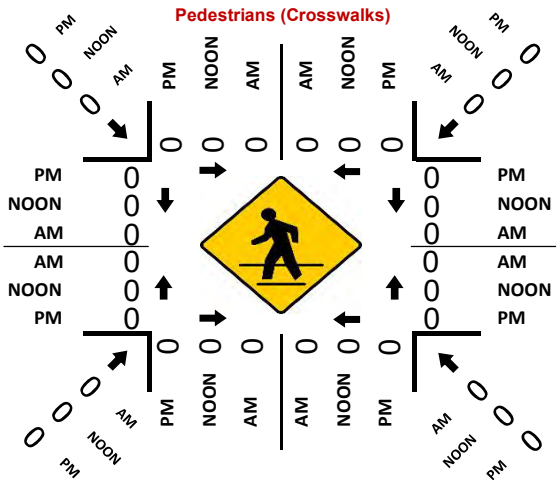
Totals (NOON)



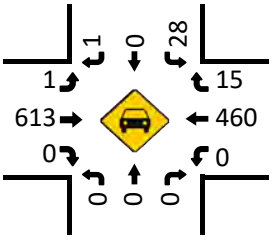
Totals (NOON)



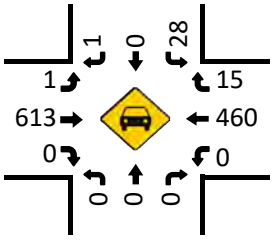
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



Prepared by National Data & Surveying Services

VOLUME

E Grand Ave W/O N Sepulveda Blvd

Day: Friday
Date: 8/2/2019

City: El Segundo
Project #: Historical

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,930	5,039	10,969

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			11		7		18		12:00			111		138		249	
00:15			10		11		21		12:15			120		110		230	
00:30			13		8		21		12:30			115		109		224	
00:45			5	39	4	30	9	69	12:45			105	451	111	468	216	919
01:00			5		6		11		13:00			136		110		246	
01:15			7		4		11		13:15			127		79		206	
01:30			4		7		11		13:30			114		89		203	
01:45			5	21	3	20	8	41	13:45			106	483	79	357	185	840
02:00			4		1		5		14:00			137		90		227	
02:15			3		4		7		14:15			128		79		207	
02:30			2		1		3		14:30			167		84		251	
02:45			2	11	8	14	10	25	14:45			106	538	87	340	193	878
03:00			1		3		4		15:00			129		94		223	
03:15			4		2		6		15:15			117		86		203	
03:30			2		8		10		15:30			130		79		209	
03:45			4	11	1	14	5	25	15:45			93	469	84	343	177	812
04:00			2		3		5		16:00			91		71		162	
04:15			6		12		18		16:15			111		80		191	
04:30			12		12		24		16:30			116		77		193	
04:45			11	31	29	56	40	87	16:45			100	418	107	335	207	753
05:00			14		18		32		17:00			149		86		235	
05:15			7		18		25		17:15			118		96		214	
05:30			18		34		52		17:30			114		82		196	
05:45			10	49	50	120	60	169	17:45			87	468	67	331	154	799
06:00			19		31		50		18:00			87		78		165	
06:15			24		33		57		18:15			74		48		122	
06:30			27		38		65		18:30			81		66		147	
06:45			44	114	61	163	105	277	18:45			71	313	53	245	124	558
07:00			49		53		102		19:00			59		47		106	
07:15			50		73		123		19:15			55		59		114	
07:30			50		55		105		19:30			71		48		119	
07:45			76	225	83	264	159	489	19:45			54	239	45	199	99	438
08:00			67		84		151		20:00			56		38		94	
08:15			98		85		183		20:15			55		44		99	
08:30			90		63		153		20:30			47		33		80	
08:45			92	347	83	315	175	662	20:45			53	211	43	158	96	369
09:00			101		74		175		21:00			45		33		78	
09:15			84		83		167		21:15			43		30		73	
09:30			71		62		133		21:30			40		30		70	
09:45			69	325	81	300	150	625	21:45			41	169	18	111	59	280
10:00			91		78		169		22:00			34		25		59	
10:15			85		74		159		22:15			27		19		46	
10:30			86		80		166		22:30			36		19		55	
10:45			84	346	91	323	175	669	22:45			25	122	22	85	47	207
11:00			130		94		224		23:00			26		10		36	
11:15			103		105		208		23:15			25		10		35	
11:30			113		94		207		23:30			17		7		24	
11:45			111	457	113	406	224	863	23:45			5	73	15	42	20	115
TOTALS				1976		2025		4001	TOTALS				3954		3014		6968
SPLIT %				49.4%		50.6%		36.5%	SPLIT %				56.7%		43.3%		63.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,930	5,039	10,969

AM Peak Hour			11:00	11:45	11:45	PM Peak Hour			13:45	12:00	12:00
AM Pk Volume			457	470	927	PM Pk Volume			538	468	919
Pk Hr Factor			0.879	0.851	0.931	Pk Hr Factor			0.805	0.848	0.923
7 - 9 Volume	0	0	572	579	1151	4 - 6 Volume	0	0	886	666	1552
7 - 9 Peak Hour			08:00	07:45	08:00	4 - 6 Peak Hour			16:30	16:45	16:45
7 - 9 Pk Volume	0	0	347	315	662	4 - 6 Pk Volume	0	0	483	371	852
Pk Hr Factor	0.000	0.000	0.885	0.926	0.904	Pk Hr Factor	0.000	0.000	0.810	0.867	0.906

Prepared by National Data & Surveying Services

VOLUME

Grand Ave W/O N Sepulveda Blvd

Day: Tuesday
Date: 12/15/2020

City: El Segundo
Project #: CA20_020257_005

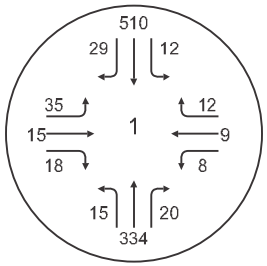
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,322	3,543	7,865

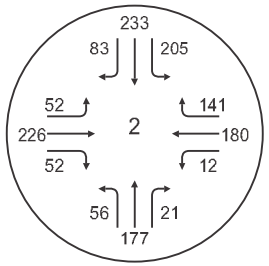
AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		5		7		12:00			90		63		153	
00:15			3		4		7		12:15			71		68		139	
00:30			2		2		4		12:30			116		71		187	
00:45			1	8	0	11	1	19	12:45			95	372	89	291	184	663
01:00			1		4		5		13:00			107		60		167	
01:15			2		1		3		13:15			108		60		168	
01:30			1		0		1		13:30			96		60		156	
01:45			1	5	0	5	1	10	13:45			83	394	68	248	151	642
02:00			0		1		1		14:00			86		87		173	
02:15			0		1		1		14:15			87		72		159	
02:30			0		2		2		14:30			159		57		216	
02:45			1	1	2	6	3	7	14:45			98	430	82	298	180	728
03:00			3		1		4		15:00			85		73		158	
03:15			1		1		2		15:15			90		57		147	
03:30			0		1		1		15:30			100		59		159	
03:45			1	5	3	6	4	11	15:45			75	350	62	251	137	601
04:00			0		1		1		16:00			100		59		159	
04:15			2		2		4		16:15			78		59		137	
04:30			4		8		12		16:30			92		65		157	
04:45			9	15	14	25	23	40	16:45			91	361	80	263	171	624
05:00			9		21		30		17:00			103		69		172	
05:15			6		22		28		17:15			88		66		154	
05:30			13		34		47		17:30			86		64		150	
05:45			14	42	44	121	58	163	17:45			73	350	68	267	141	617
06:00			5		19		24		18:00			63		48		111	
06:15			15		18		33		18:15			65		56		121	
06:30			17		31		48		18:30			55		51		106	
06:45			24	61	24	92	48	153	18:45			54	237	51	206	105	443
07:00			27		39		66		19:00			68		31		99	
07:15			31		39		70		19:15			43		41		84	
07:30			26		51		77		19:30			42		30		72	
07:45			55	139	70	199	125	338	19:45			44	197	30	132	74	329
08:00			56		65		121		20:00			24		27		51	
08:15			61		62		123		20:15			32		27		59	
08:30			57		56		113		20:30			14		18		32	
08:45			65	239	47	230	112	469	20:45			28	98	19	91	47	189
09:00			65		58		123		21:00			29		10		39	
09:15			49		50		99		21:15			13		10		23	
09:30			65		43		108		21:30			14		16		30	
09:45			58	237	59	210	117	447	21:45			10	66	11	47	21	113
10:00			65		59		124		22:00			12		7		19	
10:15			75		55		130		22:15			10		3		13	
10:30			71		56		127		22:30			6		10		16	
10:45			98	309	76	246	174	555	22:45			4	32	4	24	8	56
11:00			84		47		131		23:00			9		9		18	
11:15			80		65		145		23:15			5		9		14	
11:30			100		55		155		23:30			3		6		9	
11:45			89	353	81	248	170	601	23:45			4	21	2	26	6	47
TOTALS				1414		1399		**2813**	**TOTALS**				2908		2144		**5052**
SPLIT %				50.3%		49.7%		**35.8%**	**SPLIT %**				57.6%		42.4%		**64.2%**

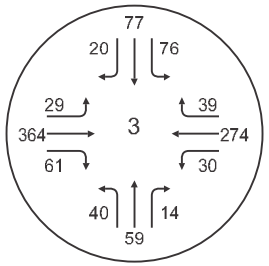
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,322	3,543	7,865

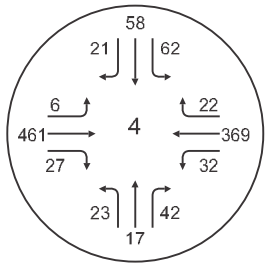
AM Peak Hour			11:45	11:45	**11:45**	**PM Peak Hour**			14:30	14:00	**14:00**
AM Pk Volume			366	283	**649**	**PM Pk Volume**			432	298	**728**
Pk Hr Factor			0.789	0.873	**0.868**	**Pk Hr Factor**			0.679	0.856	**0.843**
7 - 9 Volume	0	0	378	429	**807**	**4 - 6 Volume**	0	0	711	530	**1241**
7 - 9 Peak Hour			08:00	07:45	**07:45**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	239	253	**482**	**4 - 6 Pk Volume**	0	0	374	280	**654**
Pk Hr Factor	0.000	0.000	0.919	0.904	**0.964**	**Pk Hr Factor**	0.000	0.000	0.908	0.875	**0.951**

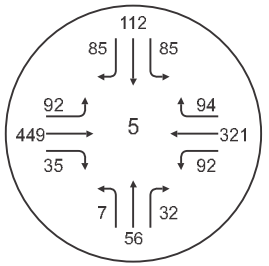
Figure 15: Future (2040) with Specific Plan Land Use - AM Peak Hour Intersection Volumes

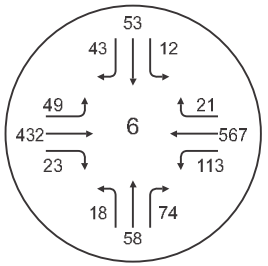


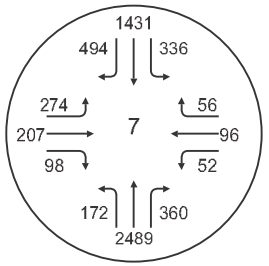


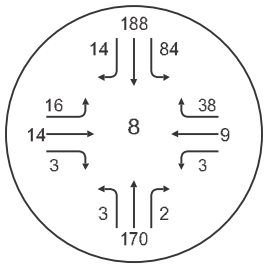


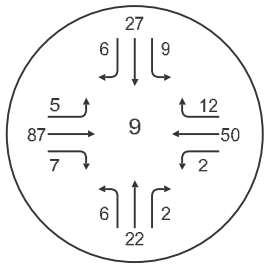


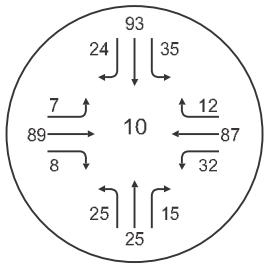


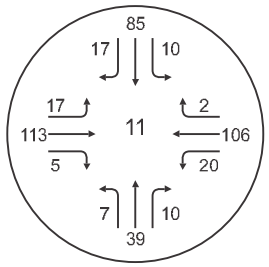


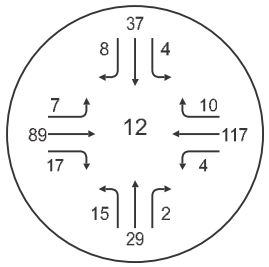


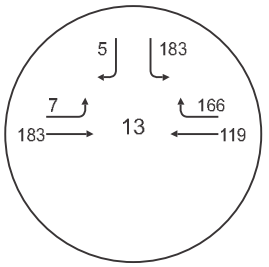


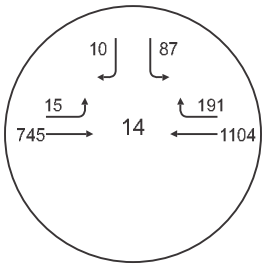


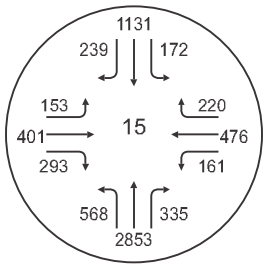










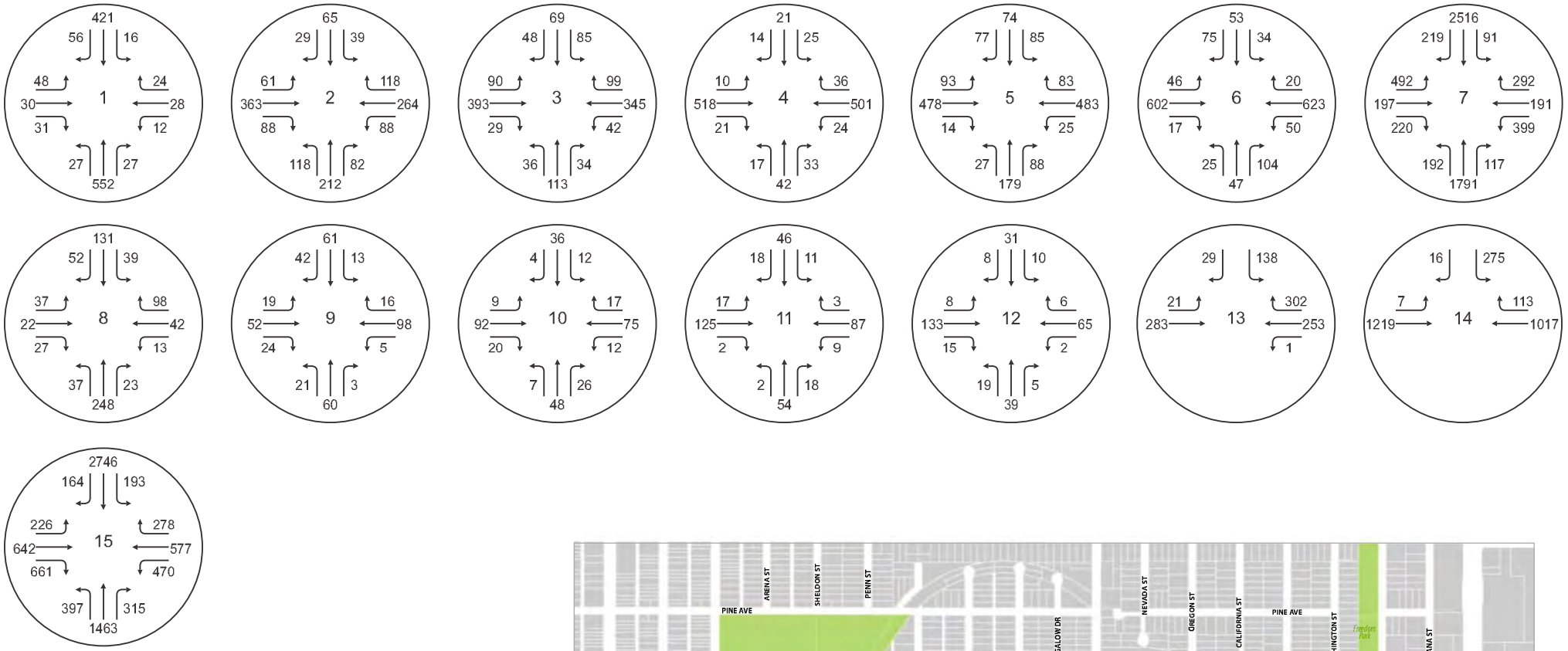




LEGEND

- Smoky Hollow Specific Plan Boundary
- Study Intersection
- XX Intersection Turn Volume

Figure 16: Future (2040) with Specific Plan Land Use - PM Peak Hour Intersection Volumes

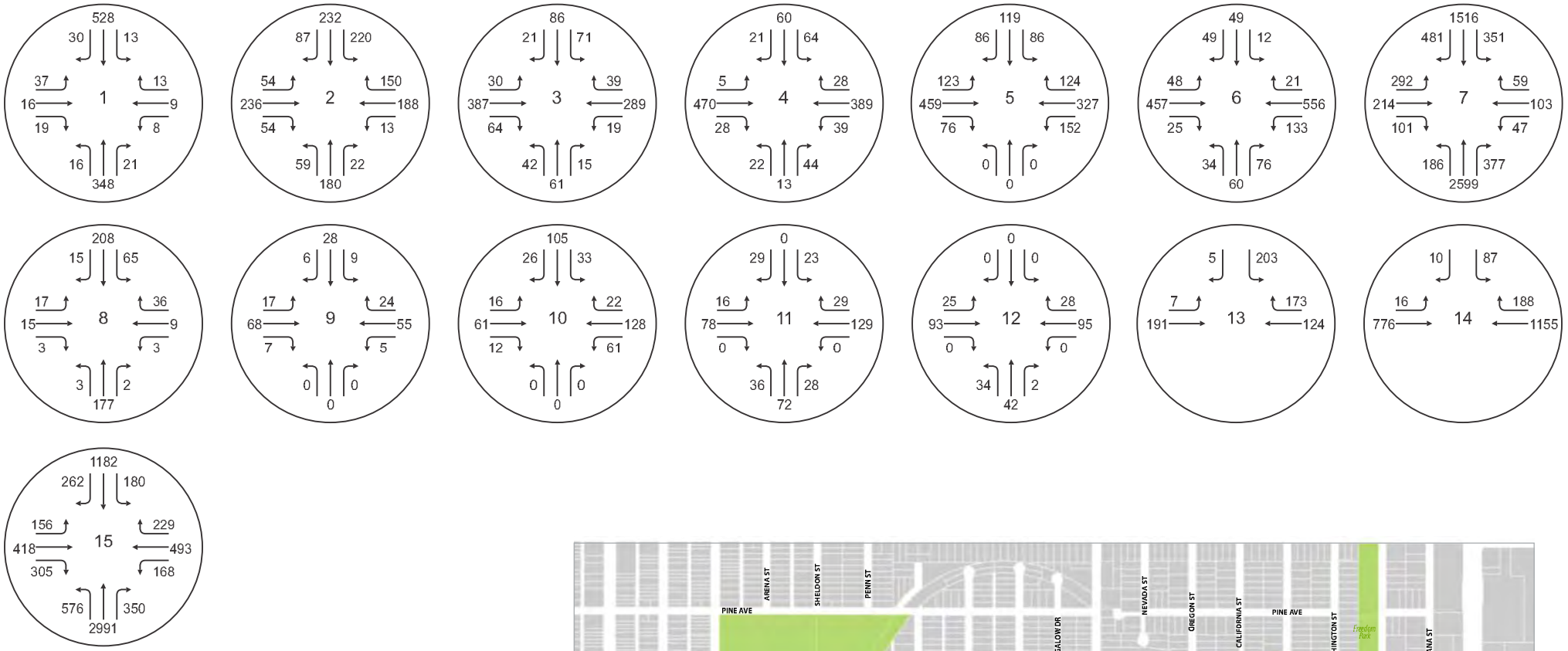




LEGEND

- Smoky Hollow Specific Plan Boundary
- Study Intersection
- XX Intersection Turn Volume

Figure 18: Future (2040) with Specific Plan Land Use and Roadway Reconfigurations - AM Peak Hour Intersection Volumes

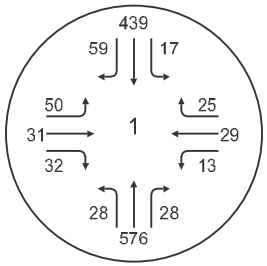


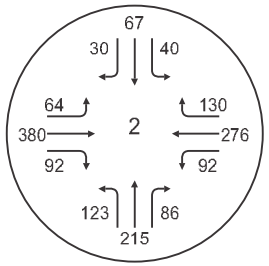


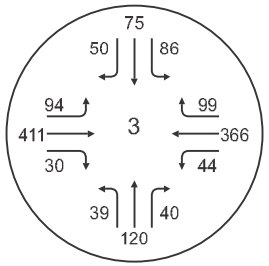
LEGEND

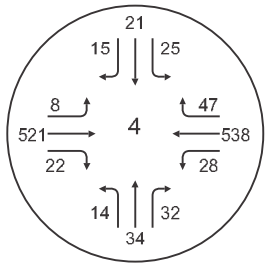
- Smoky Hollow Specific Plan Boundary
- Study Intersection
- XX Intersection Turn Volume

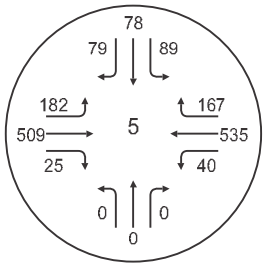
Figure 19: Future (2040) with Specific Plan Land Use and Roadway Reconfigurations - PM Peak Hour Intersection Volumes

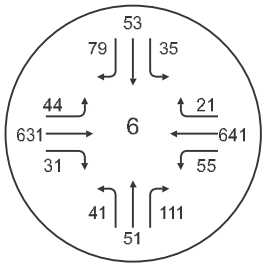


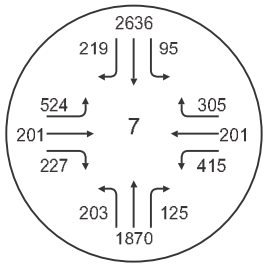


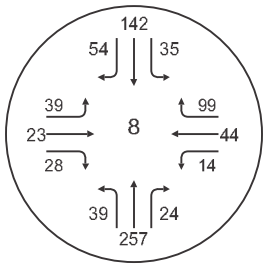


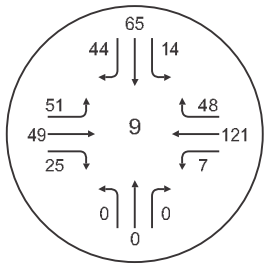


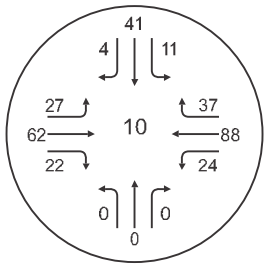


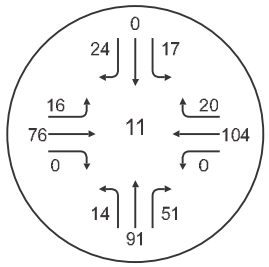


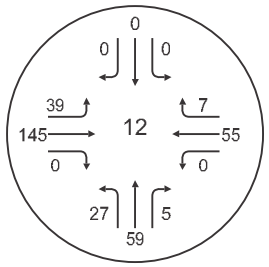


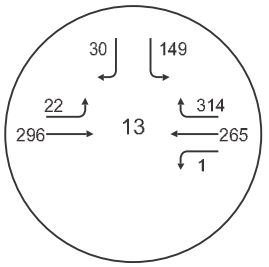


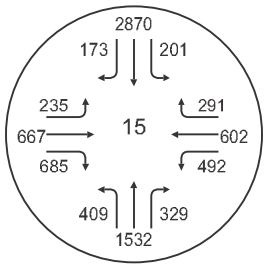














LEGEND

- Smoky Hollow Specific Plan Boundary
- Study Intersection
- XX Intersection Turn Volume

APPENDIX **B**

Intersection Analysis Worksheets

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_AM.vistro
Report File: K:\...\1 EX AM.pdf

Scenario 1 EX AM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	EB Right	0.215	33.2	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Left	0.673	30.8	C
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Left	0.706	31.5	C
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.050	15.5	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	33.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.215

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	25	50	8	18	22	32	354	6	28	374	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	25	50	8	18	22	32	354	6	28	374	11
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	6	13	2	5	6	8	89	2	7	94	3
Total Analysis Volume [veh/h]	11	25	50	8	18	22	32	354	6	28	374	11
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	67	0	0	67	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	71	71	21	21	21	21
g / C, Green / Cycle	0.71	0.71	0.21	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.16	0.15	0.16	0.15
s, saturation flow rate [veh/h]	1640	1641	849	1695	1042	1689
c, Capacity [veh/h]	1197	1199	227	364	266	363
d1, Uniform Delay [s]	4.58	4.47	34.48	36.27	34.19	36.21
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.12	0.06	2.61	2.43	2.24	2.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.04	0.61	0.70	0.61	0.69
d, Delay for Lane Group [s/veh]	4.69	4.53	37.09	38.71	36.43	38.59
Lane Group LOS	A	A	D	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.52	0.28	2.98	5.92	3.52	5.83
50th-Percentile Queue Length [ft/ln]	12.92	7.03	74.51	147.97	88.09	145.78
95th-Percentile Queue Length [veh/ln]	0.93	0.51	5.37	9.91	6.34	9.79
95th-Percentile Queue Length [ft/ln]	23.26	12.66	134.13	247.72	158.57	244.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.69	4.69	4.69	4.53	4.53	4.53	37.09	38.22	38.71	36.43	37.82	38.59
Movement LOS	A	A	A	A	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	4.69			4.53			38.14			37.74		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	33.18											
Intersection LOS	C											
Intersection V/C	0.215											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.829	1.824	2.348	2.479
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	580	1260	1260
d_b, Bicycle Delay [s]	25.21	25.21	6.85	6.85
l_b,int, Bicycle LOS Score for Intersection	1.702	1.639	1.883	1.900
Bicycle LOS	A	A	A	A

Sequence

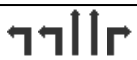
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	30.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	121	2414	347	331	1303	245	213	193	87	30	50	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	2414	347	331	1303	245	213	193	87	30	50	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	604	87	83	326	61	53	48	22	8	13	14
Total Analysis Volume [veh/h]	121	2414	347	331	1303	245	213	193	87	30	50	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	30	49	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	56	56	24	70	70	14	14	14	10	10	10
g / C, Green / Cycle	0.08	0.46	0.46	0.20	0.58	0.58	0.12	0.12	0.12	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.07	0.36	0.22	0.19	0.23	0.23	0.10	0.09	0.10	0.01	0.01	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	5094	1681	1781	1847	1542	3459	3560	1589
c, Capacity [veh/h]	146	3143	735	358	2961	977	213	221	185	288	297	133
d1, Uniform Delay [s]	54.24	26.87	22.16	47.08	13.63	13.63	51.38	51.33	51.44	50.85	51.13	52.25
k, delay calibration	0.11	0.50	0.50	0.26	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.16	1.86	2.17	20.44	0.39	1.19	6.62	6.16	7.95	0.16	0.27	2.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.77	0.47	0.93	0.39	0.39	0.80	0.79	0.80	0.10	0.17	0.42
d, Delay for Lane Group [s/veh]	65.40	28.74	24.33	67.52	14.02	14.82	58.00	57.49	59.39	51.01	51.39	54.38
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.05	14.46	7.11	11.69	5.67	5.83	5.36	5.48	4.76	0.43	0.71	1.69
50th-Percentile Queue Length [ft/ln]	101.27	361.60	177.68	292.22	141.72	145.70	133.89	136.93	119.03	10.63	17.82	42.13
95th-Percentile Queue Length [veh/ln]	7.29	20.70	11.48	17.30	9.57	9.79	9.15	9.32	8.34	0.77	1.28	3.03
95th-Percentile Queue Length [ft/ln]	182.29	517.53	286.99	432.40	239.34	244.68	228.77	232.89	208.49	19.13	32.08	75.84

Movement, Approach, & Intersection Results

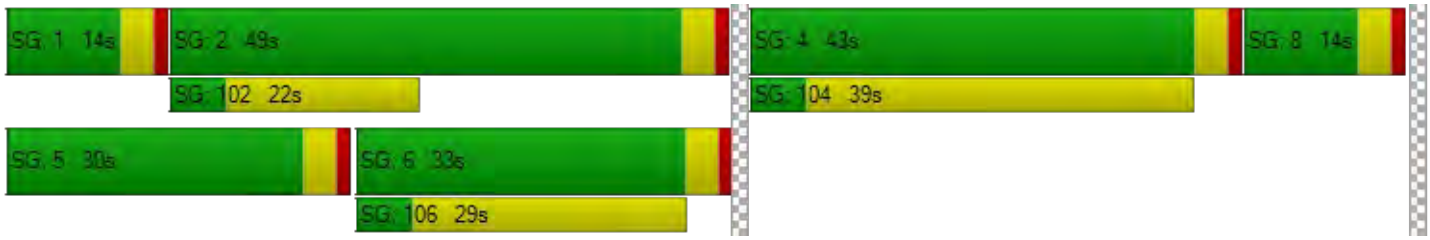
d_M, Delay for Movement [s/veh]	65.40	28.74	24.33	67.52	14.11	14.82	57.88	58.10	59.39	51.01	51.39	54.38
Movement LOS	E	C	C	E	B	B	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	29.75			23.61			58.24			52.54		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	30.79											
Intersection LOS	C											
Intersection V/C	0.673											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.426	2.492	2.749
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	750	167	650
d_b, Bicycle Delay [s]	34.50	23.44	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.748	2.335	1.966	1.672
Bicycle LOS	B	B	A	A

Sequence

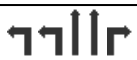
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	336	2774	330	167	1108	109	108	365	230	159	355	201
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	336	2774	330	167	1108	109	108	365	230	159	355	201
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	694	83	42	277	27	27	91	58	40	89	50
Total Analysis Volume [veh/h]	336	2774	330	167	1108	109	108	365	230	159	355	201
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	47	0	10	33	0	13	50	0	13	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	70	70	6	62	62	9	20	20	7	19	19
g / C, Green / Cycle	0.12	0.59	0.59	0.05	0.52	0.52	0.07	0.17	0.17	0.06	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.10	0.45	0.47	0.05	0.16	0.07	0.06	0.10	0.14	0.05	0.10	0.13
s, saturation flow rate [veh/h]	3459	5094	1745	3459	6792	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	403	2980	1021	173	3521	824	132	603	269	215	560	250
d1, Uniform Delay [s]	51.86	18.76	19.40	56.90	16.62	14.94	54.73	46.11	48.39	55.32	47.33	48.78
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.55	1.96	6.54	24.49	0.23	0.33	11.43	0.98	7.56	4.94	1.19	5.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.77	0.80	0.97	0.31	0.13	0.82	0.60	0.85	0.74	0.63	0.80
d, Delay for Lane Group [s/veh]	56.41	20.72	25.94	81.38	16.86	15.27	66.16	47.09	55.94	60.26	48.52	54.76
Lane Group LOS	E	C	C	F	B	B	E	D	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.20	15.68	18.62	3.11	4.41	1.62	3.64	5.13	7.24	2.51	5.06	6.22
50th-Percentile Queue Length [ft/ln]	129.95	392.11	465.42	77.83	110.28	40.39	90.91	128.17	180.92	62.81	126.61	155.43
95th-Percentile Queue Length [veh/ln]	8.94	22.18	25.69	5.60	7.86	2.91	6.55	8.84	11.65	4.52	8.76	10.31
95th-Percentile Queue Length [ft/ln]	223.43	554.48	642.32	140.10	196.39	72.69	163.63	221.01	291.21	113.06	218.88	257.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.41	21.63	25.94	81.38	16.86	15.27	66.16	47.09	55.94	60.26	48.52	54.76
Movement LOS	E	C	C	F	B	B	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	25.44			24.52			52.92			52.89		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	31.48											
Intersection LOS	C											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.489	2.818	2.829
Crosswalk LOS	F	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	483	767	767
d_b, Bicycle Delay [s]	24.70	34.50	22.82	22.82
l_b,int, Bicycle LOS Score for Intersection	2.979	2.131	2.140	2.149
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.050

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	18	4	1	389	511	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	4	1	389	511	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	0	97	128	6
Total Analysis Volume [veh/h]	18	4	1	389	511	24
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.45	10.45	8.50	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.17	0.17	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.36	4.36	0.07	0.04	0.00	0.00
d_A, Approach Delay [s/veh]	14.54		0.02		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.35					
Intersection LOS	C					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_PM.vistro
Report File: K:\...\1 EX PM.pdf

Scenario 1 EX PM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Right	0.256	30.9	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Left	0.772	40.7	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	WB Left	0.906	66.6	E
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.147	22.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.256

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	20	38	24	22	58	29	448	8	20	540	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	20	38	24	22	58	29	448	8	20	540	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	5	10	6	6	15	7	112	2	5	135	4
Total Analysis Volume [veh/h]	12	20	38	24	22	58	29	448	8	20	540	16
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	70	0	0	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	66	66	26	26	26	26
g / C, Green / Cycle	0.66	0.66	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.04	0.06	0.19	0.18	0.19	0.19
s, saturation flow rate [veh/h]	1643	1612	931	1721	1308	1714
c, Capacity [veh/h]	1128	1109	283	446	378	444
d1, Uniform Delay [s]	6.00	6.12	31.08	33.47	31.95	33.86
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.17	2.18	1.96	2.01	2.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.09	0.62	0.70	0.66	0.73
d, Delay for Lane Group [s/veh]	6.10	6.29	33.27	35.43	33.96	36.20
Lane Group LOS	A	A	C	D	C	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.51	0.77	3.58	6.95	5.33	7.39
50th-Percentile Queue Length [ft/ln]	12.71	19.32	89.50	173.69	133.28	184.87
95th-Percentile Queue Length [veh/ln]	0.92	1.39	6.44	11.27	9.12	11.85
95th-Percentile Queue Length [ft/ln]	22.89	34.78	161.11	281.76	227.95	296.37

Movement, Approach, & Intersection Results

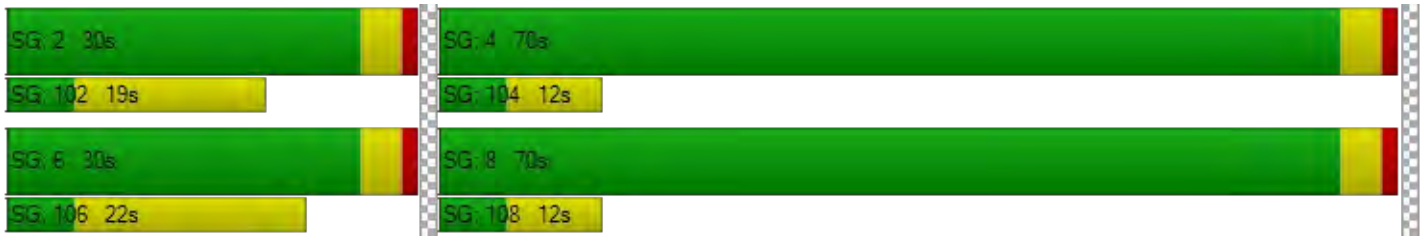
d_M, Delay for Movement [s/veh]	6.10	6.10	6.10	6.29	6.29	6.29	33.27	34.73	35.43	33.96	35.24	36.20
Movement LOS	A	A	A	A	A	A	C	C	D	C	D	D
d_A, Approach Delay [s/veh]	6.10			6.29			34.65			35.22		
Approach LOS	A			A			C			D		
d_I, Intersection Delay [s/veh]	30.91											
Intersection LOS	C											
Intersection V/C	0.256											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.808	1.845	2.422	2.552
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	520	520	1320	1320
d_b, Bicycle Delay [s]	27.38	27.38	5.78	5.78
l_b,int, Bicycle LOS Score for Intersection	1.675	1.731	1.960	2.035
Bicycle LOS	A	A	A	B

Sequence

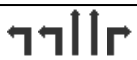
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	40.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.772

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	180	1682	100	89	2434	149	296	160	177	385	177	288
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	180	1682	100	89	2434	149	296	160	177	385	177	288
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	421	25	22	609	37	74	40	44	96	44	72
Total Analysis Volume [veh/h]	180	1682	100	89	2434	149	296	160	177	385	177	288
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	17	52	0	11	46	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	55	55	7	49	49	18	18	18	25	25	25
g / C, Green / Cycle	0.11	0.46	0.46	0.06	0.41	0.41	0.15	0.15	0.15	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.10	0.24	0.06	0.05	0.37	0.37	0.12	0.12	0.12	0.11	0.05	0.18
s, saturation flow rate [veh/h]	1810	6901	1615	1810	5176	1829	1810	1870	1477	3514	3618	1615
c, Capacity [veh/h]	196	3144	736	106	2099	742	264	272	215	728	749	334
d1, Uniform Delay [s]	52.97	23.51	18.95	55.96	33.55	33.66	49.91	49.88	50.00	42.36	39.66	45.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.63	0.66	0.38	16.12	7.20	17.53	7.11	6.76	9.12	0.60	0.16	7.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.53	0.14	0.84	0.91	0.91	0.84	0.84	0.85	0.53	0.24	0.86
d, Delay for Lane Group [s/veh]	68.61	24.17	19.34	72.08	40.75	51.19	57.02	56.65	59.12	42.96	39.82	53.38
Lane Group LOS	E	C	B	E	D	D	E	E	E	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.22	8.64	1.71	3.14	18.44	21.83	6.98	7.16	5.89	5.15	2.21	8.95
50th-Percentile Queue Length [ft/ln]	155.39	215.97	42.68	78.52	461.02	545.72	174.55	178.94	147.32	128.78	55.20	223.68
95th-Percentile Queue Length [veh/ln]	10.30	13.46	3.07	5.65	25.48	29.49	11.32	11.55	9.87	8.87	3.97	13.85
95th-Percentile Queue Length [ft/ln]	257.61	336.48	76.83	141.34	637.09	737.28	282.89	288.64	246.85	221.83	99.35	346.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.61	24.17	19.34	72.08	43.02	51.19	56.91	56.74	59.12	42.96	39.82	53.38
Movement LOS	E	C	B	E	D	D	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	28.00			44.44			57.49			45.84		
Approach LOS	C			D			E			D		
d_I, Intersection Delay [s/veh]	40.71											
Intersection LOS	D											
Intersection V/C	0.772											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.463	2.537	2.776
Crosswalk LOS	F	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	700	167	650
d_b, Bicycle Delay [s]	21.60	25.35	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.369	2.662	2.082	2.261
Bicycle LOS	B	B	B	B

Sequence

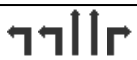
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	66.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.906

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	321	1433	310	177	2675	111	126	545	478	462	533	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	321	1433	310	177	2675	111	126	545	478	462	533	270
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	358	78	44	669	28	32	136	120	116	133	68
Total Analysis Volume [veh/h]	321	1433	310	177	2675	111	126	545	478	462	533	270
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	47	0	11	44	0	12	44	0	18	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	45	45	7	42	42	8	38	38	14	44	44
g / C, Green / Cycle	0.08	0.38	0.38	0.06	0.35	0.35	0.07	0.31	0.31	0.12	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.09	0.25	0.25	0.05	0.39	0.07	0.07	0.15	0.30	0.13	0.15	0.17
s, saturation flow rate [veh/h]	3514	5176	1685	3514	6901	1615	1810	3618	1615	3514	3618	1615
c, Capacity [veh/h]	293	1948	634	205	2425	567	121	1141	509	410	1321	590
d1, Uniform Delay [s]	55.00	31.28	31.29	56.03	38.92	27.11	56.00	33.12	39.96	53.00	28.35	29.02
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.38	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	55.15	1.89	5.68	10.28	53.34	0.77	50.20	0.31	22.58	64.55	0.20	0.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.10	0.67	0.68	0.86	1.10	0.20	1.04	0.48	0.94	1.13	0.40	0.46
d, Delay for Lane Group [s/veh]	110.15	33.18	36.97	66.30	92.26	27.88	106.20	33.43	62.53	117.55	28.55	29.58
Lane Group LOS	F	C	D	E	F	C	F	C	E	F	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.66	10.85	11.27	2.95	26.48	2.35	5.33	6.45	16.74	9.84	5.75	6.02
50th-Percentile Queue Length [ft/ln]	166.58	271.27	281.73	73.73	661.94	58.82	133.26	161.30	418.56	245.98	143.82	150.51
95th-Percentile Queue Length [veh/ln]	11.24	16.25	16.77	5.31	37.28	4.23	9.24	10.62	23.45	15.72	9.69	10.04
95th-Percentile Queue Length [ft/ln]	281.08	406.32	419.36	132.71	931.99	105.87	231.06	265.44	586.32	392.92	242.16	251.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	110.15	33.49	36.97	66.30	92.26	27.88	106.20	33.43	62.53	117.55	28.55	29.58
Movement LOS	F	C	D	E	F	C	F	C	E	F	C	C
d_A, Approach Delay [s/veh]	45.93			88.30			53.52			61.27		
Approach LOS	D			F			D			E		
d_I, Intersection Delay [s/veh]	66.58											
Intersection LOS	E											
Intersection V/C	0.906											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.518	2.904	2.929
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	667	667	767
d_b, Bicycle Delay [s]	24.70	26.67	26.67	22.82
l_b,int, Bicycle LOS Score for Intersection	2.411	2.782	2.508	2.603
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	22.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	36	1	1	786	590	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	1	1	786	590	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	0	197	148	5
Total Analysis Volume [veh/h]	36	1	1	786	590	19
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	22.20	12.66	8.68	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.51	0.51	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.82	12.82	0.08	0.04	0.00	0.00
d_A, Approach Delay [s/veh]	21.94		0.01		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.57					
Intersection LOS	C					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_AM.vistro
Report File: K:\...\2 HY AM.pdf

Scenario 2 HY AM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.398	26.9	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.703	35.3	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	0.767	39.1	D
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.126	25.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.398

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	18	58	74	12	53	43	49	432	23	113	567	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	58	74	12	53	43	49	432	23	113	567	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	15	19	3	13	11	12	108	6	28	142	5
Total Analysis Volume [veh/h]	18	58	74	12	53	43	49	432	23	113	567	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	67	0	0	67	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	56	56	36	36	36	36
g / C, Green / Cycle	0.56	0.56	0.36	0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.23	0.21	0.31	0.28
s, saturation flow rate [veh/h]	1664	1689	642	1682	765	1688
c, Capacity [veh/h]	966	980	281	611	331	613
d1, Uniform Delay [s]	10.76	10.47	27.70	25.67	34.73	28.00
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.23	1.57	0.87	2.81	1.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.11	0.53	0.58	0.71	0.76
d, Delay for Lane Group [s/veh]	11.11	10.70	29.27	26.54	37.55	29.96
Lane Group LOS	B	B	C	C	D	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.64	1.15	3.51	6.78	5.68	9.86
50th-Percentile Queue Length [ft/ln]	41.01	28.67	87.77	169.58	142.12	246.62
95th-Percentile Queue Length [veh/ln]	2.95	2.06	6.32	11.05	9.60	15.02
95th-Percentile Queue Length [ft/ln]	73.82	51.61	157.98	276.36	239.88	375.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.11	11.11	11.11	10.70	10.70	10.70	29.27	27.18	26.54	37.55	31.60	29.96
Movement LOS	B	B	B	B	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	11.11			10.70			27.35			32.51		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	26.93											
Intersection LOS	C											
Intersection V/C	0.398											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.047	1.906	2.439	2.561
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	580	1260	1260
d_b, Bicycle Delay [s]	25.21	25.21	6.85	6.85
l_b,int, Bicycle LOS Score for Intersection	1.807	1.738	1.975	2.138
Bicycle LOS	A	A	A	B

Sequence

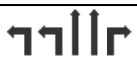
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	35.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	172	2489	360	336	1431	494	274	207	98	52	96	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	172	2489	360	336	1431	494	274	207	98	52	96	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	622	90	84	358	124	69	52	25	13	24	14
Total Analysis Volume [veh/h]	172	2489	360	336	1431	494	274	207	98	52	96	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	30	49	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	53	53	24	67	67	16	16	16	10	10	10
g / C, Green / Cycle	0.08	0.44	0.44	0.20	0.56	0.56	0.14	0.14	0.14	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.10	0.37	0.23	0.19	0.28	0.31	0.11	0.11	0.11	0.02	0.03	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	5094	1589	1781	1837	1548	3459	3560	1589
c, Capacity [veh/h]	148	3002	703	362	2863	893	244	252	212	291	300	134
d1, Uniform Delay [s]	55.00	29.49	24.15	46.93	16.00	16.70	50.31	50.28	50.36	51.09	51.72	52.16
k, delay calibration	0.11	0.50	0.50	0.27	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	87.20	2.81	2.66	21.00	0.63	2.46	6.59	6.26	7.76	0.29	0.61	2.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.16	0.83	0.51	0.93	0.50	0.55	0.82	0.81	0.82	0.18	0.32	0.42
d, Delay for Lane Group [s/veh]	142.20	32.29	26.81	67.93	16.63	19.16	56.91	56.54	58.12	51.38	52.33	54.24
Lane Group LOS	F	C	C	E	B	B	E	E	E	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.07	16.01	7.83	11.91	7.93	9.00	6.26	6.40	5.55	0.74	1.39	1.68
50th-Percentile Queue Length [ft/ln]	201.87	400.34	195.75	297.87	198.31	225.06	156.51	159.99	138.81	18.55	34.75	42.06
95th-Percentile Queue Length [veh/ln]	13.39	22.58	12.42	17.58	12.55	13.92	10.36	10.55	9.42	1.34	2.50	3.03
95th-Percentile Queue Length [ft/ln]	334.73	564.41	310.47	439.40	313.78	348.08	259.10	263.71	235.41	33.38	62.54	75.72

Movement, Approach, & Intersection Results

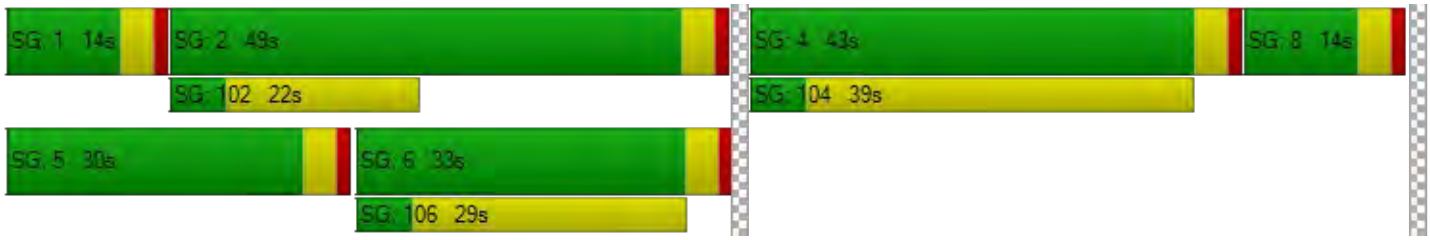
d_M, Delay for Movement [s/veh]	142.20	32.29	26.81	67.93	16.63	19.16	56.80	57.13	58.12	51.38	52.33	54.24
Movement LOS	F	C	C	E	B	B	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	37.90			24.81			57.14			52.61		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	35.35											
Intersection LOS	D											
Intersection V/C	0.703											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.477	2.577	2.763
Crosswalk LOS	F	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	750	167	650
d_b, Bicycle Delay [s]	34.50	23.44	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.806	2.492	2.037	1.728
Bicycle LOS	C	B	B	A

Sequence

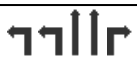
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	39.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.767

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	568	2853	335	172	1131	239	153	401	293	161	476	220
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	568	2853	335	172	1131	239	153	401	293	161	476	220
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	142	713	84	43	283	60	38	100	73	40	119	55
Total Analysis Volume [veh/h]	568	2853	335	172	1131	239	153	401	293	161	476	220
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	47	0	10	33	0	13	50	0	13	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	65	65	6	51	51	9	25	25	8	24	24
g / C, Green / Cycle	0.17	0.54	0.54	0.05	0.43	0.43	0.08	0.21	0.21	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.16	0.46	0.49	0.05	0.17	0.15	0.09	0.11	0.18	0.05	0.13	0.14
s, saturation flow rate [veh/h]	3459	5094	1748	3459	6792	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	576	2770	951	173	2902	679	134	748	334	217	704	314
d1, Uniform Delay [s]	49.85	23.07	24.30	56.98	23.62	23.17	55.50	42.20	45.91	55.28	44.57	44.82
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.32	3.35	12.63	30.54	0.40	1.43	83.45	0.60	7.38	4.93	1.14	2.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.84	0.89	0.99	0.39	0.35	1.15	0.54	0.88	0.74	0.68	0.70
d, Delay for Lane Group [s/veh]	64.17	26.42	36.93	87.53	24.01	24.60	138.95	42.80	53.28	60.21	45.72	47.64
Lane Group LOS	E	C	D	F	C	C	F	D	D	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.61	18.58	23.70	3.34	5.57	4.83	7.13	5.36	9.11	2.54	6.67	6.34
50th-Percentile Queue Length [ft/ln]	240.13	464.54	592.58	83.46	139.34	120.64	178.30	134.08	227.79	63.58	166.75	158.55
95th-Percentile Queue Length [veh/ln]	14.69	25.65	31.69	6.01	9.45	8.43	12.03	9.16	14.06	4.58	10.91	10.47
95th-Percentile Queue Length [ft/ln]	367.20	641.28	792.20	150.23	236.13	210.70	300.73	229.03	351.55	114.44	272.63	261.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.17	28.32	36.93	87.53	24.01	24.60	138.95	42.80	53.28	60.21	45.72	47.64
Movement LOS	E	C	D	F	C	C	F	D	D	E	D	D
d_A, Approach Delay [s/veh]	34.51			31.19			63.79			48.93		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	39.09											
Intersection LOS	D											
Intersection V/C	0.767											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.516	2.906	2.855
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	483	767	767
d_b, Bicycle Delay [s]	24.70	34.50	22.82	22.82
l_b,int, Bicycle LOS Score for Intersection	3.109	2.196	2.258	2.267
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	25.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.126

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	26	6	3	434	856	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	6	3	434	856	42
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	109	214	11
Total Analysis Volume [veh/h]	26	6	3	434	856	42
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	24.95	13.90	9.81	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.47	0.47	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.71	11.71	0.30	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	22.88		0.07		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.56					
Intersection LOS	C					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_PM.vistro
Report File: K:\...\2 HY PM.pdf

Scenario 2 HY PM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	EB Left	0.448	22.9	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.858	61.7	E
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	1.054	104.0	F
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.255	32.2	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	47	104	34	53	75	46	602	17	50	623	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	47	104	34	53	75	46	602	17	50	623	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	12	26	9	13	19	12	151	4	13	156	5
Total Analysis Volume [veh/h]	25	47	104	34	53	75	46	602	17	50	623	20
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	70	0	0	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	46	46	46	46	46	46
g / C, Green / Cycle	0.46	0.46	0.46	0.46	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.11	0.10	0.34	0.31	0.34	0.31
s, saturation flow rate [veh/h]	1646	1624	406	1719	456	1718
c, Capacity [veh/h]	795	787	236	794	258	793
d1, Uniform Delay [s]	16.35	16.17	31.21	20.88	30.44	21.07
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.64	0.59	2.32	0.96	2.29	1.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	0.21	0.59	0.66	0.60	0.68
d, Delay for Lane Group [s/veh]	16.99	16.76	33.53	21.84	32.73	22.09
Lane Group LOS	B	B	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.52	2.30	3.38	9.40	3.78	9.68
50th-Percentile Queue Length [ft/ln]	63.06	57.41	84.59	234.88	94.59	241.91
95th-Percentile Queue Length [veh/ln]	4.54	4.13	6.09	14.42	6.81	14.78
95th-Percentile Queue Length [ft/ln]	113.51	103.33	152.27	360.55	170.27	369.45

Movement, Approach, & Intersection Results

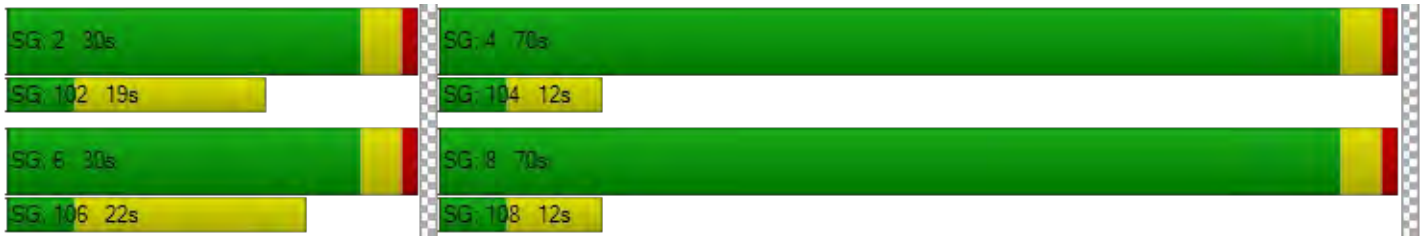
d_M, Delay for Movement [s/veh]	16.99	16.99	16.99	16.76	16.76	16.76	33.53	23.63	21.84	32.73	23.90	22.09
Movement LOS	B	B	B	B	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	16.99			16.76			24.27			24.48		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.88											
Intersection LOS	C											
Intersection V/C	0.448											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.937	1.921	2.512	2.634
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	520	520	1320	1320
d_b, Bicycle Delay [s]	27.38	27.38	5.78	5.78
l_b,int, Bicycle LOS Score for Intersection	1.850	1.827	2.108	2.131
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	61.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.858

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	192	1791	117	91	2516	219	492	197	220	399	191	292
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	1791	117	91	2516	219	492	197	220	399	191	292
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	448	29	23	629	55	123	49	55	100	48	73
Total Analysis Volume [veh/h]	192	1791	117	91	2516	219	492	197	220	399	191	292
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	16	52	0	11	47	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	49	49	7	44	44	23	23	23	25	25	25
g / C, Green / Cycle	0.10	0.41	0.41	0.06	0.36	0.36	0.19	0.19	0.19	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.07	0.05	0.39	0.40	0.18	0.18	0.18	0.11	0.05	0.18
s, saturation flow rate [veh/h]	1810	6901	1615	1810	5176	1802	1810	1851	1508	3514	3618	1615
c, Capacity [veh/h]	181	2810	658	106	1891	659	346	354	288	738	760	339
d1, Uniform Delay [s]	54.00	28.48	22.74	56.02	38.07	38.07	47.62	47.62	47.62	42.25	39.54	45.72
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.23	0.23	0.23	0.11	0.11	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	48.59	1.12	0.59	17.88	42.17	58.97	18.38	18.06	21.08	0.62	0.17	7.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.64	0.18	0.86	1.07	1.08	0.92	0.92	0.92	0.54	0.25	0.86
d, Delay for Lane Group [s/veh]	102.59	29.60	23.33	73.90	80.24	97.04	66.00	65.67	68.70	42.87	39.71	53.39
Lane Group LOS	F	C	C	E	F	F	E	E	E	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.89	10.44	2.24	3.26	25.56	29.77	11.05	11.27	9.43	5.34	2.38	9.08
50th-Percentile Queue Length [ft/ln]	197.36	260.91	55.99	81.39	638.89	744.25	276.37	281.83	235.87	133.53	59.56	227.05
95th-Percentile Queue Length [veh/ln]	12.79	15.73	4.03	5.86	35.45	40.87	16.51	16.78	14.47	9.13	4.29	14.02
95th-Percentile Queue Length [ft/ln]	319.72	393.36	100.78	146.50	886.35	1021.84	412.69	419.49	361.80	228.28	107.21	350.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	102.59	29.60	23.33	73.90	83.53	97.04	65.87	66.37	68.70	42.87	39.71	53.39
Movement LOS	F	C	C	E	F	F	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	35.92			84.27			66.67			45.67		
Approach LOS	D			F			E			D		
d_I, Intersection Delay [s/veh]	61.70											
Intersection LOS	E											
Intersection V/C	0.858											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.508	2.610	2.788
Crosswalk LOS	F	D	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	717	167	650
d_b, Bicycle Delay [s]	21.60	24.70	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.426	2.725	2.310	2.287
Bicycle LOS	B	B	B	B

Sequence

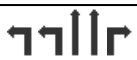
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	104.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.054

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	397	1463	315	193	2746	164	226	642	661	470	577	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	397	1463	315	193	2746	164	226	642	661	470	577	278
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	366	79	48	687	41	57	161	165	118	144	70
Total Analysis Volume [veh/h]	397	1463	315	193	2746	164	226	642	661	470	577	278
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	47	0	11	44	0	12	44	0	18	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	43	43	7	40	40	8	40	40	14	46	46
g / C, Green / Cycle	0.08	0.36	0.36	0.06	0.33	0.33	0.07	0.33	0.33	0.12	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.26	0.05	0.40	0.10	0.12	0.18	0.41	0.13	0.16	0.17
s, saturation flow rate [veh/h]	3514	5176	1686	3514	6901	1615	1810	3618	1615	3514	3618	1615
c, Capacity [veh/h]	293	1855	604	205	2300	538	121	1206	538	410	1387	619
d1, Uniform Delay [s]	55.00	33.34	33.36	56.30	40.00	29.68	56.00	32.42	40.00	53.00	27.15	27.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	164.97	2.48	7.38	18.10	91.78	1.46	399.84	0.37	118.17	72.62	0.20	0.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.36	0.72	0.72	0.94	1.19	0.30	1.87	0.53	1.23	1.15	0.42	0.45
d, Delay for Lane Group [s/veh]	219.97	35.82	40.74	74.39	131.78	31.14	455.84	32.79	158.17	125.62	27.35	28.07
Lane Group LOS	F	D	D	E	F	C	F	C	F	F	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.13	11.59	12.17	3.43	31.34	3.75	17.05	7.61	33.29	10.30	6.10	6.02
50th-Percentile Queue Length [ft/ln]	278.24	289.67	304.16	85.65	783.54	93.70	426.17	190.20	832.17	257.47	152.60	150.55
95th-Percentile Queue Length [veh/ln]	18.29	17.17	17.89	6.17	45.26	6.75	27.71	12.13	48.48	16.43	10.16	10.05
95th-Percentile Queue Length [ft/ln]	457.17	429.23	447.17	154.16	1131.44	168.66	692.72	303.30	1211.92	410.78	253.90	251.16

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	219.97	36.23	40.74	74.39	131.78	31.14	455.84	32.79	158.17	125.62	27.35	28.07
Movement LOS	F	D	D	E	F	C	F	C	F	F	C	C
d_A, Approach Delay [s/veh]	70.42			122.89			149.52			62.36		
Approach LOS	E			F			F			E		
d_I, Intersection Delay [s/veh]	104.00											
Intersection LOS	F											
Intersection V/C	1.054											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.543	2.981	2.954
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	667	667	767
d_b, Bicycle Delay [s]	24.70	26.67	26.67	22.82
l_b,int, Bicycle LOS Score for Intersection	2.457	2.840	2.821	2.653
Bicycle LOS	B	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.255

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	45	1	3	985	690	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	1	3	985	690	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	1	246	173	13
Total Analysis Volume [veh/h]	45	1	3	985	690	50
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	32.25	17.50	9.12	0.00	0.00	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.98	0.98	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.50	24.50	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	31.93		0.03		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.84					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_AM.vistro
Report File: K:\...\3 HY WP AM.pdf

Scenario 3 HY WP AM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.435	25.5	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.705	35.5	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	0.770	40.1	D
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.137	25.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	18	58	74	12	53	43	49	432	23	113	567	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	7	0	0	0	0	0	10	39	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	58	81	12	53	43	49	432	33	152	567	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	15	20	3	13	11	12	108	8	38	142	5
Total Analysis Volume [veh/h]	20	58	81	12	53	43	49	432	33	152	567	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	67	0	0	67	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	52	52	40	40	40	40
g / C, Green / Cycle	0.52	0.52	0.40	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.10	0.06	0.23	0.21	0.34	0.29
s, saturation flow rate [veh/h]	1657	1689	693	1674	712	1689
c, Capacity [veh/h]	910	926	321	662	340	668
d1, Uniform Delay [s]	12.46	12.05	24.88	23.16	34.53	25.91
k, delay calibration	0.50	0.50	0.11	0.11	0.13	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.42	0.26	1.20	0.67	3.18	1.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.17	0.12	0.50	0.53	0.71	0.75
d, Delay for Lane Group [s/veh]	12.88	12.31	26.08	23.83	37.71	27.59
Lane Group LOS	B	B	C	C	D	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.92	1.26	2.54	6.36	5.83	10.13
50th-Percentile Queue Length [ft/ln]	47.92	31.39	63.54	158.94	145.82	253.27
95th-Percentile Queue Length [veh/ln]	3.45	2.26	4.58	10.49	9.79	15.35
95th-Percentile Queue Length [ft/ln]	86.26	56.51	114.38	262.32	244.83	383.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.88	12.88	12.88	12.31	12.31	12.31	26.08	24.41	23.83	37.71	29.19	27.59
Movement LOS	B	B	B	B	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	12.88			12.31			24.53			30.89		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	25.54											
Intersection LOS	C											
Intersection V/C	0.435											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.131	1.906	2.445	2.570
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	580	1260	1260
d_b, Bicycle Delay [s]	25.21	25.21	6.85	6.85
l_b,int, Bicycle LOS Score for Intersection	1.822	1.738	1.984	2.170
Bicycle LOS	A	A	A	B

Sequence

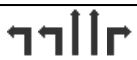
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	35.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.705

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	172	2489	360	336	1431	494	274	207	98	52	96	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	39	7	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	172	2489	360	336	1431	533	281	207	98	52	96	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	622	90	84	358	133	70	52	25	13	24	14
Total Analysis Volume [veh/h]	172	2489	360	336	1431	533	281	207	98	52	96	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	30	49	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	53	53	24	67	67	17	17	17	10	10	10
g / C, Green / Cycle	0.08	0.44	0.44	0.20	0.56	0.56	0.14	0.14	0.14	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.10	0.37	0.23	0.19	0.28	0.34	0.11	0.11	0.11	0.02	0.03	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	5094	1589	1781	1835	1550	3459	3560	1589
c, Capacity [veh/h]	148	2993	700	362	2856	891	247	254	215	291	300	134
d1, Uniform Delay [s]	55.00	29.63	24.27	46.93	16.10	17.42	50.23	50.20	50.27	51.09	51.72	52.16
k, delay calibration	0.11	0.50	0.50	0.27	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	87.20	2.86	2.68	21.00	0.63	2.96	6.60	6.28	7.75	0.29	0.61	2.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.16	0.83	0.51	0.93	0.50	0.60	0.82	0.82	0.82	0.18	0.32	0.42
d, Delay for Lane Group [s/veh]	142.20	32.49	26.95	67.93	16.73	20.38	56.83	56.48	58.02	51.38	52.33	54.24
Lane Group LOS	F	C	C	E	B	C	E	E	E	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.07	16.07	7.85	11.91	7.96	10.16	6.33	6.47	5.62	0.74	1.39	1.68
50th-Percentile Queue Length [ft/ln]	201.87	401.72	196.37	297.87	199.10	253.94	158.35	161.80	140.50	18.55	34.75	42.06
95th-Percentile Queue Length [veh/ln]	13.39	22.64	12.45	17.58	12.59	15.38	10.46	10.64	9.51	1.34	2.50	3.03
95th-Percentile Queue Length [ft/ln]	334.73	566.08	311.27	439.40	314.80	384.61	261.53	266.11	237.70	33.38	62.54	75.72

Movement, Approach, & Intersection Results

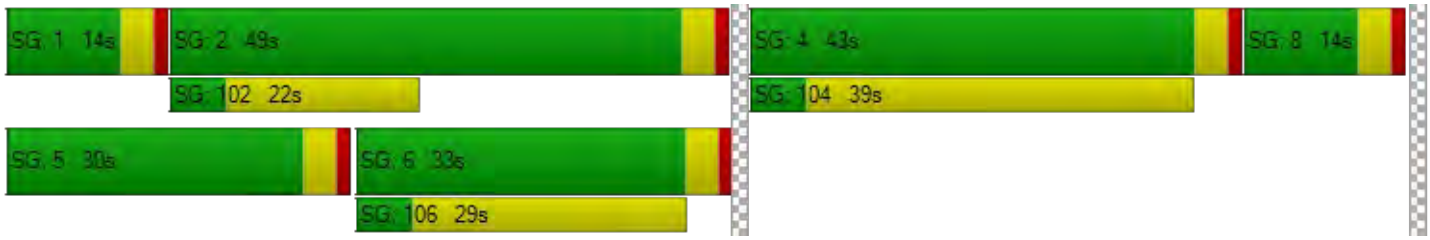
d_M, Delay for Movement [s/veh]	142.20	32.49	26.95	67.93	16.73	20.38	56.72	57.07	58.02	51.38	52.33	54.24
Movement LOS	F	C	C	E	B	C	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	38.08			25.06			57.07			52.61		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	35.48											
Intersection LOS	D											
Intersection V/C	0.705											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.481	2.586	2.763
Crosswalk LOS	F	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	750	167	650
d_b, Bicycle Delay [s]	34.50	23.44	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.806	2.508	2.043	1.728
Bicycle LOS	C	B	B	A

Sequence

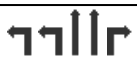
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	40.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.770

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	568	2853	335	172	1131	239	153	401	293	161	476	220
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	0	0	0	0	0	0	5	4	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	587	2853	335	172	1131	239	153	406	297	161	505	220
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	147	713	84	43	283	60	38	102	74	40	126	55
Total Analysis Volume [veh/h]	587	2853	335	172	1131	239	153	406	297	161	505	220
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	47	0	10	33	0	13	50	0	13	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	65	65	6	51	51	9	25	25	8	24	24
g / C, Green / Cycle	0.17	0.54	0.54	0.05	0.43	0.43	0.08	0.21	0.21	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.17	0.46	0.49	0.05	0.17	0.15	0.09	0.11	0.19	0.05	0.14	0.14
s, saturation flow rate [veh/h]	3459	5094	1749	3459	6792	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	576	2757	946	173	2884	675	134	757	338	217	713	318
d1, Uniform Delay [s]	50.00	23.33	24.59	56.98	23.83	23.38	55.50	41.99	45.75	55.28	44.71	44.53
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	22.19	3.46	13.15	30.54	0.40	1.45	83.45	0.59	7.36	4.93	1.31	2.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.02	0.85	0.90	0.99	0.39	0.35	1.15	0.54	0.88	0.74	0.71	0.69
d, Delay for Lane Group [s/veh]	72.19	26.78	37.74	87.53	24.23	24.83	138.95	42.58	53.11	60.21	46.01	47.21
Lane Group LOS	F	C	D	F	C	C	F	D	D	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.39	18.72	24.00	3.34	5.60	4.85	7.13	5.42	9.23	2.54	7.13	6.31
50th-Percentile Queue Length [ft/ln]	259.65	467.95	600.05	83.46	140.09	121.31	178.30	135.45	230.71	63.58	178.19	157.75
95th-Percentile Queue Length [veh/ln]	15.81	25.81	32.04	6.01	9.49	8.47	12.03	9.24	14.21	4.58	11.51	10.43
95th-Percentile Queue Length [ft/ln]	395.28	645.33	800.92	150.23	237.14	211.63	300.73	230.88	355.26	114.44	287.66	260.74

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.19	28.76	37.74	87.53	24.23	24.83	138.95	42.58	53.11	60.21	46.01	47.21
Movement LOS	F	C	D	F	C	C	F	D	D	E	D	D
d_A, Approach Delay [s/veh]	36.31			31.39			63.46			48.89		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	40.11											
Intersection LOS	D											
Intersection V/C	0.770											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.516	2.914	2.860
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	483	767	767
d_b, Bicycle Delay [s]	24.70	34.50	22.82	22.82
l_b,int, Bicycle LOS Score for Intersection	3.117	2.196	2.266	2.291
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.137

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	26	6	3	434	856	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	6	3	434	856	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	109	214	13
Total Analysis Volume [veh/h]	28	6	3	434	856	52
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	25.35	14.22	9.85	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.51	0.51	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.77	12.77	0.30	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	23.39		0.07		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.60					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_PM.vistro
Report File: K:\...\3 HY WP PM.pdf

Scenario 3 HY WP PM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Right	0.364	31.8	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Right	0.866	65.3	E
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	1.067	105.4	F
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.313	34.5	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.364

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	47	104	34	53	75	46	602	17	50	623	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	37	0	0	0	0	0	2	8	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	47	141	34	53	75	46	602	19	58	623	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	12	35	9	13	19	12	151	5	15	156	5
Total Analysis Volume [veh/h]	35	47	141	34	53	75	46	602	19	58	623	20
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	70	0	0	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	66	66	26	26	26	26
g / C, Green / Cycle	0.66	0.66	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.14	0.10	0.21	0.21	0.23	0.22
s, saturation flow rate [veh/h]	1628	1591	1494	1713	1424	1713
c, Capacity [veh/h]	1121	1099	425	440	408	440
d1, Uniform Delay [s]	6.53	6.26	34.82	34.74	35.82	35.41
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	0.28	2.55	3.40	3.49	4.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.15	0.74	0.80	0.79	0.86
d, Delay for Lane Group [s/veh]	6.93	6.54	37.38	38.14	39.32	40.35
Lane Group LOS	A	A	D	D	D	D
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.79	1.25	7.43	8.28	7.88	9.19
50th-Percentile Queue Length [ft/ln]	44.75	31.14	185.79	206.88	196.88	229.86
95th-Percentile Queue Length [veh/ln]	3.22	2.24	11.90	12.99	12.48	14.17
95th-Percentile Queue Length [ft/ln]	80.55	56.06	297.56	324.82	311.93	354.18

Movement, Approach, & Intersection Results

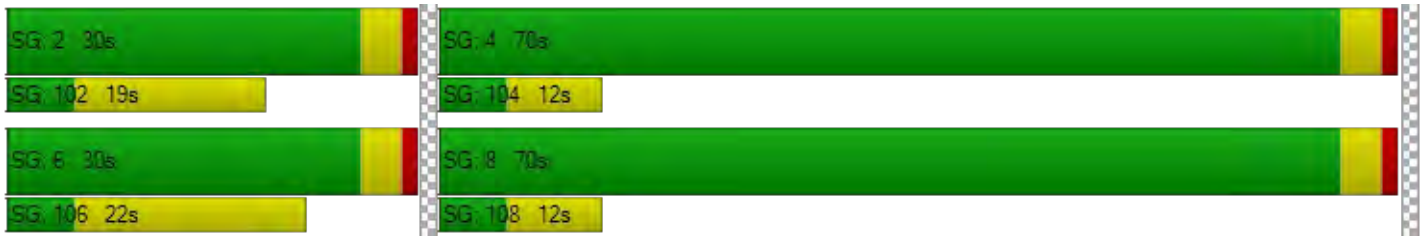
d_M, Delay for Movement [s/veh]	6.93	6.93	6.93	6.54	6.54	6.54	37.38	37.80	38.14	39.32	39.91	40.35
Movement LOS	A	A	A	A	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.93			6.54			37.78			39.87		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	31.81											
Intersection LOS	C											
Intersection V/C	0.364											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.976	1.921	2.529	2.643
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	520	520	1320	1320
d_b, Bicycle Delay [s]	27.38	27.38	5.78	5.78
l_b,int, Bicycle LOS Score for Intersection	1.928	1.827	2.110	2.138
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	65.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.866

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	192	1791	117	91	2516	219	492	197	220	399	191	292
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	37	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	1791	117	91	2516	227	529	197	220	399	191	292
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	448	29	23	629	57	132	49	55	100	48	73
Total Analysis Volume [veh/h]	192	1791	117	91	2516	227	529	197	220	399	191	292
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	16	52	0	11	47	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	48	48	7	43	43	24	24	24	25	25	25
g / C, Green / Cycle	0.10	0.40	0.40	0.06	0.36	0.36	0.20	0.20	0.20	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.07	0.05	0.39	0.40	0.18	0.18	0.18	0.11	0.05	0.18
s, saturation flow rate [veh/h]	1810	6901	1615	1810	5176	1799	1810	1846	1517	3514	3618	1615
c, Capacity [veh/h]	181	2773	649	106	1864	648	356	363	298	738	760	339
d1, Uniform Delay [s]	54.00	28.99	23.14	56.02	38.39	38.39	47.41	47.41	47.41	42.25	39.54	45.72
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.25	0.25	0.25	0.11	0.11	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	48.59	1.17	0.61	17.88	49.43	66.15	20.76	20.46	23.52	0.62	0.17	7.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.65	0.18	0.86	1.09	1.10	0.93	0.93	0.93	0.54	0.25	0.86
d, Delay for Lane Group [s/veh]	102.59	30.16	23.75	73.90	87.82	104.54	68.17	67.87	70.93	42.87	39.71	53.40
Lane Group LOS	F	C	C	E	F	F	E	E	E	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.89	10.55	2.26	3.26	26.46	30.60	11.73	11.93	10.06	5.34	2.38	9.08
50th-Percentile Queue Length [ft/ln]	197.36	263.63	56.56	81.39	661.52	765.04	293.13	298.27	251.44	133.53	59.56	227.05
95th-Percentile Queue Length [veh/ln]	12.79	15.87	4.07	5.86	36.97	42.37	17.34	17.60	15.26	9.13	4.29	14.02
95th-Percentile Queue Length [ft/ln]	319.72	396.78	101.81	146.50	924.22	1059.20	433.53	439.89	381.47	228.28	107.21	350.62

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	102.59	30.16	23.75	73.90	91.05	104.54	68.05	68.76	70.93	42.87	39.71	53.40
Movement LOS	F	C	C	E	F	F	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	36.43			91.58			68.87			45.67		
Approach LOS	D			F			E			D		
d_I, Intersection Delay [s/veh]	65.29											
Intersection LOS	E											
Intersection V/C	0.866											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.513	2.619	2.788
Crosswalk LOS	F	D	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	717	167	650
d_b, Bicycle Delay [s]	21.60	24.70	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.426	2.729	2.340	2.287
Bicycle LOS	B	B	B	B

Sequence

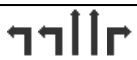
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	105.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	397	1463	315	193	2746	164	226	642	661	470	577	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	29	19	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	401	1463	315	193	2746	164	226	671	680	470	583	278
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	100	366	79	48	687	41	57	168	170	118	146	70
Total Analysis Volume [veh/h]	401	1463	315	193	2746	164	226	671	680	470	583	278
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	47	0	11	44	0	12	44	0	18	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	43	43	7	40	40	8	40	40	14	46	46
g / C, Green / Cycle	0.08	0.36	0.36	0.06	0.33	0.33	0.07	0.33	0.33	0.12	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.26	0.05	0.40	0.10	0.12	0.19	0.42	0.13	0.16	0.17
s, saturation flow rate [veh/h]	3514	5176	1686	3514	6901	1615	1810	3618	1615	3514	3618	1615
c, Capacity [veh/h]	293	1855	604	205	2300	538	121	1206	538	410	1387	619
d1, Uniform Delay [s]	55.00	33.34	33.36	56.30	40.00	29.68	56.00	32.74	40.00	53.00	27.20	27.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	170.99	2.48	7.38	18.10	91.78	1.46	399.84	0.40	132.74	72.62	0.20	0.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.37	0.72	0.72	0.94	1.19	0.30	1.87	0.56	1.26	1.15	0.42	0.45
d, Delay for Lane Group [s/veh]	225.99	35.82	40.74	74.39	131.78	31.14	455.84	33.14	172.74	125.62	27.40	28.07
Lane Group LOS	F	D	D	E	F	C	F	C	F	F	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.37	11.59	12.17	3.43	31.34	3.75	17.05	8.03	35.46	10.30	6.18	6.02
50th-Percentile Queue Length [ft/ln]	284.36	289.66	304.18	85.65	783.54	93.70	426.17	200.82	886.62	257.47	154.50	150.55
95th-Percentile Queue Length [veh/ln]	18.67	17.17	17.89	6.17	45.26	6.75	27.71	12.68	52.06	16.43	10.26	10.05
95th-Percentile Queue Length [ft/ln]	466.83	429.22	447.19	154.16	1131.44	168.66	692.72	317.03	1301.38	410.78	256.42	251.16

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	225.99	36.23	40.74	74.39	131.78	31.14	455.84	33.14	172.74	125.62	27.40	28.07
Movement LOS	F	D	D	E	F	C	F	C	F	F	C	C
d_A, Approach Delay [s/veh]	71.81			122.89			153.91			62.23		
Approach LOS	E			F			F			E		
d_I, Intersection Delay [s/veh]	105.41											
Intersection LOS	F											
Intersection V/C	1.067											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.543	2.989	2.959
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	667	667	767
d_b, Bicycle Delay [s]	24.70	26.67	26.67	22.82
l_b,int, Bicycle LOS Score for Intersection	2.458	2.840	2.861	2.658
Bicycle LOS	B	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	34.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.313

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	45	1	3	985	690	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	1	3	985	690	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	1	246	173	13
Total Analysis Volume [veh/h]	55	1	3	985	690	52
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.31	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	34.46	19.69	9.13	0.00	0.00	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.27	1.27	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	31.73	31.73	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	34.19		0.03		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	1.09					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_AM.vistro
Report File: K:\...\4 HY W DIET AM.pdf

Scenario 4 HY W DIET AM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.443	25.0	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.735	38.7	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	0.805	42.4	D
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.139	26.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	25.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.443

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	15	19	3	12	12	12	114	6	33	139	5
Total Analysis Volume [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	67	0	0	67	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	52	52	40	40	40	40
g / C, Green / Cycle	0.52	0.52	0.40	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.24	0.22	0.34	0.29
s, saturation flow rate [veh/h]	1622	1676	652	1682	647	1689
c, Capacity [veh/h]	883	907	310	677	318	680
d1, Uniform Delay [s]	12.91	12.43	25.28	22.92	34.93	25.17
k, delay calibration	0.50	0.50	0.11	0.11	0.12	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	0.27	1.30	0.70	3.00	1.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.12	0.51	0.55	0.69	0.72
d, Delay for Lane Group [s/veh]	13.39	12.70	26.58	23.62	37.92	26.65
Lane Group LOS	B	B	C	C	D	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.10	1.30	3.60	6.69	5.29	9.79
50th-Percentile Queue Length [ft/ln]	52.49	32.57	89.97	167.31	132.15	244.76
95th-Percentile Queue Length [veh/ln]	3.78	2.35	6.48	10.94	9.06	14.92
95th-Percentile Queue Length [ft/ln]	94.48	58.63	161.95	273.38	226.41	373.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.39	13.39	13.39	12.70	12.70	12.70	26.58	24.33	23.62	37.92	28.39	26.65
Movement LOS	B	B	B	B	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	13.39			12.70			24.50			30.12		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	25.03											
Intersection LOS	C											
Intersection V/C	0.443											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.094	1.906	2.471	2.568
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	580	1260	1260
d_b, Bicycle Delay [s]	25.21	25.21	6.85	6.85
l_b,int, Bicycle LOS Score for Intersection	1.840	1.741	1.997	2.145
Bicycle LOS	A	A	A	B

Sequence

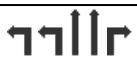
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	38.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.735

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	650	94	88	379	120	73	54	25	12	26	15
Total Analysis Volume [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	30	49	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	51	51	25	67	67	17	17	17	10	10	10
g / C, Green / Cycle	0.08	0.43	0.43	0.21	0.56	0.56	0.14	0.14	0.14	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.10	0.38	0.24	0.20	0.30	0.30	0.12	0.12	0.12	0.01	0.03	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	5094	1589	1781	1835	1551	3459	3560	1589
c, Capacity [veh/h]	148	2912	682	376	2835	885	254	262	221	291	300	134
d1, Uniform Delay [s]	55.00	31.71	25.66	46.52	16.80	16.92	49.98	49.95	50.02	51.01	51.82	52.26
k, delay calibration	0.11	0.50	0.50	0.30	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	125.73	4.67	3.22	22.69	0.73	2.40	6.60	6.29	7.72	0.26	0.68	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.25	0.89	0.55	0.93	0.53	0.54	0.82	0.82	0.83	0.16	0.34	0.44
d, Delay for Lane Group [s/veh]	180.73	36.38	28.88	69.20	17.53	19.32	56.58	56.24	57.74	51.27	52.50	54.53
Lane Group LOS	F	D	C	E	B	B	E	E	E	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	9.66	17.94	8.59	12.60	8.75	8.79	6.55	6.70	5.81	0.67	1.50	1.78
50th-Percentile Queue Length [ft/ln]	241.58	448.62	214.79	315.11	218.72	219.83	163.82	167.48	145.26	16.73	37.38	44.48
95th-Percentile Queue Length [veh/ln]	15.90	24.89	13.40	18.43	13.60	13.66	10.75	10.94	9.76	1.20	2.69	3.20
95th-Percentile Queue Length [ft/ln]	397.60	622.31	334.96	460.67	339.99	341.41	268.78	273.60	244.09	30.12	67.28	80.06

Movement, Approach, & Intersection Results

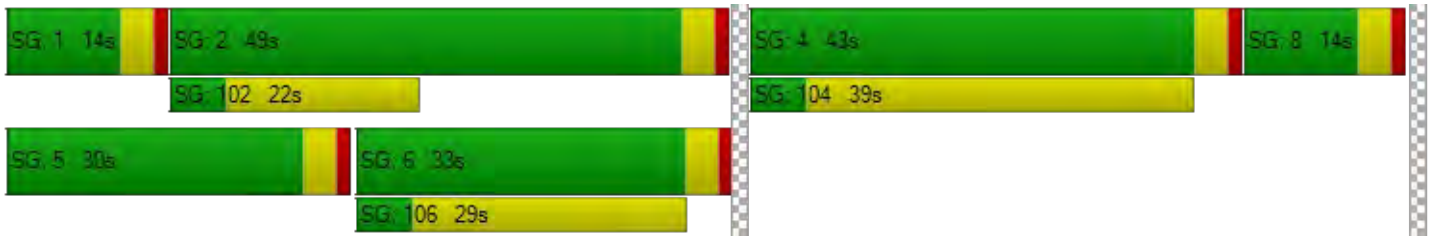
d_M, Delay for Movement [s/veh]	180.73	36.38	28.88	69.20	17.53	19.32	56.47	56.82	57.74	51.27	52.50	54.53
Movement LOS	F	D	C	E	B	B	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	43.98			25.62			56.81			52.80		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	38.69											
Intersection LOS	D											
Intersection V/C	0.735											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.498	2.584	2.769
Crosswalk LOS	F	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	750	167	650
d_b, Bicycle Delay [s]	34.50	23.44	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.864	2.528	2.060	1.732
Bicycle LOS	C	B	B	A

Sequence

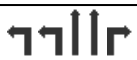
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	42.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	144	748	88	45	296	66	39	105	76	42	123	57
Total Analysis Volume [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	47	0	10	33	0	13	50	0	13	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	64	64	6	50	50	9	26	26	8	25	25
g / C, Green / Cycle	0.17	0.53	0.53	0.05	0.42	0.42	0.08	0.22	0.22	0.06	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.17	0.48	0.51	0.05	0.17	0.16	0.09	0.12	0.19	0.05	0.14	0.14
s, saturation flow rate [veh/h]	3459	5094	1750	3459	6792	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	576	2721	935	173	2835	664	134	775	346	224	739	330
d1, Uniform Delay [s]	49.99	25.03	26.73	57.00	24.65	24.38	55.50	41.60	45.43	55.16	43.74	44.02
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.25	5.24	21.22	42.94	0.45	1.76	92.17	0.58	7.32	5.00	1.05	2.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.00	0.90	0.96	1.04	0.42	0.39	1.17	0.54	0.88	0.75	0.67	0.69
d, Delay for Lane Group [s/veh]	67.24	30.27	47.95	99.94	25.10	26.14	147.67	42.18	52.75	60.16	44.79	46.65
Lane Group LOS	E	C	D	F	C	C	F	D	D	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.98	21.10	28.77	3.65	6.00	5.51	7.46	5.56	9.46	2.65	6.84	6.54
50th-Percentile Queue Length [ft/ln]	249.58	527.48	719.24	91.27	149.99	137.67	186.39	138.92	236.51	66.33	171.10	163.50
95th-Percentile Queue Length [veh/ln]	15.16	28.63	37.57	6.57	10.02	9.36	12.54	9.42	14.50	4.78	11.13	10.73
95th-Percentile Queue Length [ft/ln]	379.12	715.81	939.15	164.29	250.42	233.88	313.62	235.57	362.62	119.40	278.36	268.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.24	33.50	47.95	99.94	25.10	26.14	147.67	42.18	52.75	60.16	44.79	46.65
Movement LOS	E	C	D	F	C	C	F	D	D	E	D	D
d_A, Approach Delay [s/veh]	39.76			33.56			64.57			48.17		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	42.39											
Intersection LOS	D											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.537	2.917	2.865
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	483	767	767
d_b, Bicycle Delay [s]	24.70	34.50	22.82	22.82
l_b,int, Bicycle LOS Score for Intersection	3.175	2.230	2.285	2.294
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	27	6	3	447	884	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	6	3	447	884	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	112	221	12
Total Analysis Volume [veh/h]	27	6	3	447	884	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	26.40	14.49	9.95	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.95	12.95	0.31	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	24.23		0.07		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.59					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_PM.vistro
Report File: K:\...\4 HY W DIET PM.pdf

Scenario 4 HY W DIET PM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.412	27.0	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Right	0.898	78.7	E
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	1.096	116.9	F
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.277	34.7	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	27.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.412

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	13	28	9	13	20	11	158	8	14	160	5
Total Analysis Volume [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	70	0	0	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	58	58	34	34	34	34
g / C, Green / Cycle	0.58	0.58	0.34	0.34	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.13	0.10	0.27	0.26	0.29	0.27
s, saturation flow rate [veh/h]	1615	1620	958	1708	856	1716
c, Capacity [veh/h]	970	973	374	592	341	594
d1, Uniform Delay [s]	10.29	10.04	26.93	28.96	29.73	29.47
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	0.38	2.28	2.01	2.88	2.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.17	0.69	0.76	0.72	0.79
d, Delay for Lane Group [s/veh]	10.78	10.43	29.21	30.97	32.60	31.93
Lane Group LOS	B	B	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.18	1.75	4.82	9.64	5.96	10.38
50th-Percentile Queue Length [ft/ln]	54.48	43.67	120.38	240.93	148.95	259.49
95th-Percentile Queue Length [veh/ln]	3.92	3.14	8.41	14.73	9.96	15.66
95th-Percentile Queue Length [ft/ln]	98.06	78.60	210.35	368.21	249.02	391.58

Movement, Approach, & Intersection Results

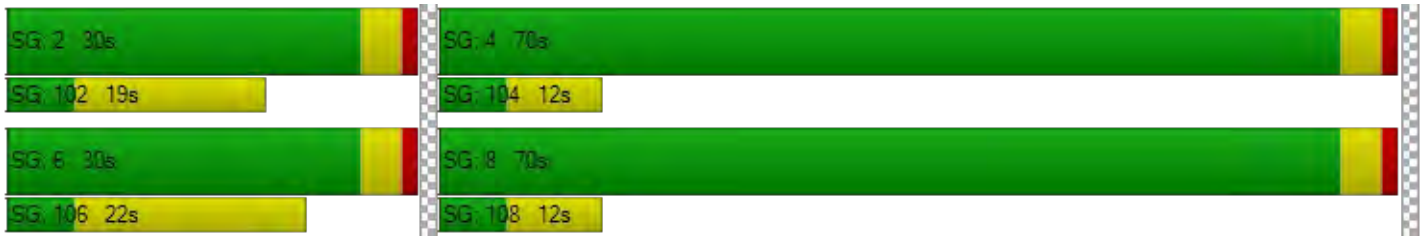
d_M, Delay for Movement [s/veh]	10.78	10.78	10.78	10.43	10.43	10.43	29.21	30.37	30.97	32.60	32.13	31.93
Movement LOS	B	B	B	B	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	10.78			10.43			30.33			32.16		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	26.99											
Intersection LOS	C											
Intersection V/C	0.412											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.966	1.922	2.554	2.648
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	520	520	1320	1320
d_b, Bicycle Delay [s]	27.38	27.38	5.78	5.78
l_b,int, Bicycle LOS Score for Intersection	1.895	1.835	2.142	2.151
Bicycle LOS	A	A	B	B

Sequence

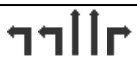
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Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	78.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.898

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	468	31	24	659	55	131	50	57	104	50	76
Total Analysis Volume [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	17	52	0	11	46	0	0	14	0	0	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	17	0	0	10	0	0	34	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	48	48	7	42	42	23	23	23	26	26	26
g / C, Green / Cycle	0.11	0.40	0.40	0.06	0.35	0.35	0.19	0.19	0.19	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.11	0.27	0.08	0.05	0.41	0.41	0.18	0.18	0.18	0.12	0.06	0.19
s, saturation flow rate [veh/h]	1810	6901	1615	1810	5176	1806	1810	1848	1511	3514	3618	1615
c, Capacity [veh/h]	196	2766	647	106	1816	634	342	350	286	767	790	352
d1, Uniform Delay [s]	53.50	29.54	23.34	56.15	38.95	38.95	48.35	48.35	48.35	41.58	38.82	45.20
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.26	0.26	0.26	0.11	0.11	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	39.44	1.35	0.66	22.20	79.17	95.35	28.97	28.61	32.18	0.60	0.17	8.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.04	0.68	0.19	0.90	1.16	1.18	0.97	0.97	0.97	0.54	0.25	0.87
d, Delay for Lane Group [s/veh]	92.94	30.89	24.01	78.36	118.12	134.29	77.32	76.96	80.53	42.17	38.99	53.79
Lane Group LOS	F	C	C	E	F	F	E	E	F	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.05	11.22	2.44	3.51	30.81	35.11	12.61	12.85	10.79	5.52	2.48	9.55
50th-Percentile Queue Length [ft/ln]	201.20	280.62	60.91	87.73	770.36	877.82	315.27	321.14	269.73	137.90	62.11	238.85
95th-Percentile Queue Length [veh/ln]	12.88	16.72	4.39	6.32	43.98	49.83	18.43	18.72	16.18	9.37	4.47	14.62
95th-Percentile Queue Length [ft/ln]	321.99	417.99	109.64	157.91	1099.54	1245.76	460.87	468.08	404.40	234.19	111.80	365.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	92.94	30.89	24.01	78.36	121.35	134.29	77.18	77.87	80.53	42.17	38.99	53.79
Movement LOS	F	C	C	E	F	F	E	E	F	D	D	D
d_A, Approach Delay [s/veh]	36.23			120.93			78.13			45.32		
Approach LOS	D			F			E			D		
d_I, Intersection Delay [s/veh]	78.69											
Intersection LOS	E											
Intersection V/C	0.898											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.532	2.622	2.796
Crosswalk LOS	F	D	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	700	167	650
d_b, Bicycle Delay [s]	21.60	25.35	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.466	2.776	2.345	2.319
Bicycle LOS	B	C	B	B

Sequence

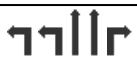
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Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	116.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.096

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	102	383	82	50	718	43	59	167	171	123	150	73
Total Analysis Volume [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	47	0	11	44	0	12	44	0	18	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	41	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	43	43	7	40	40	8	40	40	14	46	46
g / C, Green / Cycle	0.08	0.36	0.36	0.06	0.33	0.33	0.07	0.33	0.33	0.12	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.12	0.27	0.27	0.06	0.42	0.11	0.13	0.18	0.42	0.14	0.17	0.18
s, saturation flow rate [veh/h]	3514	5176	1686	3514	6901	1615	1810	3618	1615	3514	3618	1615
c, Capacity [veh/h]	293	1855	604	205	2300	538	121	1206	538	410	1387	619
d1, Uniform Delay [s]	55.00	33.89	33.93	56.43	40.00	29.87	56.00	32.69	40.00	53.00	27.36	27.83
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	183.06	2.93	8.67	24.88	115.27	1.58	433.14	0.40	136.62	95.40	0.21	0.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.40	0.76	0.76	0.98	1.25	0.32	1.95	0.55	1.27	1.20	0.43	0.47
d, Delay for Lane Group [s/veh]	238.06	36.82	42.60	81.32	155.27	31.44	489.14	33.09	176.62	148.40	27.58	28.39
Lane Group LOS	F	D	D	F	F	C	F	C	F	F	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.87	12.37	13.11	3.75	35.09	3.98	18.16	7.97	36.04	11.60	6.41	6.37
50th-Percentile Queue Length [ft/ln]	296.63	309.27	327.64	93.67	877.35	99.56	454.07	199.35	901.11	289.90	160.24	159.20
95th-Percentile Queue Length [veh/ln]	19.45	18.14	19.04	6.74	51.26	7.17	29.42	12.60	53.01	18.45	10.56	10.51
95th-Percentile Queue Length [ft/ln]	486.20	453.48	476.07	168.61	1281.38	179.21	735.47	315.12	1325.25	461.30	264.04	262.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	238.06	37.31	42.60	81.32	155.27	31.44	489.14	33.09	176.62	148.40	27.58	28.39
Movement LOS	F	D	D	F	F	C	F	C	F	F	C	C
d_A, Approach Delay [s/veh]	74.25			144.08			162.57			70.70		
Approach LOS	E			F			F			E		
d_I, Intersection Delay [s/veh]	116.89											
Intersection LOS	F											
Intersection V/C	1.096											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.563	2.995	2.969
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	667	667	767
d_b, Bicycle Delay [s]	24.70	26.67	26.67	22.82
l_b,int, Bicycle LOS Score for Intersection	2.496	2.898	2.869	2.701
Bicycle LOS	B	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	34.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.277

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	46	1	3	1012	712	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	1	3	1012	712	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	1	253	178	15
Total Analysis Volume [veh/h]	46	1	3	1012	712	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	34.73	18.86	9.23	0.00	0.00	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.08	1.08	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	27.05	27.05	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	34.39		0.03		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_AM.vistro
Report File: K:\...\5 HY W DIET-MITIG AM.pdf

Scenario 5 HY W DIET-MITIG AM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.442	24.9	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Left	0.713	36.2	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	0.694	30.0	C
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.139	26.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	24.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.442

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	15	19	3	12	12	12	114	6	33	139	5
Total Analysis Volume [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	26	0	0	26	0	0	74	0	0	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	52	52	40	40	40	40
g / C, Green / Cycle	0.52	0.52	0.40	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.24	0.22	0.34	0.29
s, saturation flow rate [veh/h]	1622	1676	654	1682	648	1689
c, Capacity [veh/h]	882	907	310	678	319	680
d1, Uniform Delay [s]	12.93	12.45	25.24	22.89	34.89	25.14
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	0.27	1.29	0.70	2.62	1.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.12	0.51	0.55	0.69	0.72
d, Delay for Lane Group [s/veh]	13.41	12.72	26.53	23.59	37.50	26.61
Lane Group LOS	B	B	C	C	D	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.10	1.30	3.60	6.68	5.25	9.78
50th-Percentile Queue Length [ft/ln]	52.54	32.61	90.02	167.07	131.31	244.45
95th-Percentile Queue Length [veh/ln]	3.78	2.35	6.48	10.92	9.01	14.91
95th-Percentile Queue Length [ft/ln]	94.57	58.69	162.04	273.05	225.28	372.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.41	13.41	13.41	12.72	12.72	12.72	26.53	24.30	23.59	37.50	28.29	26.61
Movement LOS	B	B	B	B	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	13.41			12.72			24.47			29.96		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	24.95											
Intersection LOS	C											
Intersection V/C	0.442											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.094	1.906	2.471	2.568
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	440	440	1400	1400
d_b, Bicycle Delay [s]	30.42	30.42	4.50	4.50
l_b,int, Bicycle LOS Score for Intersection	1.840	1.741	1.997	2.145
Bicycle LOS	A	A	A	B

Sequence

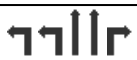
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Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	650	94	88	379	120	73	54	25	12	26	15
Total Analysis Volume [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Split	Split	Overlap	Split	Split	Overlap
Signal Group	1	6	6	5	2	2	0	8	8	0	4	4
Auxiliary Signal Groups			6			2			8			4
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	10	5	10	10	0	10	10	0	10	10
Maximum Green [s]	30	30	30	30	30	30	0	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0
Split [s]	26	39	39	23	36	36	0	15	15	0	43	43
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	17	17	0	10	10	0	34	34
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No		No	No		No	No
Maximum Recall	No	No	No	No	No	No		No	No		No	No
Pedestrian Recall	No	No	No	No	No	No		No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	60	60	19	65	65	15	15	15	15	10	10	10
g / C, Green / Cycle	0.12	0.50	0.50	0.16	0.54	0.54	0.12	0.12	0.12	0.12	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.10	0.38	0.24	0.20	0.22	0.30	0.10	0.10	0.10	0.06	0.01	0.03	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	6792	1589	1781	1807	1702	1589	3459	3560	1589
c, Capacity [veh/h]	215	3414	799	282	3667	858	216	220	207	193	291	300	134
d1, Uniform Delay [s]	51.77	24.05	19.46	50.50	16.35	18.21	51.22	51.21	51.18	49.44	51.01	51.82	52.26
k, delay calibration	0.11	0.50	0.50	0.30	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.82	1.66	2.00	126.81	0.35	2.64	6.32	6.18	6.41	2.18	0.26	0.68	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.76	0.47	1.24	0.41	0.56	0.79	0.79	0.78	0.52	0.16	0.34	0.44
d, Delay for Lane Group [s/veh]	61.58	25.70	21.46	177.31	16.69	20.85	57.53	57.39	57.59	51.63	51.27	52.50	54.53
Lane Group LOS	E	C	C	F	B	C	E	E	E	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.07	14.79	7.21	18.37	6.16	9.21	5.37	5.43	5.10	2.96	0.67	1.50	1.78
50th-Percentile Queue Length [ft/ln]	151.86	369.84	180.13	459.14	153.89	230.17	134.2	135.6	127.4	74.10	16.73	37.38	44.48
95th-Percentile Queue Length [veh/ln]	10.12	21.10	11.61	28.01	10.22	14.18	9.17	9.25	8.80	5.34	1.20	2.69	3.20
95th-Percentile Queue Length [ft/ln]	252.91	527.54	290.19	700.21	255.62	354.57	229.2	231.1	220.0	133.3	30.12	67.28	80.06

Movement, Approach, & Intersection Results

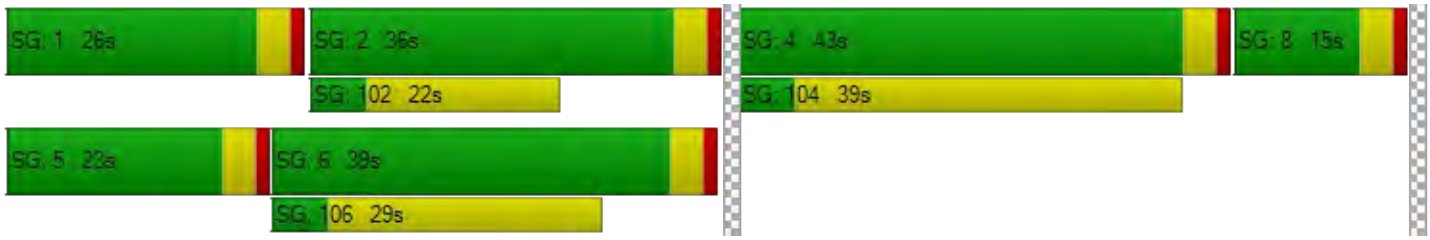
d_M, Delay for Movement [s/veh]	61.58	25.70	21.46	177.31	16.69	20.85	57.47	57.54	51.63	51.27	52.50	54.53
Movement LOS	E	C	C	F	B	C	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	27.31			41.55			56.52			52.80		
Approach LOS	C			D			E			D		
d_I, Intersection Delay [s/veh]	36.24											
Intersection LOS	D											
Intersection V/C	0.713											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.563	2.692	2.769
Crosswalk LOS	F	D	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	533	183	650
d_b, Bicycle Delay [s]	30.10	32.27	49.50	27.34
l_b,int, Bicycle LOS Score for Intersection	2.864	2.528	2.060	1.732
Bicycle LOS	C	B	B	A

Sequence

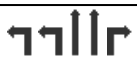
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	30.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	144	748	88	45	296	66	39	105	76	42	123	57
Total Analysis Volume [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	27	49	49	11	33	33	10	48	48	12	50	50
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	24	24	0	10	10	0	41	41
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	22	71	83	7	56	66	6	18	44	8	20	31
g / C, Green / Cycle	0.18	0.59	0.69	0.06	0.47	0.55	0.05	0.15	0.37	0.07	0.17	0.26
(v / s)_i Volume / Saturation Flow Rate	0.17	0.44	0.22	0.05	0.17	0.16	0.05	0.12	0.19	0.05	0.14	0.14
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	3560	1589	3459	3560	1589
c, Capacity [veh/h]	637	4018	1099	202	3164	873	173	534	584	231	593	411
d1, Uniform Delay [s]	47.92	17.88	7.32	56.13	20.72	14.60	56.71	49.12	29.71	54.94	48.36	38.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.28	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.17	1.29	0.76	12.65	0.34	0.88	15.37	2.55	1.87	4.37	3.09	1.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.74	0.32	0.89	0.37	0.30	0.90	0.78	0.52	0.73	0.83	0.56
d, Delay for Lane Group [s/veh]	53.09	19.17	8.08	68.78	21.06	15.48	72.07	51.67	31.58	59.31	51.45	39.75
Lane Group LOS	D	B	A	E	C	B	E	D	C	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.86	14.66	3.54	3.06	5.40	4.02	2.72	6.22	7.18	2.63	7.38	5.98
50th-Percentile Queue Length [ft/ln]	221.46	366.56	88.53	76.52	135.09	100.38	68.00	155.53	179.55	65.80	184.60	149.61
95th-Percentile Queue Length [veh/ln]	13.74	20.94	6.37	5.51	9.22	7.23	4.90	10.31	11.58	4.74	11.84	10.00
95th-Percentile Queue Length [ft/ln]	343.49	523.55	159.35	137.74	230.39	180.69	122.41	257.80	289.43	118.45	296.01	249.90

Movement, Approach, & Intersection Results

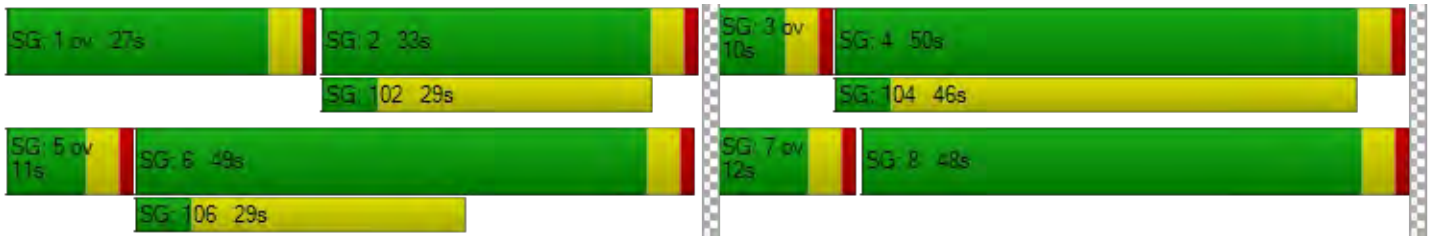
d_M, Delay for Movement [s/veh]	53.09	19.17	8.08	68.78	21.06	15.48	72.07	51.67	31.58	59.31	51.45	39.75
Movement LOS	D	B	A	E	C	B	E	D	C	E	D	D
d_A, Approach Delay [s/veh]	23.17			25.45			48.32			49.92		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	29.96											
Intersection LOS	C											
Intersection V/C	0.694											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.537	3.010	2.865
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	750	483	733	767
d_b, Bicycle Delay [s]	23.44	34.50	24.07	22.82
l_b,int, Bicycle LOS Score for Intersection	3.175	2.230	2.285	2.294
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	27	6	3	447	884	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	6	3	447	884	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	112	221	12
Total Analysis Volume [veh/h]	27	6	3	447	884	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	26.40	14.49	9.95	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.95	12.95	0.31	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	24.23		0.07		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.59					
Intersection LOS	D					

El Segundo Standard Works

Vistro File: K:\...\Std Works_TBB_PM.vistro
Report File: K:\...\5 HY W DIET-MITIG PM.pdf

Scenario 5 HY W DIET-MITIG PM
9/30/2021

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Right	0.358	32.1	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.889	45.4	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Right	0.721	56.8	E
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.277	34.7	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	32.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	13	28	9	13	20	11	158	8	14	160	5
Total Analysis Volume [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	27	0	0	27	0	0	73	0	0	73	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	66	66	26	26	26	26
g / C, Green / Cycle	0.66	0.66	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.13	0.10	0.22	0.22	0.23	0.23
s, saturation flow rate [veh/h]	1606	1600	1545	1704	1434	1713
c, Capacity [veh/h]	1099	1096	446	447	418	449
d1, Uniform Delay [s]	6.64	6.48	34.66	34.67	35.41	35.11
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	0.30	2.70	3.80	3.43	4.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.15	0.76	0.82	0.79	0.86
d, Delay for Lane Group [s/veh]	7.01	6.77	37.36	38.47	38.84	39.96
Lane Group LOS	A	A	D	D	D	D
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.64	1.31	8.02	8.70	8.05	9.37
50th-Percentile Queue Length [ft/ln]	40.90	32.81	200.57	217.62	201.15	234.18
95th-Percentile Queue Length [veh/ln]	2.95	2.36	12.67	13.54	12.70	14.39
95th-Percentile Queue Length [ft/ln]	73.63	59.06	316.70	338.58	317.45	359.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.01	7.01	7.01	6.77	6.77	6.77	37.36	37.95	38.47	38.84	39.48	39.96
Movement LOS	A	A	A	A	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	7.01			6.77			37.93			39.44		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	32.13											
Intersection LOS	C											
Intersection V/C	0.358											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	1.966	1.922	2.554	2.648
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	460	460	1380	1380
d_b, Bicycle Delay [s]	29.65	29.65	4.81	4.81
l_b,int, Bicycle LOS Score for Intersection	1.895	1.835	2.142	2.151
Bicycle LOS	A	A	B	B

Sequence

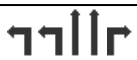
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	45.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.889

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	468	31	24	659	55	131	50	57	104	50	76
Total Analysis Volume [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Split	Split	Overlap	Split	Split	Overlap
Signal Group	1	6	6	5	2	2	0	8	8	0	4	4
Auxiliary Signal Groups			4,6			2,8			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	10	5	10	10	0	10	10	0	10	10
Maximum Green [s]	30	30	30	30	30	30	0	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0
Split [s]	17	45	45	13	41	41	0	19	19	0	43	43
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	17	17	0	10	10	0	34	34
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No		No	No		No	No
Maximum Recall	No	No	No	No	No	No		No	No		No	No
Pedestrian Recall	No	No	No	No	No	No		No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	13	49	72	9	45	93	27	27	27	44	19	19	63
g / C, Green / Cycle	0.11	0.41	0.60	0.08	0.38	0.78	0.23	0.23	0.23	0.37	0.15	0.15	0.52
(v / s)_i Volume / Saturation Flow Rate	0.14	0.27	0.08	0.05	0.38	0.14	0.18	0.19	0.12	0.14	0.12	0.06	0.19
s, saturation flow rate [veh/h]	1440	6901	1615	1810	6901	1615	1440	1347	1729	1615	3514	3618	1615
c, Capacity [veh/h]	192	2823	964	136	2593	1258	368	368	395	598	542	558	847
d1, Uniform Delay [s]	56.22	28.74	10.58	54.18	37.46	3.39	45.36	45.36	40.42	27.70	48.67	45.44	16.74
k, delay calibration	0.13	0.50	0.11	0.11	0.50	0.50	0.17	0.20	0.11	0.13	0.11	0.11	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	49.39	1.24	0.06	6.38	21.97	0.30	4.07	4.79	1.02	0.48	2.29	0.39	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.66	0.13	0.70	1.02	0.17	0.71	0.71	0.51	0.38	0.77	0.36	0.36
d, Delay for Lane Group [s/veh]	105.61	29.98	10.64	60.57	59.43	3.69	49.43	50.15	41.44	28.18	50.96	45.84	17.10
Lane Group LOS	F	C	B	E	F	A	D	D	D	C	D	D	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.48	11.02	1.45	3.04	22.55	1.24	7.89	7.97	5.31	4.87	6.13	2.72	4.97
50th-Percentile Queue Length [ft/ln]	212.00	275.42	36.13	76.07	563.81	31.00	197.3	199.1	132.7	121.6	153.18	68.09	124.19
95th-Percentile Queue Length [veh/ln]	13.55	16.46	2.60	5.48	30.70	2.23	12.50	12.59	9.09	8.49	10.19	4.90	8.62
95th-Percentile Queue Length [ft/ln]	338.84	411.50	65.03	136.93	767.58	55.80	312.4	314.8	227.1	212.1	254.67	122.56	215.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	105.61	29.98	10.64	60.57	59.43	3.69	49.79	41.44	28.18	50.96	45.84	17.10
Movement LOS	F	C	B	E	F	A	D	D	C	D	D	B
d_A, Approach Delay [s/veh]	35.87			55.33			42.87			38.63		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	45.36											
Intersection LOS	D											
Intersection V/C	0.889											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	4.339	3.013	2.796
Crosswalk LOS	F	E	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	617	250	650
d_b, Bicycle Delay [s]	26.00	28.70	45.94	27.34
l_b,int, Bicycle LOS Score for Intersection	2.466	2.776	2.345	2.319
Bicycle LOS	B	C	B	B

Sequence

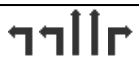
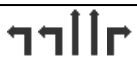
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	56.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	102	383	82	50	718	43	59	167	171	123	150	73
Total Analysis Volume [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	17	44	44	12	39	39	14	45	45	19	50	50
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	24	24	0	10	10	0	41	41
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	13	54	73	8	49	63	10	27	44	15	32	44
g / C, Green / Cycle	0.11	0.45	0.61	0.07	0.41	0.52	0.08	0.23	0.37	0.13	0.27	0.37
(v / s)_i Volume / Saturation Flow Rate	0.12	0.22	0.20	0.06	0.42	0.11	0.07	0.18	0.42	0.14	0.17	0.18
s, saturation flow rate [veh/h]	3514	6901	1615	3514	6901	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	381	3099	981	234	2811	845	290	817	594	439	971	595
d1, Uniform Delay [s]	53.50	23.41	11.61	55.44	35.56	15.27	54.12	44.08	37.94	52.50	38.52	29.20
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	44.55	0.57	0.92	8.81	22.46	0.55	5.37	2.06	87.28	61.31	0.65	0.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.07	0.49	0.34	0.86	1.02	0.20	0.81	0.82	1.15	1.12	0.62	0.49
d, Delay for Lane Group [s/veh]	98.05	23.97	12.54	64.25	58.02	15.82	59.49	46.14	125.22	113.81	39.17	29.82
Lane Group LOS	F	C	B	E	F	B	E	D	F	F	D	C
Critical Lane Group	No	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.08	7.73	4.46	3.30	24.37	2.64	3.70	9.61	31.49	10.34	7.84	6.56
50th-Percentile Queue Length [ft/ln]	202.11	193.29	111.44	82.39	609.18	66.11	92.61	240.35	787.36	258.43	196.11	164.01
95th-Percentile Queue Length [veh/ln]	13.11	12.29	7.92	5.93	32.96	4.76	6.67	14.70	44.75	16.36	12.44	10.76
95th-Percentile Queue Length [ft/ln]	327.75	307.29	198.00	148.31	824.06	118.99	166.69	367.48	1118.67	409.02	310.95	269.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	98.05	23.97	12.54	64.25	58.02	15.82	59.49	46.14	125.22	113.81	39.17	29.82
Movement LOS	F	C	B	E	F	B	E	D	F	F	D	C
d_A, Approach Delay [s/veh]	35.66			56.15			82.25			63.74		
Approach LOS	D			E			F			E		
d_I, Intersection Delay [s/veh]	56.79											
Intersection LOS	E											
Intersection V/C	0.721											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.563	3.078	2.969
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	583	683	767
d_b, Bicycle Delay [s]	26.67	30.10	26.00	22.82
l_b,int, Bicycle LOS Score for Intersection	2.496	2.898	2.869	2.701
Bicycle LOS	B	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	34.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.277

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	46	1	3	1012	712	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	1	3	1012	712	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	1	253	178	15
Total Analysis Volume [veh/h]	46	1	3	1012	712	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	34.73	18.86	9.23	0.00	0.00	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.08	1.08	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	27.05	27.05	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	34.39		0.03		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	D					

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.480	23.7	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	SB Left	0.736	36.7	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	EB Left	0.727	34.9	C
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.150	26.8	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	23.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	34	60	76	12	49	49	48	457	25	133	556	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	7	0	0	0	0	0	10	39	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	60	83	12	49	49	48	457	35	172	556	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	15	21	3	12	12	12	114	9	43	139	5
Total Analysis Volume [veh/h]	36	60	83	12	49	49	48	457	35	172	556	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	26	0	0	26	0	0	74	0	0	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	43	43	43	43
g / C, Green / Cycle	0.49	0.49	0.43	0.43	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.11	0.07	0.24	0.22	0.37	0.31
s, saturation flow rate [veh/h]	1619	1676	711	1674	619	1690
c, Capacity [veh/h]	831	855	354	726	331	733
d1, Uniform Delay [s]	14.71	14.08	22.36	20.61	34.32	23.19
k, delay calibration	0.50	0.50	0.11	0.11	0.12	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	0.31	1.00	0.56	2.81	1.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	0.13	0.48	0.51	0.69	0.71
d, Delay for Lane Group [s/veh]	15.30	14.39	23.36	21.16	37.13	24.48
Lane Group LOS	B	B	C	C	D	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.41	1.41	2.49	6.23	5.45	9.92
50th-Percentile Queue Length [ft/ln]	60.28	35.28	62.28	155.64	136.22	248.04
95th-Percentile Queue Length [veh/ln]	4.34	2.54	4.48	10.32	9.28	15.09
95th-Percentile Queue Length [ft/ln]	108.50	63.51	112.10	257.94	231.92	377.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.30	15.30	15.30	14.39	14.39	14.39	23.36	21.75	21.16	37.13	25.76	24.48
Movement LOS	B	B	B	B	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	15.30			14.39			21.85			28.34		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	23.67											
Intersection LOS	C											
Intersection V/C	0.480											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.178	1.906	2.477	2.577
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	440	440	1400	1400
d_b, Bicycle Delay [s]	30.42	30.42	4.50	4.50
l_b,int, Bicycle LOS Score for Intersection	1.855	1.741	2.005	2.178
Bicycle LOS	A	A	B	B

Sequence

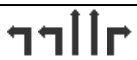
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	36.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.736

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	186	2599	377	351	1516	481	292	214	101	47	103	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	39	7	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	186	2599	377	351	1516	520	299	214	101	47	103	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	650	94	88	379	130	75	54	25	12	26	15
Total Analysis Volume [veh/h]	186	2599	377	351	1516	520	299	214	101	47	103	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Split	Split	Overlap	Split	Split	Overlap
Signal Group	1	6	6	5	2	2	0	8	8	0	4	4
Auxiliary Signal Groups			6			2			8			4
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	10	5	10	10	0	10	10	0	10	10
Maximum Green [s]	30	30	30	30	30	30	0	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0
Split [s]	18	33	33	30	45	45	0	14	14	0	43	43
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	17	17	0	10	10	0	34	34
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No		No	No		No	No
Maximum Recall	No	No	No	No	No	No		No	No		No	No
Pedestrian Recall	No	No	No	No	No	No		No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	51	51	25	62	62	18	18	18	10	10	10
g / C, Green / Cycle	0.12	0.42	0.42	0.21	0.52	0.52	0.15	0.15	0.15	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.10	0.38	0.24	0.20	0.30	0.33	0.12	0.12	0.12	0.01	0.03	0.04
s, saturation flow rate [veh/h]	1781	6792	1589	1781	5094	1589	1781	1833	1552	3459	3560	1589
c, Capacity [veh/h]	208	2878	674	376	2639	824	263	271	229	291	300	134
d1, Uniform Delay [s]	52.28	32.27	26.12	46.52	19.83	20.70	49.47	49.44	49.50	51.01	51.82	52.26
k, delay calibration	0.11	0.50	0.50	0.30	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.61	5.20	3.34	22.69	0.92	3.66	5.72	5.47	6.67	0.26	0.68	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.90	0.56	0.93	0.57	0.63	0.80	0.80	0.81	0.16	0.34	0.44
d, Delay for Lane Group [s/veh]	64.89	37.47	29.46	69.20	20.75	24.37	55.19	54.91	56.18	51.27	52.50	54.53
Lane Group LOS	E	D	C	E	C	C	E	D	E	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.24	18.22	8.69	12.60	9.70	11.02	6.54	6.69	5.80	0.67	1.50	1.78
50th-Percentile Queue Length [ft/ln]	156.11	455.38	217.25	315.11	242.53	275.46	163.61	167.25	144.98	16.73	37.38	44.48
95th-Percentile Queue Length [veh/ln]	10.34	25.21	13.52	18.43	14.81	16.46	10.74	10.93	9.75	1.20	2.69	3.20
95th-Percentile Queue Length [ft/ln]	258.56	630.36	338.12	460.67	370.24	411.56	268.50	273.30	243.71	30.12	67.28	80.06

Movement, Approach, & Intersection Results

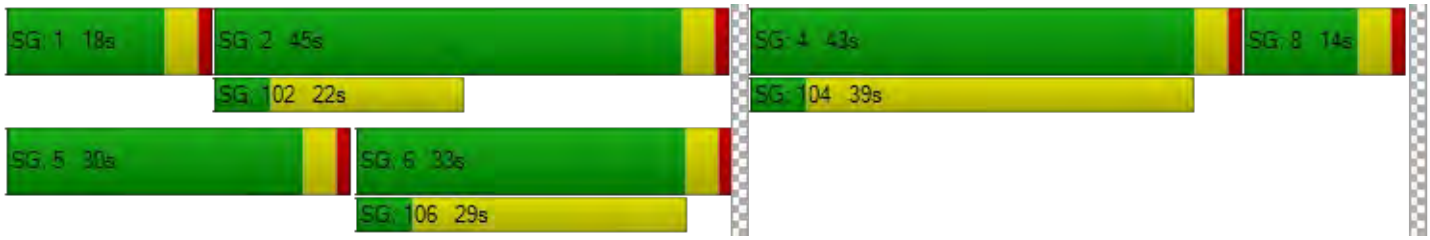
d_M, Delay for Movement [s/veh]	64.89	37.47	29.46	69.20	20.75	24.37	55.10	55.41	56.18	51.27	52.50	54.53
Movement LOS	E	D	C	E	C	C	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	38.13			28.66			55.39			52.80		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	36.73											
Intersection LOS	D											
Intersection V/C	0.736											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.503	2.593	2.769
Crosswalk LOS	F	D	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	683	167	650
d_b, Bicycle Delay [s]	34.50	26.00	50.42	27.34
l_b,int, Bicycle LOS Score for Intersection	2.864	2.544	2.066	1.732
Bicycle LOS	C	B	B	A

Sequence

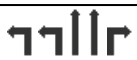
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	34.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.727

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	576	2991	350	180	1182	262	156	418	305	168	493	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	0	0	0	0	0	0	5	4	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	595	2991	350	180	1182	262	156	423	309	168	522	229
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	748	88	45	296	66	39	106	77	42	131	57
Total Analysis Volume [veh/h]	595	2991	350	180	1182	262	156	423	309	168	522	229
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	24	46	46	11	33	33	13	51	51	12	50	50
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	24	24	0	10	10	0	41	41
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	20	67	79	7	54	67	9	22	46	8	21	32
g / C, Green / Cycle	0.17	0.56	0.66	0.06	0.45	0.56	0.08	0.18	0.38	0.07	0.17	0.27
(v / s)_i Volume / Saturation Flow Rate	0.17	0.44	0.22	0.05	0.17	0.16	0.09	0.12	0.19	0.05	0.15	0.14
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	576	3792	1046	202	3056	887	134	653	609	231	623	424
d1, Uniform Delay [s]	50.00	20.92	8.98	56.13	21.98	14.02	55.50	45.41	28.32	54.94	47.85	37.70
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.29	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	26.38	1.74	0.86	12.65	0.37	0.85	92.17	1.09	1.73	4.37	3.09	1.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.03	0.79	0.33	0.89	0.39	0.30	1.17	0.65	0.51	0.73	0.84	0.54
d, Delay for Lane Group [s/veh]	76.38	22.66	9.84	68.78	22.35	14.86	147.67	46.50	30.06	59.31	50.94	38.77
Lane Group LOS	F	C	A	E	C	B	F	D	C	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	10.72	16.25	4.06	3.06	5.60	3.92	7.46	5.95	7.08	2.63	7.80	5.90
50th-Percentile Queue Length [ft/ln]	268.04	406.23	101.47	76.52	139.97	97.91	186.39	148.63	176.99	65.80	195.05	147.50
95th-Percentile Queue Length [veh/ln]	16.34	22.86	7.31	5.51	9.48	7.05	12.54	9.94	11.44	4.74	12.38	9.88
95th-Percentile Queue Length [ft/ln]	408.54	571.51	182.64	137.74	236.98	176.23	313.62	248.60	286.08	118.45	309.58	247.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.38	22.66	9.84	68.78	22.35	14.86	147.67	46.50	30.06	59.31	50.94	38.77
Movement LOS	F	C	A	E	C	B	F	D	C	E	D	D
d_A, Approach Delay [s/veh]	29.64			26.29			58.55			49.44		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	34.85											
Intersection LOS	C											
Intersection V/C	0.727											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.537	3.017	2.870
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	700	483	783	767
d_b, Bicycle Delay [s]	25.35	34.50	22.20	22.82
l_b,int, Bicycle LOS Score for Intersection	3.183	2.230	2.292	2.318
Bicycle LOS	C	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.150

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	27	6	3	447	884	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	6	3	447	884	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	112	221	15
Total Analysis Volume [veh/h]	29	6	3	447	884	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	26.84	14.85	10.00	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.56	0.56	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.10	14.10	0.31	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	24.79		0.07		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	D					

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Grand Ave at Kansas St	Signalized	HCM 6th Edition	WB Left	0.461	26.3	C
2	Grand Ave at Pacific Coast Highway	Signalized	HCM 6th Edition	NB Left	0.902	49.9	D
3	El Segundo Blvd at Pacific Coast Highway	Signalized	HCM 6th Edition	WB Left	0.723	60.4	E
4	El Segundo Blvd at Kansas St	Two-way stop	HCM 6th Edition	SB Left	0.338	37.3	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Grand Ave at Kansas St

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	41	51	111	35	53	79	44	631	31	55	641	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	37	0	0	0	0	0	2	8	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	51	148	35	53	79	44	631	33	63	641	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	13	37	9	13	20	11	158	8	16	160	5
Total Analysis Volume [veh/h]	51	51	148	35	53	79	44	631	33	63	641	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	27	0	0	27	0	0	73	0	0	73	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	14	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	56	56	36	36	36	36
g / C, Green / Cycle	0.56	0.56	0.36	0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.16	0.10	0.28	0.27	0.31	0.29
s, saturation flow rate [veh/h]	1601	1615	905	1707	751	1716
c, Capacity [veh/h]	939	947	369	616	317	619
d1, Uniform Delay [s]	11.37	10.74	25.63	27.91	30.70	28.72
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.69	0.41	2.18	1.80	3.13	2.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.18	0.68	0.74	0.72	0.80
d, Delay for Lane Group [s/veh]	12.07	11.15	27.80	29.72	33.83	31.16
Lane Group LOS	B	B	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.93	1.84	4.49	9.59	5.61	10.75
50th-Percentile Queue Length [ft/ln]	73.33	46.09	112.19	239.76	140.17	268.75
95th-Percentile Queue Length [veh/ln]	5.28	3.32	7.96	14.67	9.49	16.13
95th-Percentile Queue Length [ft/ln]	131.99	82.96	199.05	366.73	237.25	403.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.07	12.07	12.07	11.15	11.15	11.15	27.80	29.09	29.72	33.83	31.86	31.16
Movement LOS	B	B	B	B	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	12.07			11.15			29.04			32.01		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	26.30											
Intersection LOS	C											
Intersection V/C	0.461											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.006	1.922	2.571	2.656
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	460	460	1380	1380
d_b, Bicycle Delay [s]	29.65	29.65	4.81	4.81
l_b,int, Bicycle LOS Score for Intersection	1.972	1.835	2.144	2.158
Bicycle LOS	A	A	B	B

Sequence

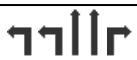
Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Grand Ave at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	49.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.902

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	203	1870	125	95	2636	219	524	201	227	415	201	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	37	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	203	1870	125	95	2636	227	561	201	227	415	201	305
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	468	31	24	659	57	140	50	57	104	50	76
Total Analysis Volume [veh/h]	203	1870	125	95	2636	227	561	201	227	415	201	305
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Split	Split	Overlap	Split	Split	Overlap
Signal Group	1	6	6	5	2	2	0	8	8	0	4	4
Auxiliary Signal Groups			4,6			2,8			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	10	5	10	10	0	10	10	0	10	10
Maximum Green [s]	30	30	30	30	30	30	0	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0
Split [s]	17	45	45	13	41	41	0	19	19	0	43	43
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	17	17	0	10	10	0	34	34
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No		No	No		No	No
Maximum Recall	No	No	No	No	No	No		No	No		No	No
Pedestrian Recall	No	No	No	No	No	No		No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	13	48	70	9	44	93	29	29	29	46	19	19	64
g / C, Green / Cycle	0.11	0.40	0.58	0.08	0.36	0.78	0.24	0.24	0.24	0.38	0.15	0.15	0.54
(v / s)_i Volume / Saturation Flow Rate	0.14	0.27	0.08	0.05	0.38	0.14	0.19	0.21	0.12	0.14	0.12	0.06	0.19
s, saturation flow rate [veh/h]	1440	6901	1615	1810	6901	1615	1440	1349	1729	1615	3514	3618	1615
c, Capacity [veh/h]	192	2741	945	136	2511	1258	384	384	415	617	542	558	866
d1, Uniform Delay [s]	56.22	29.90	11.21	54.18	38.16	3.41	44.76	44.76	39.20	26.68	48.67	45.44	15.92
k, delay calibration	0.13	0.50	0.11	0.11	0.50	0.50	0.20	0.24	0.11	0.13	0.11	0.11	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	49.39	1.40	0.06	6.38	32.68	0.31	5.00	5.77	0.88	0.44	2.30	0.39	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.68	0.13	0.70	1.05	0.18	0.73	0.73	0.48	0.37	0.77	0.36	0.35
d, Delay for Lane Group [s/veh]	105.61	31.29	11.27	60.57	70.84	3.72	49.76	50.54	40.07	27.12	50.96	45.84	16.26
Lane Group LOS	F	C	B	E	F	A	D	D	D	C	D	D	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.48	11.30	1.50	3.04	23.78	1.29	8.53	8.61	5.21	4.76	6.13	2.72	4.81
50th-Percentile Queue Length [ft/ln]	212.00	282.45	37.51	76.07	594.44	32.32	213.2	215.3	130.1	118.9	153.19	68.09	120.32
95th-Percentile Queue Length [veh/ln]	13.55	16.81	2.70	5.48	32.86	2.33	13.32	13.42	8.95	8.33	10.19	4.90	8.41
95th-Percentile Queue Length [ft/ln]	338.84	420.26	67.51	136.93	821.54	58.18	332.9	335.6	223.7	208.3	254.68	122.56	210.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	105.61	31.29	11.27	60.57	70.84	3.72	50.15	40.07	27.12	50.96	45.84	16.26
Movement LOS	F	C	B	E	F	A	D	D	C	D	D	B
d_A, Approach Delay [s/veh]	37.02			65.36			42.81			38.35		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	49.87											
Intersection LOS	D											
Intersection V/C	0.902											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	4.396	3.020	2.796
Crosswalk LOS	F	E	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	617	250	650
d_b, Bicycle Delay [s]	26.00	28.70	45.94	27.34
l_b,int, Bicycle LOS Score for Intersection	2.466	2.780	2.376	2.319
Bicycle LOS	B	C	B	B

Sequence

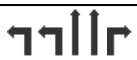
Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Segundo Blvd at Pacific Coast Highway

Control Type:	Signalized	Delay (sec / veh):	60.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.723

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	409	1532	329	201	2870	173	235	667	685	492	601	291
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	29	19	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	413	1532	329	201	2870	173	235	696	704	492	607	291
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	103	383	82	50	718	43	59	174	176	123	152	73
Total Analysis Volume [veh/h]	413	1532	329	201	2870	173	235	696	704	492	607	291
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	17	38	38	12	33	33	20	52	52	18	50	50
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	24	24	0	24	24	0	10	10	0	41	41
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	13	54	72	8	49	69	16	28	45	14	26	38
g / C, Green / Cycle	0.11	0.45	0.60	0.07	0.41	0.57	0.13	0.24	0.38	0.12	0.22	0.32
(v / s)_i Volume / Saturation Flow Rate	0.12	0.22	0.20	0.06	0.42	0.11	0.13	0.19	0.44	0.14	0.17	0.18
s, saturation flow rate [veh/h]	3514	6901	1615	3514	6901	1615	1810	3618	1615	3514	3618	1615
c, Capacity [veh/h]	381	3087	965	234	2800	924	241	854	610	410	793	516
d1, Uniform Delay [s]	53.50	23.55	12.22	55.44	35.66	12.29	51.79	43.37	37.34	53.00	43.94	33.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	48.48	0.57	0.96	8.81	23.79	0.45	21.37	1.96	87.05	95.40	1.57	0.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.08	0.50	0.34	0.86	1.03	0.19	0.97	0.82	1.15	1.20	0.77	0.56
d, Delay for Lane Group [s/veh]	101.98	24.13	13.18	64.25	59.45	12.74	73.16	45.33	124.39	148.40	45.51	34.88
Lane Group LOS	F	C	B	E	F	B	E	D	F	F	D	C
Critical Lane Group	No	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.29	7.77	4.61	3.30	24.55	2.32	8.46	9.97	32.26	11.60	8.62	7.17
50th-Percentile Queue Length [ft/ln]	207.31	194.16	115.18	82.39	613.63	57.90	211.38	249.22	806.52	289.90	215.40	179.33
95th-Percentile Queue Length [veh/ln]	13.43	12.34	8.13	5.93	33.27	4.17	13.22	15.15	45.77	18.45	13.43	11.57
95th-Percentile Queue Length [ft/ln]	335.87	308.42	203.18	148.31	831.87	104.22	330.60	378.67	1144.29	461.30	335.74	289.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	101.98	24.13	13.18	64.25	59.45	12.74	73.16	45.33	124.39	148.40	45.51	34.88
Movement LOS	F	C	B	E	F	B	E	D	F	F	D	C
d_A, Approach Delay [s/veh]	36.68			57.25			83.37			79.71		
Approach LOS	D			E			F			E		
d_I, Intersection Delay [s/veh]	60.43											
Intersection LOS	E											
Intersection V/C	0.723											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.563	3.085	2.974
Crosswalk LOS	F	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	567	483	800	767
d_b, Bicycle Delay [s]	30.82	34.50	21.60	22.82
l_b,int, Bicycle LOS Score for Intersection	2.498	2.898	2.908	2.706
Bicycle LOS	B	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: El Segundo Blvd at Kansas St

Control Type:	Two-way stop	Delay (sec / veh):	37.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.338

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	46	1	3	1012	712	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	1	3	1012	712	60
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	1	253	178	15
Total Analysis Volume [veh/h]	56	1	3	1012	712	60
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	37.35	21.46	9.24	0.00	0.00	0.00
Movement LOS	E	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.40	1.40	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	35.00	35.00	0.26	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	37.07		0.03		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.16					
Intersection LOS	E					

APPENDIX C

Traffic Signal Warrant Analysis

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: **El Segundo Boulevard** EB WB # OF APPROACH LANES: **2**

MINOR STREET: **Kansas Street** NB SB # OF APPROACH LANES: **1**

CITY, STATE: **El Segundo, CA**

COMMENTS: Signal Warrant Study, Horizon Year without Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): **N**
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): **N**

			MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
					MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES					**600**	**150**		**900**	**75**		**480**	**120**		**720**	**60**			
06:00 AM	TO	07:00 AM	0	0														
07:00 AM	TO	08:00 AM	0	0														
08:00 AM	TO	09:00 AM	1,335	32	Y			Y			Y			Y				
09:00 AM	TO	10:00 AM	0	0														
10:00 AM	TO	11:00 AM	0	0														
11:00 AM	TO	12:00 PM	0	0														
12:00 PM	TO	01:00 PM	0	0														
01:00 PM	TO	02:00 PM	0	0														
02:00 PM	TO	03:00 PM	0	0														
03:00 PM	TO	04:00 PM	0	0														
04:00 PM	TO	05:00 PM	0	0														
05:00 PM	TO	06:00 PM	1,728	46	Y			Y			Y			Y				
06:00 PM	TO	07:00 PM	0	0														
07:00 PM	TO	08:00 PM	0	0														
08:00 PM	TO	09:00 PM	0	0														
09:00 PM	TO	10:00 PM	0	0														
			3,063	78	2	0	**0**	2	0	**0**	2	0	**0**	2	0	**0**	**0**	**0**
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					NOT SATISFIED			**NOT SATISFIED**			**NOT SATISFIED**						**NOT SATISFIED**	**NOT SATISFIED**

10/05/21
Kimley-Horn and Associates

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: **El Segundo Boulevard** EB WB # OF APPROACH LANES: **2**

MINOR STREET: **Kansas Street** NB SB # OF APPROACH LANES: **1**

CITY, STATE: **El Segundo, CA**

COMMENTS: Signal Warrant Study, Horizon Year With Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): **N**
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): **N**

			MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
					MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES					**600**	**150**		**900**	**75**		**480**	**120**		**720**	**60**			
06:00 AM	TO	07:00 AM	0	0														
07:00 AM	TO	08:00 AM	0	0														
08:00 AM	TO	09:00 AM	1,345	34	Y			Y			Y			Y				
09:00 AM	TO	10:00 AM	0	0														
10:00 AM	TO	11:00 AM	0	0														
11:00 AM	TO	12:00 PM	0	0														
12:00 PM	TO	01:00 PM	0	0														
01:00 PM	TO	02:00 PM	0	0														
02:00 PM	TO	03:00 PM	0	0														
03:00 PM	TO	04:00 PM	0	0														
04:00 PM	TO	05:00 PM	0	0														
05:00 PM	TO	06:00 PM	1,730	56	Y			Y			Y			Y				
06:00 PM	TO	07:00 PM	0	0														
07:00 PM	TO	08:00 PM	0	0														
08:00 PM	TO	09:00 PM	0	0														
09:00 PM	TO	10:00 PM	0	0														
			3,075	90	2	0	**0**	2	0	**0**	2	0	**0**	2	0	**0**	**0**	**0**
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					NOT SATISFIED			**NOT SATISFIED**			**NOT SATISFIED**						**NOT SATISFIED**	**NOT SATISFIED**

10/05/21
Kimley-Horn and Associates

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: **El Segundo Boulevard** EB WB # OF APPROACH LANES: **2**

MINOR STREET: **Kansas Street** NB SB # OF APPROACH LANES: **1**

CITY, STATE: **El Segundo, CA**

COMMENTS: Signal Warrant Study, Horizon Year With Diet without Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): **N**
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): **N**

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			**600**	**150**		**900**	**75**		**480**	**120**		**720**	**60**			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	0	0														
08:00 AM TO 09:00 AM	1,382	33	Y			Y			Y			Y				
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	0	0														
05:00 PM TO 06:00 PM	1,785	47	Y			Y			Y			Y				
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,167	80	2	0	**0**	2	0	**0**	2	0	**0**	2	0	**0**	**0**	**0**
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			**NOT SATISFIED**			**NOT SATISFIED**						**NOT SATISFIED**	**NOT SATISFIED**

10/05/21
Kimley-Horn and Associates

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: **El Segundo Boulevard** EB WB # OF APPROACH LANES: **2**

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CITY, STATE: **El Segundo, CA**

COMMENTS: Signal Warrant Study, Horizon Year With Diet With Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): **N**

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): **N**

			MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
					MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES					**600**	**150**		**900**	**75**		**480**	**120**		**720**	**60**			
06:00 AM	TO	07:00 AM	0	0														
07:00 AM	TO	08:00 AM	0	0														
08:00 AM	TO	09:00 AM	1,392	35	Y			Y			Y			Y				
09:00 AM	TO	10:00 AM	0	0														
10:00 AM	TO	11:00 AM	0	0														
11:00 AM	TO	12:00 PM	0	0														
12:00 PM	TO	01:00 PM	0	0														
01:00 PM	TO	02:00 PM	0	0														
02:00 PM	TO	03:00 PM	0	0														
03:00 PM	TO	04:00 PM	0	0														
04:00 PM	TO	05:00 PM	0	0														
05:00 PM	TO	06:00 PM	1,787	57	Y			Y			Y			Y				
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07:00 PM	TO	08:00 PM	0	0														
08:00 PM	TO	09:00 PM	0	0														
09:00 PM	TO	10:00 PM	0	0														
			3,179	92	2	0	**0**	2	0	**0**	2	0	**0**	2	0	**0**	**0**	**0**
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					NOT SATISFIED			**NOT SATISFIED**			**NOT SATISFIED**						**NOT SATISFIED**	**NOT SATISFIED**

10/05/21

Kimley-Horn and Associates

CITY OF EL SEGUNDO

Planning Commission Agenda Statement

Meeting Date: February 10, 2022
Agenda Heading: Continued public hearing

TITLE:

Proposed Pacific Coast Commons Specific Plan and Mixed-use Commercial and Residential Development Project to Include 263 Residential Units and 11,252 square feet of Commercial Space at 475-629 North Pacific Coast Highway (PCH).

RECOMMENDATION:

It is recommended the Planning Commission:

1) Adopt Resolution No. 2905, recommending the City Council certify the EIR for the Pacific Coast Commons Specific Plan and Development Project;

2) Adopt Resolution No. 2905, recommending that the City Council approve General Plan Amendment No. GPA 19-01, Subdivision No. SUB 19-03 (Vesting Tentative Tract Map), Site Plan Review No. 19-01, Parking Demand Study, and Waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and mixed-use development project; and,

3) Adopt Resolution No. 2905, recommending that the City Council adopt an Ordinance adopting the Pacific Coast Commons Specific plan (SP 19-01), approving a zone change (ZC 19-01), a zone text amendment (ZTA 19-08), and a Development Agreement (DA 19-02);

4) Adopt Resolution No. 2906, recommending that the City Council approve modifications to Conditional Use Permit No. 14-01 for the Aloft Hotel;

5) Adopt Resolution No. 2907, recommending that the City Council approve modifications to Conditional Use Permit No. 14-02 for the Fairfield Inn and Suites Hotel.

INTRODUCTION:

On November 18, 2021, at the applicant's request, the Planning Commission continued the item to December 9, 2021. Although the item was continued to a date certain, staff provided full notice again for the December 9, 2021 meeting. The day prior to the hearing, staff received lengthy correspondence from two legal firms commenting on the Environmental Impact Report (EIR) for the project. On the day of the hearing, the Planning Commission received oral testimony from members of the public that were

present at the meeting. Following the public testimony, the Planning Commission continued the item to a date uncertain to allow staff time to review the correspondence and prepare responses.

This report updates and replaces the analysis in the prior staff report for the December 9, 2021 meeting. It also includes the written correspondence received prior to the December 9, 2021 meeting, a summary of the oral testimony received during the meeting, and staff's responses to all the written and oral comments.

BACKGROUND:

The applicant, BRE El Segundo HOLDCO LLC, submitted an application for development of a mixed use project including commercial and residential uses on property generally located between Holly Avenue on the south, Indiana Street to the west, Palm Avenue to the north and North PCH to the east (see Figure 1, below). The property is currently occupied by two hotels (Aloft Hotel and Fairfield Inn and Suites), a vacant food and beverage building (former Hacienda hotel restaurant), and two open parking lots that provide parking for the two hotels.

The proposed mixed use project involves demolition of the existing food and beverage building and the construction of four new buildings consisting of 257 apartment units, 6 townhome condominium units, 11,252 square feet (sf) of commercial uses, and parking structures containing 792 parking spaces. Of the total 263 residential units, 32 are proposed as affordable housing units, further described below.

Figure No. 1 - Vicinity Map



High density residential uses are not currently permitted under the present General Plan Land Use designations for the site. Therefore, the overall project/request includes an application for a General Plan Amendment. Other applications associated with the project include a Zone Change, Zone Text Amendment, and Specific Plan.

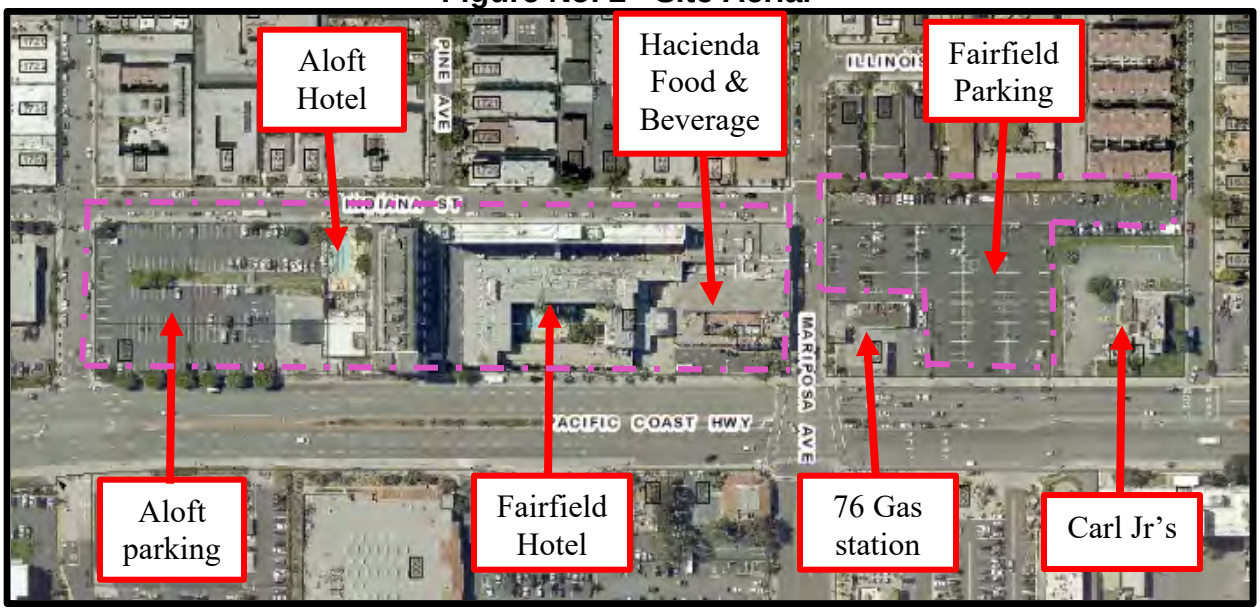
The proposed entitlements, including the Specific Plan, Development Agreement and other entitlements are described in detail in the following sections of this report.

SITE DESCRIPTION:

The project site encompasses a "super-block" at 475-629 North Pacific Coast Highway (PCH) measuring 6.38 acres. The site is bounded by PCH, Holly Avenue, Indiana Street, and Palm Avenue, and bisected by Mariposa Avenue. Illustrated in Figures 2 and 3 below, the portion of the site south of Mariposa Avenue (South Site) has a General Plan Land Use designation of General Commercial and a Zoning designation of General Commercial (C-3). The South Site is currently improved with a 175-space parking lot; Aloft, a 246-room hotel; Fairfield Inn and Suites, a 350-room hotel; and a 41,660 sf vacant food and beverage building that previously operated as part of the Hacienda Hotel.

Illustrated in Figures 2 and 3 below, the portion of the site north of Mariposa Avenue (North Site) has a General Plan Land Use Designation of Parking and a Zoning designation of Parking (P). The North Site is currently improved with a 236-space surface parking lot, providing 213 spaces covenanted to the Fairfield Inn & Suites and 23 spaces covenanted to the Aloft hotel. The 7-Eleven/Unocal 76 gas station and Carl's Jr restaurant located at the corner of PCH and Mariposa Avenue and PCH and Palm Avenue respectively are not part of the project site.

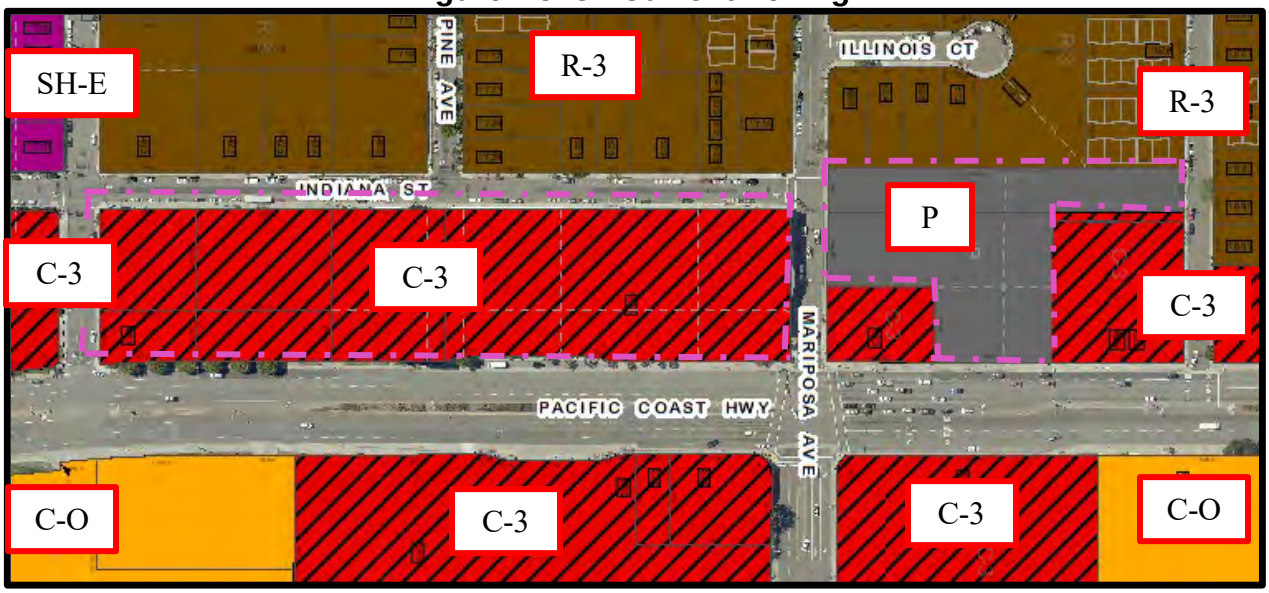
Figure No. 2 - Site Aerial



Surrounding Zoning and Uses

The properties immediately west of the project site are zoned Multi-Family Residential (R-3) and are developed with multi-family residential uses (apartments and condominium). The properties north of the site are in the R-3 and C-3 zones and are occupied by residential and commercial uses, including an existing fast-food restaurant and a vacant restaurant building. The properties east of the site, across PCH, are in the Corporate Office (CO) and C-3 zones and developed with office, retail, restaurant, and other commercial uses. The properties south of the site are in the C-3 and Smoky Hollow-East (SH-E) zones and occupied by a pharmacy, restaurant, and office uses. Figure No. 3 below illustrates the current zoning on and around the subject site.

Figure No. 3 - Current Zoning



PROJECT DESCRIPTION:

Entitlement Applications

The development project consists of a high-density mixed-use development, including 263 residential units and 11,252 sf of commercial space. High density residential uses are not permitted under the present General Plan Land Use designations for the site. Therefore, the overall project/request includes an application for a General Plan Amendment and other entitlements. Details of each application are provided below:

General Plan Amendment (GPA 19-01). A General Plan Amendment is proposed to create a new General Plan Land Use designation titled "Pacific Coast Commons Specific Plan (PCCSP)", which will replace the current General Commercial and Parking designations for the site (See Resolution Exhibit F). In addition, the proposed General Plan Land Use Element text will be modified to include a description of the new designation in the Land Use Plan section (See Resolution Exhibits C, D, and E).

Zone Change (ZC 19-01). The zone change application is proposed to ensure that the Zoning Map designation for the site is consistent with the General Plan Land Use designation. Accordingly, the Zoning Map will change to replace the current General Commercial (C-3) and Parking (P) zoning designations for the site with a new PCCSP designation (See Resolution Exhibit B).

Zone Text Amendment (ZTA 19-08). The proposed Zone Text Amendment amends Zoning Code Section 15-3-2(A) to add a new Specific Plan Zone titled "Pacific Coast Commons Specific Plan" along with the new land use districts within the proposed Specific Plan.

Specific Plan (SP 19-01). A specific plan is a tool for the systematic implementation of the general plan that creates carefully tailored land use regulations within particular areas of the City. All future development plans and entitlements within a specific plan boundary must be consistent with the standards set forth in the adopted specific plan, even when they may be different from the general regulations contained in the El Segundo Municipal Code (ESMC). The proposed PCCSP establishes the regulations necessary to implement the proposed development project and maintain the conforming status of the existing hotel uses. The Specific Plan document covers the following regulatory areas, which are discussed in more detail below:

1) Specific Plan Land Use Plan

2) Design guidelines

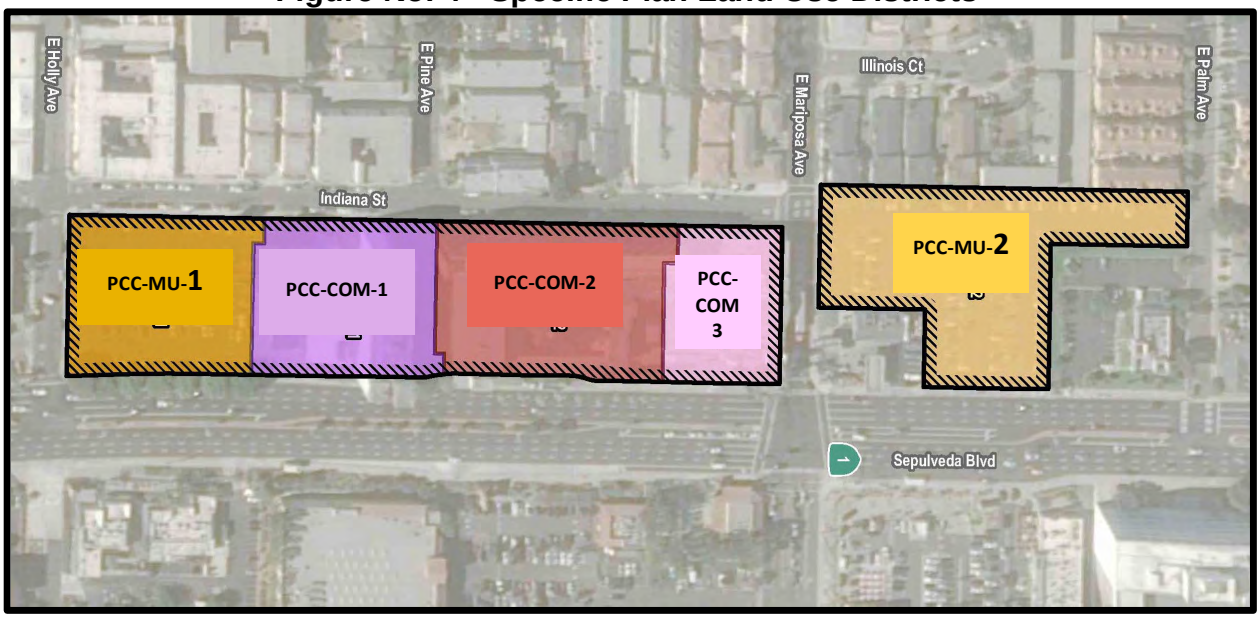
3) Permitted uses and development standards

4) Administration/Site Plan Review procedures

1) Specific Plan Land Use Plan.

The applicant proposes to create five land use districts (or subareas) as illustrated below in Figure 4.

Figure No. 4 - Specific Plan Land Use Districts



PCC Mixed-Use 1 (PCC MU-1) – This land use district measures 1.24 net acres and includes the existing surface parking lot for the Aloft Hotel, but not the hotel itself. It is located at the southernmost parcel with frontage on PCH, Holly Avenue, and Indiana Avenue. The proposed PCC MU-1 land use district allows for development of multi-family residential uses (apartments) and commercial uses.

Within the PCC MU-1 district, the applicant proposes developing 120 apartment units, 5,756 gross sf of commercial space, and an 8-level parking structure accommodating 336 parking spaces. The name for this project sub-area is "PCC-South," and additional details of the proposed development concept within this district is provided below.

PCC Commercial-1 (PCC COM-1) – This land use district measures 0.95 net acre and is located northerly and adjacent to PCC MU-1, fronting along PCH and Indiana Avenue. The existing Aloft Hotel is located within this land use designation, which allows for hotel and several commercial uses.

Within the PCC COM-1 district, the applicant proposes to replace existing non-conforming fences, such as chain-link fencing, with decorative fencing design and material at the existing hotel site. Thus, since the applicant does not propose to remodel or rehabilitate the existing hotel at the present time, no construction activity occurs within this district.

PCC Commercial-2 (PCC COM-2) – This land use district measures 1.55 net acres and is located north of and adjacent to PCC COM-1 and fronts on PCH and Indiana Avenue. The existing Fairfield Inn and Suites is located within this land use designation, which allows for hotel and several commercial uses.

Within the PCC COM-2 district, the applicant proposes to replace existing non-conforming fences, such as chain-link fencing, with decorative fencing design and material at the existing hotel site. Thus, since the applicant does not propose to remodel or rehabilitate the existing hotel at the present time, no construction activity will occur within this district.

PCC Commercial-3 (PCC COM-3) – This land use district measures 0.73 net acres and is located north of and adjacent to PCC COM-2 and fronts on PCH, Indiana Avenue, and Mariposa Avenue. The existing Fairfield Inn and Suites hotel food and beverage building is located within this land use designation, which allows for hotel and several commercial uses.

Within the PCC COM-3 district, the applicant proposes to demolish the existing food and beverage building and replace it with a new 5-level parking structure for 215 parking spaces and construct 3,273 gross square feet of commercial space. The applicant also proposes to construct a dedicated right turn lane on the south side of Mariposa Avenue. The name for this component of the development project is "Fairfield Parking" and additional details of the proposed development concept within this district is provided below.

PCC Mixed-Use 2 (PCC MU-2) – Referred to as the North Site, this land use district measures 1.81 net acres and is the northernmost parcel in the project site and is located north of Mariposa Avenue, south of Palm Avenue, and west of PCH. The existing gas station and fast-food restaurant on this block are not part of the project site and are owned by different owners. This land use designation allows for residential and several commercial uses.

Within the PCC MU-2 district, the applicant proposes constructing 137 apartment units, 2,223 gross sf of commercial space, and a 6-level parking structure for 241 parking spaces. The applicant also proposes to develop six townhomes, with self-contained 2-car garages, on another parcel adjacent to Palm Avenue. The name for this component of the development project is "PCC-North," and additional details of the proposed development concept within this district is provided below.

2) Specific Plan Design Guidelines

The proposed Design Guidelines are intended as guidelines and, thus, are not development regulations. Therefore, strict compliance is not required. The design guidelines apply only to new development within the Specific Plan area, are used as metrics to determine when and if future development is consistent with the intent of the Specific Plan, and cover the following 10 design areas:

a) Site Planning

b) Access and Parking

c) Architecture/Orientation/Massing

d) Color and Materials

e) Screening and Mechanical Equipment

f) Parking Structures

g) Landscaping

h) Walls and Fences

i) Lighting Design

j) Signage

3) Specific Plan Development Standards

The Development Standards section lists in detail the regulations in 11 areas. Strict compliance is required and would apply to new development, additions, and redevelopment within the Specific Plan area:

a) Permitted Uses

b) Development Standards

c) Circulation

d) Parking and Loading

e) Landscaping

f) Common Recreation Facilities/Open Space and Private Open Space

g) Public Safety

h) Signage

i) Sustainability

j) Enclosed and Unenclosed Uses

k) Non-Conforming Uses and Buildings

4) Specific Plan Administration

The Administration section includes provisions for the following:

a) Introduction

b) Municipal Code References

c) Modifications

d) Site Plan Review

e) Amendments

f) Infrastructure Improvements/Coordination

g) Financing Measures

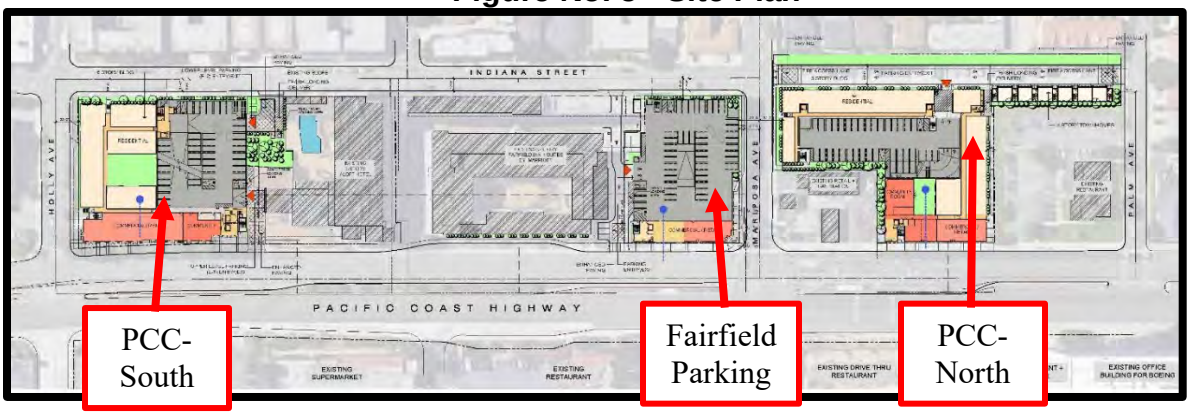
h) California Environmental Quality Act Compliance

Site Plan Review SPR 19-01. Proposed PCCSP Section VII(D) requires approval of a Site Plan Review application for the proposed development project. This section of the staff report provides a physical description and evaluation of the development project.

Development Proposal

The applicant proposes to develop the Pacific Coast Commons mixed-use project on three districts comprised of two existing surface parking lots and an underutilized food and beverage hall as shown in Figure No. 5 below (PCC-South, Fairfield Parking, and PCC-North). Commercial uses are proposed on all three sub-areas, and residential uses on two sub-areas. The project exhibits contemporary design features and modulated building surfaces to enhance shadow lines and architectural features. The development project and Specific Plan development standards are summarized in the table below.

Figure No. 5 - Site Plan



PCC-South (PCC MU-1 District/Subarea): Bordered by PCH, Holly Avenue, Indiana Street, and the Aloft Hotel to the north, the proposed development at PCC-South includes a mixed-use 6-story building with 120 apartment units (105 market rate units and 15 affordable housing units), 5,756 gross sf of commercial space, and an 8-level parking structure containing 336 parking spaces as illustrated in Figure No. 6, below. The building will measure 72-feet in height as measured from lowest grade along PCH to top of parapet, and 83'-6" in height as measured from Indiana Street and Holly Avenue to top of parapet. In accordance with the proposed PCCSP, public and private open space will be provided. PCC-South features a private open-air courtyard (approximately 41'x70'), enclosed on all four sides by six floors of apartments, a large rooftop deck/pool area, a

community room, and private balconies for most units. The applicant also proposes private landscaping (ground cover and trees) along the outer edges of the built structure(s) as well as public street trees along the southern portion of PCH, Holly Avenue, and Indiana Street. Climbing fig plants will be added at certain locations along the parking structure facing Indiana Street.

Figure No. 6 – PCC-South Rendering



Fairfield Parking (PCC COM-3 District/Subarea): Bordered by PCH, Indiana Street, Mariposa Avenue, and the Aloft Hotel to the south, the proposed development incudes a 5-level parking structure accommodating 215 parking spaces and 3,273 gross sf of commercial space as illustrated in Figure No. 7 below. The building will measure 49.75-feet in height as measured from lowest grade along PCH to top of parapet, and 54'-6" in height as measured from lowest grade along Indiana Street to top of parapet. The applicant also proposes a 2-level "green wall", along the parking structure facing Indiana Street. The new parking structure will serve the parking needs of both Aloft hotel and Fairfield Inn that are currently encumbered on another parcel. The new structure will also serve the parking needs of the commercial uses and guest parking for the residential uses.

Figure No. 7 – Fairfield Parking Rendering



PCC-North (PCC MU-2 District/Subarea): Encompassing the existing surface parking lot and fire lane in the area north of Mariposa Avenue generally bounded by Carl's Jr. and the 7-Eleven/Union 76 Gas Station, the proposed development includes a 6-story mixed-use building with 137 apartment units (120 market rate units and 17 affordable housing units), 2,223 gross sf of commercial space, and a 6-level parking structure containing 252 parking spaces as illustrated in Figure No. 8 below. The proposed building will be 74-feet in height as measured from lowest grade along Mariposa Avenue, and 72'-6" as measured from lowest grade along PCH to top of parapet.

Figure No. 8 – PCC North Rendering



Townhomes
Six townhomes with 2-car garages are also proposed on a separate lot within PCC-North, as illustrated in Figure No. 9 below. The proposed building height, from lowest grade, is 44.7-feet along Palm Avenue to top of parapet and 47'-6" along the adjacent grade, south of the building. In accordance with the proposed PCCSP, public and private open space are provided. The proposal includes a private open-air courtyard (approximately 31'x51'), enclosed on all four sides by six floors of apartments and parking levels, a large rooftop deck/pool area, two community rooms, and private balconies for most units. The applicant is proposing to add private landscaping (ground cover and trees) along the outer edges of the built structure(s).

Figure No. 9 – Townhomes Rendering



Table No. 1 below provides a breakdown of the project's parking, floor area, number of units, and development intensity in each sub-area where new construction is proposed.

Table No. 1 – Specific Plan and Project Development Intensity/Summary

Use	Units / Number of Parking Spaces	Conceptual Site Plan Building Area (in square feet)		Specific Plan Maximum Buildout Building Area (in square feet)		Parcel Square Footage	FAR	Dwelling Units per Acre
		Net Area	Gross Area	Net Area	Gross Area			
New Development								
PCC Mixed Use-1 (PCC- South)								
Multi-Family Residential	120 units	136,571	140,794	139,917	144,244	–	–	–
Commercial	–	5,583	5,756	5,583	5,756	–	–	–
Parking structure	336 spaces	–	–	–	–	–	–	–
PCC MU-1 Total		142,154	146,550	145,500	150,000	54,072	2.56	96.70
PCC Commercial-3 (Fairfield Parking)								
Commercial	–	3,175	3,273	3,175	3,273	–	–	–
Parking structure	215 spaces	–	–	–	–	–	–	–
Lobby	–	1,170	1,206	1,675	1,727	–	–	–
PCC COM-3 Total		4,345	4,479	4,850	5,000	32,254	0.16	–
PCC Mixed-Use-2 (PCC – North)								
Multi-Family Residential	137 units	159,062	163,472	167,754	172,433	66,241	–	90.07
Commercial		2,156	2,223	2,156	2,223		–	
Parking structure	241 spaces	–	–	–	–		–	
Townhomes	6 units	9,540	10,344	9,540	10,344	13,649		19.17
PCC MU-2 Total		170,758	176,039	179,450	185,000	79,890	2.25	77.97
Total Development Areas		**317,257**	**327,068**	**329,800**	**340,000**		–	–

As illustrated in the table above, the proposed project site plan complies with the residential density and overall floor area ratio (FAR) limits of the Specific Plan.

Subdivision (SUB 19-03). Construction of the proposed development requires consolidation and reconfiguration of the existing parcels on the subject property to ensure that the new buildings do not cross legal parcel lines. As a result, the applicant has submitted an application for a Vesting Tentative Tract Map (VTTM 82806).

The vesting tentative tract map reconfigures the existing 12 lots south of Mariposa Avenue and the 3 parcels (4 lots) north of Mariposa Avenue into six individual lots (one lot for each of the five land use designations plus one lot for the townhome portion of the site). The vesting tentative tract map will provide:

- One residential ground and airspace parcel for 120 apartment units and a maximum of ten airspace parcels for commercial condominiums on Lot 1 (i.e., PCC-South)
- Ground and airspace parcel for the parking structure and up to ten airspace parcels for commercial condominiums on Lot 4 (i.e., Fairfield Parking)
- One residential ground and airspace parcel for 137 apartment units and up to a maximum of 20 airspace parcels for commercial condominiums on Lot 5 (i.e., southern portion of PCC-North)
- Six residential condominiums (townhomes) on Lot 6 (northern portion of PCC-North)

The vesting tentative tract map currently depicts the legal lots without the street dedications required on Mariposa Avenue, Indiana Street, Holly Avenue and Palm Avenue. The dedications are required as conditions of approval and will be provided through irrevocable offers to dedicate land before the final tract map is recorded and/or buildings are occupied.

DISCUSSION:

General Plan Consistency

In considering the proposed project, the Planning Commission reviews components of each requested application and considers the merits of the project to make a recommendation for City Council's consideration. This will include recommending that the project is consistent with the General Plan. The project is consistent with the goals and policies in the Economic Development, Land Use, Circulation, Housing, Open Space and Recreation, Conservation, Noise, and Public Safety General Plan Elements. It will increase the City's tax base, provide a mixed-use and pedestrian friendly environment, provide need housing, make improvements to the street network, and it will comply with all applicable building safety, noise, and air quality/construction related regulations. A detailed analysis of the General Plan consistency can be found in the attached draft resolution (Attachment No. 1).

City Council Strategic Plan Consistency

The proposed Specific Plan is also consistent with City Council Strategic Plan Goal No. 5 to Champion Economic Development and Fiscal Sustainability. Specifically, the proposed Specific Plan addresses the Council's priority to "identify areas within the community that are appropriate for housing." PCH serves as a primary corridor through El Segundo. A range of business and services are complimented by residential units

along commercial corridors by minimizing the oversaturation of non-residential uses as properties are redeveloped, reduces overall traffic, encourages and facilitates a stronger local customer base, and expands service demands on local business and services.

Housing Element Consistency

The City is currently updating its General Plan Housing Element. One of the goals of this process is to identify adequate locations to meet the City's RHNA (Regional Housing Needs Allocation), which is 521 units for the 2021-2029 Housing Element period. The 521 units are divided into the following affordability categories:

Table No. 2 – Housing Element RHNA allocation

Income Category	5th Cycle Carryover	6th Cycle RHNA	Total RHNA	Percent
Very Low Income	18	189	207	39.7%
Low Income	11	88	99	19.0%
Moderate Income	0	84	84	6.1%
Above Moderate Income	0	131	131	25.1%
Total	29	492	521	100.0%

The proposed Specific Plan results in the construction of 263 residential units, including 32 units set aside for low and very low-income households (See Development Agreement discussion below). As a result, the Specific Plan meets a substantial proportion of the City's RHNA allocation in both the affordable and market rate units.

In addition to helping meet the City's RHNA requirements, the proposed location is a good location for higher density housing. The location along PCH corridor can better accommodate higher density residential development compared to other parts of the City, because of its proximity to many existing amenities/uses, such as:

- Commercial retail and services (grocery store, restaurants, etc.).
- Park and recreation facilities.
- School facilities (elementary and middle school within walking distance).
- A major employment area east of PCH.

Further, the proposed location is advantageous due to its proximity to existing and planned transportation facilities, including:

- PCH, a major north-south commuting route and LAX connection.
- I-105 and I-405 freeways, major regional transportation corridors

- LA Metro Bus and Beach Cities Transit Bus lines that provide connections to nearby cities and to the LA Metro Green Line.
- LA Metro Green Line and Crenshaw Corridor Line. The nearest Green Line station to the PCC Specific Plan is half a mile away, at Mariposa and Nash. Once the Crenshaw Corridor project is completed (in 2022), it will connect the Green Line with the Expo Line and allow convenient transportation to Downtown Los Angeles and the West Los Angeles/Santa Monica area without using a car.

For the above reasons, the proposed PCC Specific Plan location meets the Council goal of identifying appropriate locations for housing.

Parking Discussion and Analysis

The applicant is providing enough on-site vehicular parking for the PCC project as required by ESMC Chapter 15-15 and the PCC Specific Plan. Based upon a parking demand study and shared parking analysis conducted by Fehr & Peers and peer-reviewed by Dudek, the City's consultant, the Specific Plan is requiring the mixed-use project to provide parking as described in Table No. 3 below.

Table No. 3: PCCSP Parking Requirements

Use/Unit Type	Minimum Number of Parking Spaces
Market Rate Units	
Studio	1.0
One-Bedroom	1.5
Two-Bedroom	2.0
Townhomes	2.0
Guest Parking	1/3 parking space per residential unit; may be shared with commercial uses; up to 5% of residential parking spaces within Specific Plan area may be shared with other uses.
Affordable Housing Units	
Studio	0.5
One-Bedroom	1.0
Two-Bedroom	1.5
Guest Parking	0.0
Non-Residential Uses	
Commercial, Restaurants, Hotel	Number of parking spaces to be determined by an approved parking demand study and shared use analysis

Compact Parking for Residential and Commercial Uses	Maximum of 20% of spaces
Tandem Parking for Residential Only	Maximum of 20% of spaces
Vehicle Lifts for Residential and Hotel Uses Only	Maximum of 10% of spaces

The PCC project provides 792 parking spaces within the three parking structures plus an additional 33 at-grade parking spaces on the Fairfield Inn and Suites site, 26 of which will remain after construction. Of the 792 parking spaces within the parking structures, the applicant is providing compact spaces and tandem spaces only in the PCC-North area (41 compact spaces, and 22 tandem spaces, which is less than the maximum allowed by the PCC Specific Plan and the ESMC). There are no compact spaces or tandem spaces in PCC-South and Fairfield Parking areas. Parking spaces for residential uses are reserved for the individual tenants, except for the 5% of residential spaces that may be shared with non-residential and guest parking. Residential parking within PCC-South and PCC-North meets the Specific Plan requirements as depicted in Table No. 4.

Table No. 4: Parking Compliance Analysis

Site	Use	Specific Plan Required Spaces	Parking Supply	Designated Residential Spaces
	All Market Rate Units (257)			
PCC-South	*Hotel* *Residential* *Guest/Retail*	126* 170 40*	336	165
Fairfield Parking	*Hotel/Retail*	213*	215	0
PCC-North	*Residential* *Guest/Retail*	194 47*	241	189
Total		**790**	**792**	**354**
	225 Market Rate Units Plus 32 Affordable Units			
PCC-South	*Hotel* *Residential* *Guest/Retail*	126* 140 35*	336	165
Fairfield Parking	*Hotel/Retail*	213*	215	0

PCC-North	*Residential* *Guest/Retail*	185 40*	241	189
Total		**739**	**792**	**354**

*There is no specific requirement for commercial uses in the Specific Plan. The commercial uses will share the parking spaces with the residential and/or hotel guests based on the Parking Demand Study and Shared Parking Analysis.

The parking requirements are reduced with the inclusion of affordable housing, pursuant to State law. The PCC Specific Plan specifies that parking rates for affordable housing units are less than for market rate units. As further discussed in the affordable housing agreement, the applicant will provide 32 affordable units, including 18 studios, 11 one-bedroom, and 3 two-bedroom units. This composition of affordable housing units reduces the parking requirement from a total of 790 spaces for all market rate units to 739 spaces for the proposed mix of market rate and affordable units.

Loading and Trash Pick-Up Discussion and Analysis

The applicant is providing loading/unloading spaces pursuant to ESMC Section 15-15-7 and the PCC Specific Plan as follows:

PCC-South: Two small truck loading areas are provided near the parking structure entrance on Indiana Street, on Level P-2, to serve the residents and commercial tenants. Residential trash pick-up is located in the same area. Commercial trash service is located on Level L-1, at-grade on PCH. The applicant is providing a dedicated area west of the parking structure entrance for commercial trash pick-up as well as an additional delivery area. The exact location is not identified on the plans.

Fairfield Parking: The applicant is providing an area for loading and trash service west of the parking structure entrance. The trucks will enter from PCH onto the one-way driveway in a westerly direction and exit the site onto Indiana Street. Smaller delivery trucks can access the parking structure and park along the rear of the commercial spaces.

PCC-North: Parking for loading/unloading and commercial and residential trash service is provided from the fire lane in a separate area (approximately 10’x30’) between the apartments and townhomes.

Bicycle Parking Discussion and Analysis

The applicant is providing the appropriate number of bicycle parking for both residential and commercial and uses as stipulated by ESMC Section 15-15-6 and PCC Specific Plan. Multi-family residential requires bicycle parking equivalent to 10 percent of the required vehicle parking spaces and for commercial uses, a minimum of four bicycle spaces for up to 15,000 square feet of commercial space.

Table No. 5: Bicycle Parking

Site	Residential Use		Commercial Use	
	Code	Provided	Code	Provided
PCC-South	34	34	4	4
Fairfield Parking	0	0	4	4
PCC-North	24	24	4	4
Total	**58**	**58**	**12**	**12**
Aloft Hotel and Fairfield Inn & Suites			**8***	**8***

*These are existing bicycle spaces to be replaced as part of the development.

Bicycle parking for both residential and commercial uses are located on private property, with the exception of bicycle parking in the Fairfield Parking area where it is located in the public right-of-way, specifically on the public sidewalk adjacent to the store window. The applicant will be required to obtain an encroachment permit and enter into a maintenance agreement to place the commercial bicycle parking spaces in the public right-of-way.

In addition to the new residential and commercial bicycle parking spaces, the applicant is replacing 8 existing bicycle parking spaces located in front of the Fairfield banquet facility, which will be demolished in the first phase of construction. These 8 bicycle spaces will be used by hotel guests and employees and reallocated equally between the two hotel sites.

Landscape Plan Discussion and Analysis

The applicant has provided a conceptual Landscape Plan and Plant Palette (Attachment No. 5). A full set of Landscape and irrigation Plans will be developed prior to issuance of a building permit and is included as a Condition of Approval. Landscaping is provided in the street setback areas, the two central courtyards, around the parking structures, and within the two pool/roof decks. To provide a variety of sizes of landscaping, including trees that will quickly reach maturity, ESMC Section 15-2-14 requires the following minimum sizes for plant material:

Table No. 6 – Minimum Plant Material Sizes

Container Size	Required	Provided
Trees		
60” box	Not Required	4%
36” box	20%	62%
24” box	30%	34%
15 gallon	50%	-
Shrubs		
5 gallon	100%	100%

In lieu of providing the smaller 15-gallon trees, the applicant has proposed to meet the requirement with larger trees.

Generally, the interior of the site has limited landscaping, due to the compact nature of the development. The proposed landscaping consists primarily of medium size trees within street facing and interior setback areas between parcels within the Specific Plan and properties outside the Specific Plan.

One exception is a portion of the 15-foot setback between PCC North and the abutting residential properties to the west. Staff recommends and has included a condition of approval requiring the applicant to plant additional trees and other landscaping along the entire western setback area, with the tree species being subject to staff review and approval (see Site Plan Review discussion below).

Site Plan Review Discussion and Analysis

During project review, staff proposed several design modifications to the project; however, as part of the ongoing negotiation of the Development Agreement, these items were not included in the final development proposal in order to accomplish a financially feasible project, while providing the City's requested 12% affordable housing units. As such, staff recommends including certain conditions requiring non-structural design changes to further improve the project.

The following discussion is included to provide the Planning Commission a complete picture of the project review process and some concessions made to reach a draft agreement with the applicant. The discussion also highlights the major design modifications conceded during the review process and the minor design modifications recommended as conditions of approval.

PCC North and PCC South elevations:
The proposed elevations of both buildings provide a variety of colors and materials, as well as changes in building planes (step-backs) that provide visual relief from the ground level to the top of the structures. It is unclear from the plans how big those building plane variations are, because they are not fully dimensioned. Condition of approval No. 17 requires submittal of detailed, fully dimensioned drawings for Development Services Director review and approval clearly showing the extent of the building step-backs and various architectural elements. With adequate details on the plans, staff can better evaluate the buildings' architectural design features. Any changes to the design that staff requires would not substantially affect the overall design of the project. Further, this will ensure internal architectural consistency and compatibility.

PCC North and PCC South courtyards/plazas:
As mentioned in the site plan design guidelines discussion, the proposed mixed-use buildings do not include any courts or plazas along the PCH frontage that can serve as gathering spaces and encourage more pedestrian activity. Staff recommends that, at a

minimum, some of the commercial spaces be designed with recessed entries or storefronts to allow for outdoor seating or retail displays, or provision of amenities such as bicycle parking. Condition of approval No.18 requires submittal of revised plans that promote a pedestrian oriented design that does not result in the loss of square footage, including recessed storefronts to accommodate amenities such as seating, bike parking, outdoor dining, outdoor retail display, etc. for the commercial uses at PCC North, PCC-South, and Fairfield Parking sites, subject to Development Services Director review and approval.

This condition partly replaces the public gathering/plaza design feature, in that it will provide some architectural relief, provide a better pedestrian experience, and encourage some pedestrian activity without substantially or structurally altering the overall design.

PCC South – West elevation (Indiana Street):
The west elevation of PCC South fronts on Indiana Street, which is occupied exclusively by residential uses on the west side of the street. Staff recommended during the review process that the project incorporate residential units with entrances along Holly Avenue and Indiana Street to add more visual interest and pedestrian activity along the project frontage on those streets and to better integrate the project with the residential uses across Indiana Street. Although staff continues to believe that such a design would result in a more pedestrian oriented development and street activation, staff does not recommend a re-design to include residential units at the street level.

PCC North Firelane and setback area (Blue Wall):
As mentioned in the project description, PCC North utilizes a 26-foot wide driveway along the western part of the property to provide access to the apartment building parking garage and the townhome units (see Figure No. 10 below). Directly next to the proposed firelane is an existing 6-foot tall concrete block wall painted blue, which is proposed to remain in place. However, it is not located on the western property line;it is set back 15 feet away from the property line, which creates an underutilized 15-foot strip of land running the entire length of the property from Mariposa Avenue to Palm Avenue. During the project review, staff recommended that the wall be removed, rebuilt at the actual property line, and that the 15-foot strip of land be incorporated into the development in the form of a landscaped setback, a pedestrian path, a seating/recreational area, or a combination of those options. This could provide a pedestrian connection and/or recreation space between Mariposa Avenue and Palm Avenue. Instead of removing the blue wall, the applicant proposes to paint it and plant climbing fig to cover the wall and provide some visual relief for residents driving along the firelane.

Rather than require a substantial re-design of the 15-foot setback area along PCC North, staff recommends condition of approval No. 16, which requires new trees or other landscaping materials be planted along the entire 15-foot wide setback area between Mariposa Avenue in order to contribute to screening and sound attenuation. Staff believes the condition will improve the project design and is common practice for new projects particularly those projects abutting residential uses.



Townhome site layout*:*

The proposed six townhomes are arranged in a row north-to-south at the north end of the site. They have a very small ground floor footprint consisting only of a two-car garage space and a stairway leading to the upper floors. All garages are oriented west and take access directly off the firelane/access driveway that runs north-south between Palm Avenue and Mariposa Avenue. The firelane/access driveway does not have a sidewalk along this portion of the site, although there is a sidewalk adjacent to the apartment building directly south of this location.

To improve pedestrian mobility and add more landscaping along the access driveway, staff recommended and a change to the townhome configuration. This would consist of reducing the number of townhomes to four and re-orienting the garages in a north-south direction so that they face each other. This would create more space between the townhome buildings and the fire lane to provide a sidewalk and landscaping, which would then extend from Mariposa Avenue all the way to Palm Avenue.

Staff does not recommend a substantial redesign of the project to re-orient or remove the townhomes. However, staff raised this issue during the project review process and development agreement negotiations to improve the project's design along the firelane without reducing the overall number of residential units.

Townhome Elevations:
The west elevations facing the firelane provide more variety in materials and building planes. This is partly because the garages, main entrances, and the balconies/decks on the upper levels are oriented toward the west. Staff believes that the east elevation should have a similar details and variety. Condition of approval No. 23 requires submittal of revised drawings for the townhome building that incorporate equal detail and variety in building planes and materials on all the elevations, subject to the Development Services Director review and approval that do not result in the loss of square footage. With additional architectural features, such as windows, balconies, etc., the east elevations will provide sufficient variety and interest without affecting the overall design substantially or structurally. Further, staff believes these features provide visual relief and minimize the apparent bulk and mass of the structure.

Figure No. 12 – Townhome Elevations



Additional Specific Plan Design Issues Considered

Circulation:
A potential improvement to the circulation within the Specific Plan area would be to extend Indiana Street from Mariposa Avenue to Palm Avenue as a public or a private street. The Specific Plan circulation plan currently contemplates a private access driveway/firelane at the same location with gates at either end restricting access only to the residential and commercial uses onsite. Removing the gates and adding a full-length sidewalk along this

driveway would provide an additional vehicular and pedestrian connection for the entire neighborhood. Staff recommended allowing public access along this private driveway and studying the potential impacts in the draft Environmental Impact Report (EIR). However, the applicant elected to proceed with the Specific Plan as currently presented.

Specific Plan boundaries:
One potential limitation of the PCC Specific Plan is that it does not incorporate at a minimum the two parcels abutting the PCC North site that are developed with the Unocal 76 station and the Carl's Jr restaurant. Staff believes that inclusion of those two parcels would have allowed for a more efficient design of the entire city block, while producing even more housing (including affordable units). However, the applicant elected to proceed without incorporating additional parcels in the Specific Plan.

Recreation/Open Space:
The Specific Plan does not contemplate any public open space that is accessible to residents or businesses outside the Specific Plan property. There are courtyards and community rooms on the ground level and rooftop decks/pools in each of the mixed-use districts of the Specific Plan, but those amenities are available only to residents of the proposed development. Providing public courtyards, as mentioned above, or replacing some or all of the townhomes in the PCC-North area with a public park would provide an additional amenity for the entire neighborhood. Staff recommended providing public open space where the townhomes are located and compensating by adding more residential units on the top level of the mixed-use buildings. However, the applicant elected to proceed with Specific Plan as currently presented, without publicly available open space.

Commercial Condominiums:
A staff concern with the proposed tract map relates to the proposed for commercial airspace units. The concern is about responsibility for the maintenance of common areas, trash, and landscaping. If the commercial area is divided and sold to multiple owners, the responsibility for the common areas may be neglected. The overall commercial floor area for the project is 11,252 gross sf and up to 30 commercial condominium units are proposed. The conditions of approval currently require recordation of CC&Rs, subject to City review and approval, that address maintenance of common areas and landscaping, including landscaping in the public right-of-way. Alternatively, the Planning Commission or City Council may consider either reducing the number or eliminating the commercial airspaces from the tract map.

Most of the above staff recommendations on the project site plan design were intended to provide physical and visual connections between the proposed development and the surrounding neighborhood, to add more interest at the ground level, and promote more pedestrian activity around the project site. Staff's objective was to better integrate the proposed development into the community around it. However, in the interest of reaching an agreement on the Development Agreement and the percentage of affordable units, staff did not pursue these points further. If the Planning Commission believes these issues are worth further exploring, the Commission has the authority to ask the applicant

to address them, including any potential implication on project design or impact to the number of affordable housing units, prior to making a decision on the project or including additional conditions when formulating a recommendation to City Council.

Dedications and Waiver Request

Chapter 24A of the Municipal Code requires certain right of way dedications in order for streets around the project site to meet the minimum standards in the Circulation Element of the General Plan. The required dedications based on the Circulation Element and the proposed dedications for the project are described in Table No. 7 below.

Table No. 7 – Required Dedications and Waiver Requests

Street Segment	Required Dedication	Requested Waiver	Net Proposed Dedication
Holly Avenue (North)	7 feet	0 feet	7 feet
Indiana Street (East)	7 feet	3 feet	4 feet*
Mariposa Avenue (South)	7 feet	3 feet	4-12 feet**
Mariposa Avenue (North)	7 feet	0 feet	7 feet
Palm Avenue (South)	12 feet	0 feet	12 feet

*Along Indiana Street, dedications are required only along the property frontage where new construction will occur (Fairfield Parking and PCC South Sites). No dedication is required along the existing hotel properties' frontage.
**The dedication width along the south side of Mariposa Avenue varies to accommodate the width of a proposed right-turn lane.

In accordance with ESMC Chapter 24A, the applicant has submitted a request to partially waive the dedications on two street segments, along Mariposa Avenue (South) and Indiana Street (East). After reviewing the requested waivers, the Public Works Director determined that the necessary findings can be made to approve the request. Specifically, even with the reduced dedications, both Indiana Street and Mariposa Avenue will maintain the minimum necessary width for emergency vehicle access and normal two-way operations, as well as maintain the minimum required public sidewalk widths. As a result, staff recommends that the Planning Commission recommend approval of the proposed dedication waivers to City Council. A more detailed discussion of the findings is provided in the attached draft resolution (Attachment No. 1).

Right Turn Lane:
The proposed project includes construction of a dedicated right-turn lane on eastbound Mariposa Avenue to southbound PCH. As a result, the east bound lanes of Mariposa Avenue at PCH would be reconfigured from one left-turn lane and one through-right lane, to one left-turn, one through, and one right-turn lane. The proposed right-turn lane is 10 feet wide and approximately 50 feet long (at full width) with a gradual (60-foot) taper. Based on the traffic analysis for the project, inclusion of the proposed right-turn lane will improve the operation and traffic flow at the Mariposa Avenue/PCH intersection.

Modifications to hotel CUP approvals

In 2014, the Planning Commission approved a Subdivision (SUB 14-05) to combine the underlying Hacienda Hotel site into two parcels to allow the Hacienda Hotel to be split into two hotels and remodeled. It also approved two conditional use permits (CUP 14-01 and CUP 14-02) to regulate the alcohol sales and service at each of the hotels. Resolutions Nos. 2759 and 2760 regulating the alcohol sales and service at each hotel also contain unrelated conditions regarding:

a. Subdivision No. SUB 14-05;
b. Off-site parking for the two hotels;
c. A lot-tie covenant between the Fairfield hotel site and the parking lot north of Mariposa Avenue; and
d. Construction conditions related to the 2014 remodel.

All these conditions (a-d) will be superseded with the approval of the proposed Pacific Coast Commons project, which contains conditions regarding sharing of access and parking between the proposed lots in the Specific Plan area. However, the existing CUPs and conditions regarding the alcohol sales and service need to remain in place. As a result, staff recommends that the Planning Commission approve resolutions Nos. 2906 and 2907 recommending City Council approve modifications to the existing CUPs to retain only those conditions related to the alcohol sales and service at each hotel.

Development Agreement Discussion and Analysis

City staff and applicant negotiated the attached Development Agreement to stipulate and to clarify the benefits, which each party is providing towards the completion and on-going implementation and maintenance of the PCC project. The term of the Development Agreement is 15 years and provides for an annual monitoring and reporting of good faith performance by both parties.

The Development Agreement stipulates that the applicant shall comply with this Agreement, and all Project approvals and EIR mitigation measures. The items contained in the Development Agreement are in addition to the code-required project development.

The applicant is providing the following additional development improvements, which are not required in either the City's General Plan, Zoning Ordinance, or PCC Specific Plan, and are considered to be of benefit to the community. The applicant is providing the following items as contained in the Development Agreement:

- **Affordable Housing:** The applicant agrees to provide 32 units of affordable housing for 55 years and to pay for an independent affordable housing consultant to monitor the implementation of the affordable housing program. The Affordable

Housing provisions are further detailed in a separate affordable housing agreement, which is discussed in the next section.

- **Preferential Parking Zone:** The applicant agrees to contribute $25,000 towards the establishment of a permit parking district, contingent upon community initiation. If after three years nearby residents do not initiate a parking district, the funds may be used towards the implementation of any public improvement that benefits the immediate neighborhood.

- **Community Meeting Room:** The applicant agrees to provide a meeting room for community non-profits to use at no charge.

- **Additional Public Landscaping and Public Seating Areas**: The applicant agrees to provide additional street trees on certain sections of the west side of Indiana Street, near Holly Avenue, as well as along the southern portion of PCH. The applicant further agrees to provide solo seating facilities, on private property, along the PCH frontage.

- **Enhanced Paving:** The applicant agrees to provide enhanced paving materials for specific locations to increase pedestrian safety.

- **EV Charging Stations:** The current CalGreen code requires 62 parking spaces to be capable of converting into an EV Charging Station. The applicant agrees to provide 200 EV spaces, of which 50 will have operational charging stations upon the completion of each construction phase. The remaining 150 EV parking spaces will be capable of converting to EV Charging Stations at a later date.

- **Solar Panels and Battery Storage:** The applicant agrees to provide solar panels, mounted on the top floor of the parking structures, to provide electricity for the project common areas, as well as battery storage units.

In exchange for the community benefits, the City is providing certain assurances to the applicant that reduces the applicant's risk and increases certainty:

- Certainty that the PCC Project is subject to only those City fees, codes, and regulations that are in effect at the time of approving the Development Agreement.
- Expedited process to review building plans.

Affordable Housing

As mentioned earlier in this report, the City's RHNA obligation is 521 units distributed among four income categories based on Table No. 8 below.

Table No. 8 – Housing Element RHNA allocation

Income Category	5th Cycle Carryover	6th Cycle RHNA	Total RHNA	Percent
Very Low Income	18	189	207	39.7%
Low Income	11	88	99	19.0%
Moderate Income	0	84	84	6.1%
Above Moderate Income	0	131	131	25.1%
Total	29	492	521	100.0%

The above RHNA obligation for the 2021-2029 period is seven times larger than that for the previous planning period (2013-2021). As a result, finding an adequate number of potential housing locations in the City and incentivizing and/or requiring the construction of affordable units is imperative. The PCC project offers an opportunity for the City to make significant progress towards meeting its RHNA obligations. The 32 affordable units agreed to in the Development Agreement will meet a significant proportion of the City's RHNA obligations in the low and very low-income categories. As part of the development agreement, the applicant will record two affordable housing agreements, one for each housing site (PCC South and PCC North). The two affordable housing agreements are attached to this report as Development Agreement Exhibits D1 and D2. Each agreement defines the affordability requirements, requires the affordable housing units to be equitably distributed throughout the two residential sites, provides the minimum number and type of apartment unit for each income category (summarized in Table No. 9 below), and identifies the annual monitoring requirements and reporting methodology.

Table No. 9 – Affordable Unit Types and Income Levels

Housing Site	Type of Unit	PCC South	Affordable Housing Units (Sub-Set of Total)	Affordability Levels
PCC South	Studios	44	9	1 Very Low/8 Low
	One Bedrooms	52	5	5 Low
	Two Bedrooms	24	1	1 Low
	Subtotals	**120**	**15**	**1 Very Low/14 Low**
PCC North	Studios	47	9	2 Very Low/7 Low
	One Bedrooms	67	6	6 Low
	Two Bedrooms	23	2	2 Low
	Subtotals	**137**	**17**	**2 Very Low/15 Low**
	Totals	**257**	**32**	**3 Very Low/29 Low**

Development Feasibility Analysis

The Development Agreement negotiations were informed by the findings of a Development Feasibility Analysis conducted by Keyser Marston Associates (KMA), the City's economic/financial consultant for this project. KMA based their analysis on construction pro forma information provided by the applicant, their own expertise in public and private real estate development, and market information on current rents and sales prices for real estate. For their analysis KMA also assumed that 10% (or 26) of the proposed residential units would have rents restricted at levels affordable to households with low incomes. The purpose of the analysis was to help determine whether the project would be financially feasible if it incorporates a certain percentage of affordable units and to what extent the City could gain additional benefits through the Development Agreement. KMA's analysis indicates that with 10% of the residential units set aside for low income households, the proposed development is feasible, but that there is little ability to negotiate for additional benefits to the City.

Fiscal Impact Analysis

In addition to the Development Feasibility Analysis, KMA peer reviewed a Fiscal Impact Analysis prepared by Stanley Hoffman Associates (SHA), a consultant retained by the applicant. The purpose of the Fiscal Impact Analysis was to determine the impact of the proposed project on the City budget through a comparison of the anticipated annual City revenues (taxes, service charges, etc.) with the anticipated annual City costs for services (Police, Fire, Recreation, etc.) from the project. KMA peer-reviewed the Fiscal Impact Analysis and agreed with its estimate that the proposed development would have a net negative impact on the City budget of $127,631 annually. For contextual purposes, KMA indicated to staff that residential developments generally tend to have a more negative fiscal impact for cities compared to commercial developments.

ENVIRONMENTAL REVIEW

Notice of Preparation

Pursuant to the requirements of the California Environmental Quality Act (CEQA) and based on staff's review of the project and discussion with the applicant, City staff concluded that the project necessitated the preparation of an EIR. As such, on May 26, 2020, the City distributed a Notice of Preparation (NOP) for an EIR, initiating a 30-day public scoping period that concluded on June 25, 2020. The purpose of the NOP was to indicate formally that the City was preparing a Draft EIR for the PCC Project and, as Lead Agency, to solicit input regarding the scope and content of the Draft EIR. The City held a public scoping session on June 10, 2020 to provide the public with an opportunity to learn more about the PCC Project before submitting any written comments. The NOP was distributed to all Responsible Agencies, as well as other agencies; property owners and occupants within a 300-foot radius from the subject property, plus additional occupants of properties immediately east of Independence Park between Holly Avenue

and Palm Avenue, and published in the El Segundo Herald. The NOP was also posted on the City's website.

Draft EIR

After the NOP comment period ended, the Draft EIR was prepared taking into account and addressing the various comments received during the NOP phase. After completing the Draft EIR, the document was made available to the public on February 25, 2021 for a 45-day public comment and circulation period that concluded on April 12, 2021. The purpose of this circulation period is to allow the public and agencies to provide input on the content and analysis contained in the Draft EIR.

The Draft EIR analysis determined that the project would have less than significant impacts in the following topical issues: Aesthetics, Agriculture and forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, hydrology and Water Quality, Land Use, Mineral Resources, Noise, Population and Housing, Public Services and Recreation, Transportation, Utilities and Services Systems, and Wildfire. In addition, the analysis determined that the project would have less than significant impacts with mitigation incorporated in the following issues: Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, Transportation, and Tribal Cultural Resources. The impacts and mitigation measures related to these environmental factors are summarized in the Final EIR Executive Summary. Finally, the Draft EIR analysis found that the project would have a significant and unavoidable impact to Air Quality.

Final EIR

As a result of circulating the Draft EIR, the City received 37 comment letters. The Final EIR document contains a section titled "Response to Comments," which contains each written comment submitted, responses to each comment, and a section containing the mitigation measures identified in the EIR document to reduce impacts to a less than significant level. Lastly, the Final EIR contains an Errata section to the DEIR, which contains some minor modifications to the text for clarification or edits resulting from the comments received. The text modifications are shown in <u>underline</u> for language added and ~~strikethrough~~ for language deleted. As a result of the comment and circulation periods associated with the NOP and the subsequent Draft EIR, and with the edits made to the Final EIR and responses to comments, no new impacts have been identified to warrant recirculation of the document or significant amendments to the analysis.

EIR Findings

Pursuant to CEQA requirements, the City is required to adopt two sets of findings prior to approving a project that will generate a significant and unavoidable impact on the environment: 1) Statement of Facts and Findings, and 2) a Statement of Overriding Considerations.

Statement of Facts and Findings: The Statement of Facts and Findings identifies the significant impacts, presents facts supporting the conclusions reached in the analysis, makes one or more of the following three findings for each impact, and explains the reasoning behind the City's findings. The possible findings are as follows:

1. Changes or alteration have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained works, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

The attached Exhibit "4", titled "Findings of Fact and Statement of Overriding Considerations" provides draft findings for each of the impacts identified and provides the necessary supporting evidence. In summary, staff believes that Finding No. 3 can be adopted because:

a. The proposed project would maintain the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood.

b. The proposed project would provide additional housing opportunities that support the goals of the Housing Element of the City's General Plan.

c. The proposed project would improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.

d. The proposed project would enhance bicycle and vehicular circulation through roadway intersection improvements that facilitate a safe and walkable community along PCH.

e. The proposed project would eliminate surface parking lots and provide parking garages that allow for sharing among hotel, commercial, and residential land uses.

f. The proposed project would reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

Based upon the mitigation measures identified in the EIR document, this finding can be made and adopted.

Statement of Overriding Considerations: The Statement of Overriding Considerations is required when a project will cause an unavoidable significant impact that cannot be mitigated. The EIR prepared for the proposed project identifies potentially significant environmental impacts within one issue area related to Air Quality, which cannot be fully mitigated and is therefore considered significant and unavoidable. Specifically, in regards to Air Quality, the proposed project would conflict with the region's Air Quality Management Plan (AQMP) population and housing estimates. The project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD administers the Air Quality Management Plan for the region which relies on population growth estimates in the Final SCAG 2016 RTP/SCS for the 2012-2040 period. Using population and housing estimates from the California Department of Finance, the City has a household size of 2.35 persons per household (DOF 2020). Assuming a household size of 2.35 persons per household, the proposed Project's residential units would accommodate 618 individuals upon its anticipated full occupancy in 2025. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. There are no feasible mitigation measures for population growth. As a result, for the purposes of CEQA analysis, the proposed Specific Plan will have a significant and unavoidable impact with regard to AQ.

As a result, a Statement of Overriding Considerations must be adopted, (ultimately, by the City Council for this project). In adopting a Statement of Overriding Considerations, Staff believes that the following finding can be made:

The proposed project's benefits outweigh the significant and unavoidable impacts and, therefore, those impacts are acceptable in light of the proposed project's benefits. Each of the following benefits is an overriding consideration, independent of the other benefits, that warrants approval of the proposed project notwithstanding the proposed project's significant and unavoidable impacts related to air quality. The proposed project would provide several public benefits, including, without limitation, the following:

1. The Project is consistent with the City's housing strategy to facilitate the development of affordable housing units and meet its Regional Housing Needs Allocation (RHNA).

2. The Project will physically improve two underutilized parking lots and a vacant 41,660 square-foot food and beverage building and replace them with 263 much needed housing units as well as 11,252 square feet of retail, service and restaurant uses to serve the neighboring residents and businesses.

3. The Project make land dedications and several improvements in the public right-of-way that will improve vehicular, bicycle, and pedestrian circulation in the area, including:

a. Construction of a right turn lane from eastbound Mariposa Avenue onto southbound PCH.
b. Widening and sidewalk reconstruction along Holly Avenue between PCH and Indiana Street.
c. Installation of street trees along PCH, Holly Avenue, Indiana Street, Mariposa Avenue, and Palm Avenue.
d. Installation of public seating along PCH.

4. The Project is consistent with the City's housing strategy to direct growth in regional centers and areas near transit stations, major bus centers, and bus stops along major bus routes.

5. The Project is a mixed-use development that would generate fewer vehicle trips than traditional single-use and subdivision development, and it would take advantage of existing infrastructure systems serving the area.

6. The Project would implement the majority of the proposed measures by the California Air Pollution Control Officers Association (CAPCOA) to reduce GHG emissions, which also reduce criteria pollutants.

7. Promotes consistency with regional growth strategies, such as the SCAG 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy, by increasing density within the Plan area.

To the extent the Air Quality impact would remain significant after mitigation, this impact is acceptable and outweighed by social, economic and other benefits of the project. Further, the alternatives that were identified in the Final EIR would not provide the project benefits to the same extent as the proposed project.

Therefore, having reviewed and considered the information contained in the Final EIR, Technical Appendices and the public record, staff believes that a Statement of Overriding Considerations has been balanced against the unavoidable adverse impacts in reaching a decision on this project, and that a Statement of Overriding Considerations can be adopted.

As indicated above, the attached Exhibit "4", titled "Findings of Fact and Statement of Overriding Considerations", provides the details and justification for making the necessary findings and Statement of Overriding Considerations.

PUBLIC COMMENTS

The day of the December 9, 2021 Planning Commission meeting staff received lengthy and substantial written correspondence from two legal firms commenting and expressing concern about the analysis in the EIR:

1) Legal firm Mitchell M. Tsai representing Southwest Regional Council of Carpenters ("Southwest Carpenters" or "SWRCC") and
2) Legal firm Lozeau Drury, LLP representing Supporters Alliance For Environmental Responsibility ("SAFER").

Due to the extent and substantive nature of the comments, the Planning Commission -at staff's recommendation- continued the item to a date uncertain to give staff adequate time to review and respond to the comments. Prior to continuing the item, the Planning Commission also received oral testimony from several residents and interested parties who attended the December 9, 2021 meeting. The written correspondence, a summary of the oral testimony received, as well as responses to each of the comments, are attached as Exhibit No. 11.

Further, since the December 9, 2021 meeting, staff has received correspondence from residents expressing general concern on issues such as parking (during and after construction), traffic, and construction noise that are addressed in this report and the EIR. That written correspondence is attached as Exhibit No. 10.

ADDITIONAL INFORMATION:

Specific Plan Public Outreach/Participation

When the applicant initially approached staff with a development concept in 2019, staff suggested the applicant commence rigorous public outreach efforts due to the number of residential properties and neighborhoods that abut and are in close proximity to the specific plan area. Staff suggested the applicant also take a proactive approach to engage with the community, listen to their issues and concerns, and work with them to create a development project that is sensitive to those abutting communities. In response, the applicant conducted a community-wide open house meeting at the Fairfield Inn & Suites hotel and a virtual community meeting via Zoom. These meetings were advertised by sending individual mailers to residents living within 300' of the specific plan boundaries and was further extended to the residents living west of the Freedom Park along Washington Street. The two meetings were attended by at least 56 participants. City staff also attended these two meetings to observe and note the feedback provided by the community. Generally, the feedback consisted of questions/concerns regarding traffic, parking, height, noise, and air quality impacts from the project's construction and operation. The applicant also presented the project to four local community service organizations, including the Chamber of Commerce, El Segundo Kiwanis Club, El Segundo Rotary Club, and the El Segundo Unified School District Board. City staff were not present at these additional meetings/presentations. Information concerning the project, including renderings and plans, was also posted on the City's website and the applicant's website. The Specific Plan was posted on the website and copies were available for public review at the Development Services Department.

ORIGINATED BY: Paul Samaras, AICP, Principal Planner AS
REVIEWED BY: Eduardo Schonborn, AICP, Planning Manager EAS
APPROVED BY: Michael Allen, AICP, Director of Development Services MA

ATTACHED DOCUMENTS

1. Planning Commission Resolution No. 2905
   - Exhibit A – Conditions of Approval
   - Exhibit B – Ordinance
     - Ord. Exhibit A – Zoning Map Changes
     - Ord. Exhibit B – Pacific Coast Commons Specific Plan
     - Ord. Exhibit C – Development Agreement
   - Exhibit C – Amendment to General Plan Land Use Designations
   - Exhibit D – Amendment to General Plan Land Use Plan Northwest Quadrant subsection
   - Exhibit E – Amendment to 1992 General Plan Summary of Existing Trends Build-out
   - Exhibit F – Amendment to General Plan Land Use Map
   - Exhibit G – Vesting Tentative Map (VTM) No. 82806
   - Exhibit H – Parking Demand Study and Shared Parking Analysis
   - Exhibit I – Street Dedication Map
2. Pacific Coast Commons Specific Plan Environmental Impact Report (State Clearinghouse Document # 2020050508)
3. Mitigation Monitoring and Reporting Program
4. Environmental Findings of Fact and Statement of Overriding Considerations
5. Planning Commission Resolution No. 2906
   - Exhibit A – Conditions of Approval
6. Planning Commission Resolution No. 2907
   - Exhibit A – Conditions of Approval
7. Proposed Development Plans
8. Financial Feasibility Analysis
9. Fiscal Impact Analysis
10. Public communications
11. Responses to written comments and oral testimony received on December 8 and 9, 2021.

RESOLUTION NO. 2905

A RESOLUTION MAKING FINDINGS OF FACT PURSUANT TO CEQA AND RECOMMENDING THAT THE CITY COUNCIL (1) CERTIFY THE ENVIRONMENTAL IMPACT REPORT (ENVIRONMENTAL ASSESSMENT NO. EA-1248) FOR THE PACIFIC COAST COMMONS SPECIFIC PLAN PROJECT, MAKE FINDINGS OF FACT AND ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS; (2), ADOPT GENERAL PLAN AMENDMENT NO. GPA 19-01, SPECIFIC PLAN NO. SP 19-01, ZONE CHANGE AND ZONING MAP AMENDMENT NO. ZC 19-01, AND ZONE TEXT AMENDMENT NO. ZTA 19-08; (3) APPROVE DEVELOPMENT AGREEMENT NO. 19-02; (4) APPROVE SUBDIVISION NO. SUB 19-03, SITE PLAN REVIEW NO. SPR 19-01, PARKING DEMAND STUDY AND SHARED PARKING USE ANALYSIS; AND (5) APPROVE A WAIVER OF PUBLIC RIGHT-OF-WAY DEDICATIONS FOR THE PACIFIC COAST COMMONS SPECIFIC PLAN AND PACIFIC COAST COMMONS MIXED-USE PROJECT.

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: The Planning Commission finds and declares that:

A. On May 31, 2019, BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC, submitted applications for Environmental Assessment No. EA-1248, General Plan Amendment and General Plan Map Amendment No. GPA 19-01, Specific Plan No. SP 19-01, Zone Change and Zoning Map Amendment No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, Development Agreement No. 19-02, Subdivision No. SUB 19-03, Site Plan Review No. SPR 19-01, Parking Demand Study and Shared Parking Use Analysis, and waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and Pacific Coast Commons mixed-use project;

B. The project applications were reviewed by the City's Development Services Department for, in part, consistency with the General Plan and conformity with the El Segundo Municipal Code ("ESMC");

C. The City reviewed the project's environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

D. An Environmental Impact Report (EIR) was prepared pursuant to the requirements of CEQA Guidelines Section 15161 as more fully set forth in Section 9 below;

E. The Development Services Department completed its review and scheduled a public hearing regarding the application before the Planning Commission for

November 18, 2021;

F. On November 18, 2021, the Planning Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the application;

G. On November 18, 2021, the Planning Commission continued the public hearing to December 9, 2021; and

H. On December 8, 2021 a letter was submitted to the City by Mitchell M. Tsai, Attorney At Law, on behalf of the Southwest Regional Council of Carpenters ("Carpenters' Letter") objecting to the Project and referring to an earlier letter which had never been received by the City which raised issues with the EIR; and

I. Based on the submission of the Carpenters' Letter the City determined that it would be necessary to continue the hearing to allow time to respond, but nevertheless took testimony on December 9, 2021; and

J. During the public testimony portion of the hearing, a letter was submitted by the Lozeau Drury law firm on behalf of Supporters Alliance For Environmental Responsibility ("SAFER letter");

K. On February 10, 2022, the Planning Commission held a new duly noticed public hearing to receive public testimony and other evidence regarding the application;

L. This Resolution and its findings are made based upon the evidence presented to the Commission at its November 18, 2021, December 9, 2021, and February 10, 2022 hearings including the staff reports submitted by the Development Services Department and the totality of the evidence in the administrative record.

SECTION 2: *Factual Findings and Conclusions*. The Planning Commission finds that the following facts exist:

A. The subject property is located at 475-629 North Pacific Coast Highway in the northwest quadrant of the City of El Segundo.

B. The property site is a level 6.385 gross acre site located on two blocks along Pacific Coast Highway.

C. The project site is comprised of two blocks and is currently improved with two existing hotels and two existing paved parking lots. The block bounded by Pacific Coast Highway, Holly Avenue, Indiana Street and Mariposa Avenue is currently developed with the 350-room Fairfield Inn and Suites and the 246-room Aloft hotels totaling approximately 325,000 gross square feet combined and a paved parking lot. The portion of the project site on the block north of Mariposa Avenue and south of Palm Avenue is developed with a paved surface parking lot. No trees are located

on the parking lot site.

D. The project is a residential and commercial mixed-use concept. The Specific Plan would allow 622,398 gross square feet of development including 282,398 square feet of existing development that would remain. The proposed maximum development density is a 2.70 Floor Area Ratio (FAR) after dedications for right-of-way improvements. The Specific Plan would allow a maximum of two hundred sixty-three (263) residential dwelling units including thirty-two (32) affordable housing units located among three of the Land Use Districts within the Specific Plan. Each new lot will meet or exceed the minimum size and dimension requirements.

E. The surrounding land uses include a fast food restaurant (Carl's Jr.), a vacant restaurant and parking lot, and multi-family residential uses to the north and a gas station on the northwest corner of Mariposa Avenue and Pacific Coast Highway; restaurants and office uses, a Ralphs market, two commercial shopping centers with retail and restaurant uses, and a 6- story office building to the east; a small commercial shopping center with a drug store, bank, two restaurants and retail store to the south; and multi-family residential uses to the west.

F. Development standards for allowable uses have been developed for the Specific Plan and all uses within the Plan area must be compliant. The allowed uses identified in the development standards include multiple-family residential uses including both townhomes and apartments, and a range of commercial uses including but not limited to, hotel, retail, restaurant, and offices.

G. The proposed General Plan re-designation and rezoning of the Project Site would change the General Plan land use designation from General Commercial and Parking to the Pacific Coast Commons Specific Plan (PCCSP) land use designation and rezone the area from the General Commercial (C-3) Zone and Parking (P) Zone to the Pacific Coast Commons Specific Plan (PCCSP) Zone.

H. The PCCSP contains five land use designations. These are: PCC Mixed-Use 1 (PCC MU-1), PCC Commercial-1 (PCC COM-1), PCC Commercial-2 (PCC COM-2), PCC Commercial-3 (PCC COM-3), and PCC Mixed-Use 2 (PCC MU-2). The PCC MU-1 designation applies to one parcel comprised of 1.241 acres after right-of-way dedications. The PCC COM-1 designation applies to one parcel comprised of 0.905 acres after right-of-way dedications. The PCC COM-2 designation applies to one parcel comprised of 1.549 acres after right-of-way dedications. The PCC COM-3 designation applies to one parcel comprised of acres after 0.728 acres after right-of-way dedications. The PCC MU-1 designation applies to two parcels comprised of 1.806 acres after right-of-way dedications.

I. The Project includes completion of a roadway widening on Mariposa Avenue and the addition of a new eastbound dedicated right-turn only travel lane that turns

south onto Pacific Coast Highway. The Project also includes roadway widening on Holly Avenue.

SECTION 3: *General Plan Consistency Findings*. The Planning Commission finds that the proposed Project will further the goals, objectives and policies of the General Plan and not obstruct their attainment. The Project's consistency with the General Plan is analyzed below:

A. ECONOMIC DEVELOPMENT ELEMENT

Goal ED1: To create in El Segundo a strong, healthy economic community in which all diverse stakeholders may benefit.

Objective ED1-1 To build support and cooperation among the City of El Segundo and its business and residential communities for the mutual benefits derived from the maintenance and expansion of El Segundo's economic base.

Policy ED1-1.1: Maintain economic development as one of the City's and the business and residential communities' top priorities.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Policy ED1-2.2: Maintain and promote land uses that improve the City's tax base, balancing economic development and quality of life goals.

Analysis: In order to have a strong economic base and maintain and attract high-caliber businesses, there needs to be housing for employees in nearby areas. The provision of 263 new housing units, ranging in size from studio units to townhome style condominiums, including 32 affordable units, provides new housing opportunities that will help maintain and expand the City's business community. The addition of new residents will help support the local businesses in the area. The redevelopment of the project area, from unused buildings and surface parking lots, along with new commercial development, will add to the City's tax base allowing the City to continue providing high quality services to the residents and daytime population.

B. LAND USE ELEMENT

Policy LU1-5.8: Innovative land development and design techniques as well as new materials and construction methods should be encouraged.

Goal LU3: Promote the health, safety, and well-being of the people of El Segundo by adopting standards for the proper balance, relationship, and distribution of the residential land uses.

Objective LU3-1: Preserve, protect, and extend, if possible, existing Single-Family Residential uses.

Policy LU3-2.1: Promote construction of high-quality Multi-Family Residential development with ample open space, leisure and recreational facilities.

Policy LU3-2.2: Multi-family development will be located only in appropriate places and evaluated carefully to ensure that these developments are not detrimental to the existing single-family character.

Objective LU3-3.1: Adopt and enforce recreational area requirements for large multiple unit developments.

Analysis: The project is located on the eastern edge of the residential area of the City, adjacent to multi-family development and will not impact existing single-family neighborhoods. The project will be of the highest quality residential development with common space areas such as pools, courtyards, and a community center.

Goal LU4: Provide a stable tax base for the City through development of new commercial uses, primarily within a mixed-use environment, without adversely affecting the viability of Downtown.

Objective LU4-1: Promote the development of high-quality retail facilities in proximity to major employment centers.

Policy LU4-1.1: Require landscaping, its maintenance, and permanent upkeep on all new commercial developments.

Policy LU4-1.2: All commercial facilities shall be built and maintained in accordance with Health and Safety Code requirements and shall meet seismic safety regulations and environmental regulations.

Policy LU4-1.4 New commercial developments shall meet seismic safety standards and regulations, as well as comply with all noise, air quality, water and environmental regulations.

Analysis: The project is a mixed-use project, mixing residential and commercial development on the west side of Pacific Coast Highway. The commercial development will serve the new residents and adjacent business community and not detract from the businesses in Downtown. The developments will be required to maintain the landscape and premises and all buildings will be constructed to meet the most current building code requirements as well as be designed to comply with all environmental regulations.

Objective LU4-4: Provide areas where development has the flexibility to mix uses, in an effort to provide synergistic relationships

which have the potential to maximize economic benefit, reduce traffic impacts, and encourage pedestrian environments.

Policy LU4-4.6: Promote mixed-use development near transit nodes and encourage modes of transportation that do not require an automobile.

Analysis: The project is located along a major bus route corridor and approximately ½ mile from a Green Line Station and within close proximity to major employment centers allowing for people to walk, ride bicycles, and/or use public transportation. Additionally, as the project is mixed-use, there will be amenities for the resident population on-site, thereby reducing vehicular trips.

Goal LU7: Provide the highest quality public facilities, services, and public infrastructure possible to the community.

Policy LU7-1.2: No new development shall be allowed unless adequate public facilities are in place or provided for.

Policy LU7-2.3: All new development shall place utilities underground.

Analysis: The project will be required to pay public facility impact fees, including for facilities, vehicles, and equipment for law enforcement, fire suppression, and general services, as well as libraries, community centers, and road projects.

C. CIRCULATION ELEMENT

Goal C1: Provide a safe, convenient, and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.

Objective C1-1: Provide a roadway system that accommodates the City's existing and project land use and circulation needs.

Policy C1-1.8: Provide all residential, commercial, and industrial areas with efficient and safe access to the major regional transportation facilities.

Policy C1-1.9: Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy C1-1.14: Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further require the implementation of appropriate mitigation measures prior to, or in conjunction with project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system, intersection improvements, and other measures.

Mitigation measures shall be provided by or paid for by the project developer.

Objective C1-3: *Ensure that the City's Master Plan Truck Route System efficiently serves the shipping needs of the commercial and industrial land uses in El Segundo while balancing potential conflicts with residential and recreation land uses throughout the City.*

Policy C1-3.2: Ensure that the development review process incorporates consideration of off-street commercial loading requirements for all new projects.

Objective C2-1: *Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.*

Policy C2-1.6: Encourage shopping areas to design their facilities for ease of pedestrian access.

Policy C2-1.7: Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.

Objective C2-2: Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.

Policy C2-2.1: Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises; i.e., through development, private grants, signing of shared routes.

Policy C2-2.2: Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.

Policy C2-5.1: Ensure that Transportation Demand Management (TDM) measures are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

Policy C3-1.8: Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.

Policy C3-2.1: Ensure the provision of sufficient on-site parking in all new development.

Analysis: The project was thoroughly reviewed by the City's Development Services Department to ensure the adequacy of parking facilities and

pedestrian access and also reviewed by the Fire and Police Department. A parking study was provided to demonstrate the adequacy of the parking. The project will provide 70 bicycle parking spaces for residents and guests. The sidewalks along Pacific Coast Highway are 12 feet wide, allowing for a pedestrian-friendly environment for the mixed-use development. The project will include a widening of eastbound Mariposa Avenue, approaching Pacific Coast Highway, to include a right-turn only lane. Additionally, the project will provide dedications and irrevocable offers of dedication for other right-of-way improvements.

D. HOUSING ELEMENT

Goal 3: Provide opportunities for new housing construction in a variety of locations and a variety of densities in accordance with the land use designations and policies in the Land Use Element.

Analysis: The project provides a variety of new housing opportunities, including 32 affordable units, at the eastern edge of the City's residential area along Pacific Coast Highway, along with densities that are not realistically achievable in other areas of the City.

E. OPEN SPACE AND RECREATION ELEMENT

Goal OS1: Provide and maintain high quality open space and recreational facilities that meet the needs of the existing and future residents and employees within the City of El Segundo.

Analysis: The project will pay impact fees, including those for libraries, public use facilities, and parks/open space and recreation facilities. Additionally, the project will provide common open space areas including rooftop pools, courtyards and community rooms which would provide an alternative to public parks and recreational facilities.

F. CONSERVATION ELEMENT

Policy CN2-5: Require new construction and development to install water-conserving fixtures and appliances to reduce the amount of new demand.

Policy CN2-7: Require new construction and development to incorporate the principles and practices of sound landscape design and management, particularly those conserving water and energy.

Policy CN2-8: Encourage the retrofitting of existing landscapes to incorporate the principles and practices of sound landscape design and management, particularly those conserving water and energy.

Policy CN2-11: Encourage, whenever appropriate and feasible, development techniques which minimize surface run-off and allow replenishment of soil moisture. Such techniques may include, but not be limited to, the on-site use and retention of storm water, the use of pervious paving material (such as walk-on-bark, pea gravel, and cobble mulches), the preservation of vegetative covers, and efficiently designed and managed irrigation systems.

Analysis: The project will comply with all requirements of the Cal-Green Code, including the installation of water-saving fixtures, as well as comply with the California Model Water Efficient Landscape Ordinance, and low-impact development requirements.

G. AIR QUALITY ELEMENT

Goal AQ3: Vehicle work trip reduction for private employees.

Objective AQ-3-1: Increase the proportion of work trips made by transit.
Analysis: The project is located along a major bus route corridor and approximately ½ mile from a Green Line Station and within close proximity to major employment centers allowing for people to walk, ride bicycles, and/or use public transportation. Additionally, as the project is mixed-use, there will be amenities for the resident population on-site, thereby reducing vehicular trips.

Goal AQ12: Reduction in Residential, Commercial, and Industrial Energy Consumption.

Objective AQ-12-1: Enact the recommendations of the AQMP Energy Working Group for commercial and residential buildings and adopt ordinances to mitigate air quality impacts from water and pool heating systems.

Policy AQ-12-1.2: It is the policy of the City of El Segundo that the City encourage the incorporation of energy conservation features in the design of new projects and the installation of conservation devices in existing developments.

Analysis: The project will comply with Cal-Green requirements. There will be 200 EV capable spaces, including 50 installed EV chargers across the PCC Specific Plan area. Additionally, solar panels will be installed in both the PCC North and PCC South developments that will generate sufficient power for their respective common area power needs.

H. NOISE ELEMENT

Goal N1: Encourage a high quality environment within all parts of the City of El

Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise**.**

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Objective N1-2: It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1: Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A: Address noise impacts in all environmental documents for discretionary approval projects, to ensure that noise sources meet City Noise Ordinance standards. These sources may include mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

Analysis: The project underwent a thorough environmental analysis, including for noise, and it was determined that there would not be significant noise impacts. The project will be designed to meet the City's noise standards.

I. PUBLIC SAFETY ELEMENT

Goal PS1: Protect the public health and safety and minimize the social and economic impacts associated with geologic hazards.

Objective PS1-1: It is the objective of the City of El Segundo to reduce exposure to potentially hazardous geological conditions through land use planning and project review.

Policy PS1-1.1: Continue to review proposals for new development and for the expansion of existing development in areas of potential geological hazards.

Program PS1-1.1A: The City shall review projects to ensure that slope design considers the potential effects of high rainfall, private sewage systems, landscaping irrigation, and possible runoff from adjacent future development.

Policy PS1-1.2: Enforce, monitor and improve development standards which place the responsibility on the developer, with advice from qualified engineers and geologists, to develop and implement adequate mitigation measures as

conditions for project approval.

Program PS1-1.2A: The City shall review projects to ensure that adequate geotechnical investigation has been completed in areas susceptible to land sliding and debris flows and in areas where collapsible or expansive soils occur, and to approve only those which mitigate these hazards to the satisfaction of the City Engineer.

Policy PS2-1.2: The City shall assist in the prevention of structural damage in areas with a high potential for liquefaction, landslides, and mudslides by requiring geotechnical studies for new development to mitigate potential impacts.

Analysis: The project underwent a thorough environmental review, including for geological issues and it was determined that by following the building codes, no mitigation measures were required.

Goal PS6: A fire safe community.

Objective PS6-1: It is the objective of the City of El Segundo that the City minimize threats to public safety and protect property from wildland and urban fires.

Policy PS6-1.1: Review projects and development proposals, and upgrade fire prevention standards and mitigation measures in areas of high urban fire hazard.

Policy PS6-1.2: Continue efforts to reduce fire hazards associated with older buildings, high-rise buildings, and fire-prone industrial facilities, and maintain adequate fire protection in all areas of the City. Review projects and development proposals, and upgrade fire prevention standards and mitigation measures in areas of high urban fire hazard.

Program PS6-1.2C: The City shall continue to require that all property be maintained in compliance with the fire code.

Analysis: The project will comply with the most current version of the California Fire Code, as adopted by the City.

Goal PS7: Protect public health, safety, and welfare, and minimize loss of life, injury, property damage, and disruption of vital services, resulting from earthquakes, hazardous material incidents, and other natural and man-made disasters.

Analysis: The project will be built to the most current version of the California Building Code to protect against disasters such as earthquakes. Mitigation measures will be imposed to protect against the release of hazardous

materials.

SECTION 4: *General Plan Amendment Findings.* In accordance with Government Code section 65358, and based on the findings set forth in Sections 2 and 3, together with the evidence in the administrative record as a whole, the Planning Commission finds that amendment of the General Plan and the General Plan Map to change the land use designation from General Commercial and Parking to Pacific Coast Commons Specific Plan and to update the text of the General Plan, is in the public interest and consistent with other provisions of the General Plan.

SECTION 5: *Zone Change Findings.* Based on the findings set forth in Sections 2 and 3, and the totality of the evidence in the record, the Planning Commission finds as follows:

A. The proposed Zone Change is necessary to carry out the proposed project because the proposed General Plan Amendment changes the land use classification of the project site from General Commercial and Parking to Pacific Coast Commons Specific Plan (PCCSP). The proposed Zone Change changing the property and the Zoning Map from General Commercial (C-3) and Parking (P) to Pacific Coast Commons Specific Plan (PCCSP) is necessary to maintain consistency with the proposed General Plan land use designation of Pacific Coast Commons Specific Plan.

B. ESMC Title 15 is intended to be the primary tool for implementing the goals, objectives and policies of the El Segundo General Plan. The zone change will maintain consistency with the proposed change in General Plan land use designation to Pacific Coast Commons Specific Plan and is also consistent with the General Plan goals, objectives and policies set forth in Section 3 of this Resolution. Those findings of consistency are incorporated by reference as if fully set forth below.

SECTION 6: *Zone Text Amendment Findings*. In accordance with ESMC Chapter 15-26 (Amendments), and based on the findings set forth in Sections 2 and 3, together with the evidence in the administrative record as a whole, the Planning Commission finds that the proposed Zone Text Amendment is necessary to implement the Project and establish the proposed Pacific Coast Commons Specific Plan (PCCSP) Zone. An amendment to ESMC § 15-3-2(A)(12) to create the Pacific Coast Commons Specific Plan (PCCSP) Zone is necessary for consistency with the General Plan.

SECTION 7: *Specific Plan Findings.* The proposed creation of the Pacific Coast Commons Specific Plan (PCCSP) would allow a residential and commercial mixed-use development concept. Without adoption of the PCCSP, the current zoning would not permit a residential and commercial mixed-use development with an overall average 2.15 FAR based on the 6.23 net acre (post dedications) size of the project area. Based on the factual findings set forth herein and the evidence in the administrative record as a whole,

the Planning Commission finds that the Pacific Coast Commons Specific Plan will further the goals, policies and objectives of the General Plan and will not obstruct their attainment.

SECTION 8: *Development Agreement Findings.* Pursuant to City Council Resolution No. 3268, adopted June 26, 1984, the Planning Commission finds that:

A. The project is consistent with the objectives, policies, general land uses, and programs specified in the general plan and any applicable specific plan. The Development Agreement would provide the following public benefits in exchange for valuable development rights (fifteen-year entitlement with a five-year extension option):

1. Create a Specific Plan with a range of multiple-family residential and commercial uses that will contribute to the City's housing stock including the addition of affordable housing units and contribute to job creation opportunities and balance growth with local resources and infrastructure capacity. Additionally, the addition of housing units will improve the jobs-housing balance within the City.

2. The project will provide thirty-two affordable housing units for occupancy by low income and very low-income households for 55 years.

3. The project will help foster economic development in the City by contributing to a strong business climate, with positive outcomes such as business retention and attraction, as well as effective levels of City services to all members of the community.

4. The project will increase the City's tax base including utility user tax, property tax and sales tax, and therefore provide the City with resources to provide high-quality services to residents and the daytime population.

5. The project includes the payment of $25,000 to the City for either the costs to implement a permit parking district adjacent to the Project site if the residents petition for such district or, to be used by the City for public improvements in the geographical vicinity of the Project site.

6. Community Non-Profit Space. The project will provide 1,000 square feet of community space on the ground floor of the Fairfield parking structure.

7. Landscaping improvements. Additional landscaping and trees will be provided on the west side of Indiana Street between Mariposa Avenue and Holly Avenue. Enhanced landscaping and pedestrian seating will be provided in the existing landscaped areas in front of the Fairfield Inn and Suites and Aloft hotels that will be installed with the development of the PCC South Site. Six new street trees will be planted along the PCC South Site

development street frontage. Enhanced landscaping will be provided with the development of the PCC North Site along the western block wall.

8. Enhanced on-site paving improvements. Enhanced on-site paving improvements will be provided at several vehicular entrances/exits to the three new development areas.

9. EV Charging. The project will include 200 EV capable spaces including 50 installed EV chargers across the PCC Specific Plan area.

10. Solar Panels. Solar panels will be installed in the PCC North and PCC South residential developments that will generate sufficient power for their respective common areas power needs.

11. Battery Storage. The project will comply with the battery storage system requirements consistent with the 2022 Building Energy Efficiency Standards (Title 24 Energy Code) for both PCC North and PCC South.

12. Fencing improvements. Chain link fencing at the Fairfield and Aloft Hotel sites will be removed and replaced with decorative fencing.

13. The increase in density, which is located along a major bus route corridor and approximately ½ mile from the existing Metro Green Line Light Rail Station at Mariposa Avenue and Nash Street, helps implement regional planning programs and plans such as the SCAG Regional Transportation Plan/Sustainable Communities Strategy and efforts towards improving mobility and livability.

14. The increase in density close to the existing Metro Green Line light rail station also implements General Plan Land Use Element Policy LU 4-4.6 promoting denser mixed-use development near the City's existing Metro Green Line stations.

B. The project is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located. The proposed project includes a new land use designation and zoning classification which establishes the permitted uses and development standards that would apply to the project. These uses and development standards are similar and compatible with the other commercially zoned districts in the City.

C. The project conforms to public convenience, general welfare and good land use practice. The Pacific Coast Commons Specific Plan includes a range of multiple-family residential and commercial uses that will contribute to the City's housing stock including affordable units, contribute to job creation opportunities, balance growth with local resources and infrastructure capacity, and improve the jobs-housing balance within the City. The project will provide roadway improvements

on Holly Avenue and on Mariposa Avenue including a new dedicated eastbound (to southbound) right turn lane on Mariposa Avenue.

D. The project will not be detrimental to the health, safety and general welfare. An EIR was completed to evaluate the project which reviewed issue areas such as Aesthetics, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems. All feasible mitigation has been incorporated into the project to reduce or eliminate potential impacts and to maintain public health, safety and general welfare. The EIR concluded that the project will have a significant, unavoidable impact with regard to air quality due to the fact that it will result in slightly higher population growth than that anticipated in the SCAG 2016 RTP/SCS for the 2016-2040 period (an increase of 618 individuals as opposed to the 600 anticipated by SCAG). Notwithstanding the fact that the project would slightly increase the City's population growth beyond SCAG's projections for the 2016-2040 period, the Planning Commission finds that the project will not be detrimental to the health, safety and general welfare.

E. The project will not adversely affect the orderly development of property or the preservation of property values. This project is surrounded by previously developed multiple-family residential and commercially developed land and the proposed uses of the Pacific Coast Commons Specific Plan are consistent with surrounding development and will not adversely affect the value of neighboring properties. The proposed Pacific Coast Commons Specific Plan development standards and development agreement will ensure that the project will be developed in an orderly fashion. All mitigation measures will be implemented at the time and place impacts occur.

SECTION 9: *Environmental Assessment*. The Planning Commission makes the following environmental findings based on the whole of the administrative record:

A. The City completed a Draft Environmental Impact Report (DEIR) for Pacific Coast Commons Specific Plan project. A noticed Public Scoping meeting was held on June 10, 2020 pursuant to CEQA Guidelines §15083. A Notice of Preparation of the DEIR was circulated for public review from May 26, 2020 to June 25, 2020 pursuant to CEQA Guidelines §15082. A Notice of Completion for the DEIR was filed with the State Office of Planning and Research on February 25, 2021 pursuant to CEQA Guidelines §15085. The public comment and review period for the DEIR was open between February 25, 2021 and April 12, 2021 in compliance with CEQA Guidelines §15087.

B. A Final Environmental Impact Report (FEIR) dated October 2021 was prepared which included comments received by the City, responses to the comments, changes to the DEIR, and a mitigation monitoring and reporting program. The

FEIR was posted on the City's website on November 4, 2021.

C. Based on the Carpenters' Letter and SAFER letter, the Environmental Consultant prepared an additional document entitled "Pacific Coast Commons Specific Plan Final Environmental Impact Report Responses to Additional Comments Received" dated January 2022 (hereafter referred to as "Additional Responses").

D. The DEIR, FEIR and Additional Responses are jointly referred to herein as the EIR.

E. The EIR was presented to the Planning Commission and each commissioner has independently reviewed and considered the EIR and its appendices prior to making a recommendation on the Project. Furthermore, each commissioner has reviewed and considered the testimony and other additional evidence presented at or prior to the public hearings on November 18, 2021, December 9, 2021, and February 10, 2022;

F. The EIR is an accurate and complete statement of the potential environmental impacts of the project and is in compliance with CEQA and the CEQA Guidelines. The EIR was prepared under the City's direction and reflects its independent judgment and good faith analysis of the potential environmental impacts and includes substantive and thorough responses to comments received during the public review period, as well as responses to the Carpenters' Letter, the SAFER letter, and comments made at the December 9, 2021 hearing;

G. In response to comments from the public and other public agencies, some other minor changes have been made to the Draft EIR. Additionally, the Additional Responses adjusted the CalEEMod land use inputs. Minor changes were made to the tables relating to: Construction Criteria Air Pollutant Emissions; Estimated Maximum Daily Operational Criteria Air Pollutant Emissions; Localized Significance Thresholds for Project Construction; Estimated Annual GHG Emissions; and Estimated Operational GHG Emissions. The changes were all insignificant, did not result in any change in determination regarding the significance of any impact, and do not require recirculation.

H. In accordance with CEQA and for the reasons set forth in Section 4.1 of the Findings of Fact and Statement of Overriding Considerations, incorporated herein by this reference, the Planning Commission finds that recirculation of the EIR is not required.

I. The project would result in the following unavoidable significant adverse impacts after mitigation:

1. Air Quality (AQ). The project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality

Management District (SCAQMD). SCAQMD administers the Air Quality Management Plan for the region which relies on population growth estimates in the Final SCAG 2016 RTP/SCS for the 2012-2040 period. Using population and housing estimates from the California Department of Finance, the City has a household size of 2.35 persons per household (DOF 2020). Assuming a household size of 2.35 persons per household, the proposed Project's residential units would accommodate 618 individuals upon its anticipated full occupancy in 2025. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. There are no feasible mitigation measures for population growth. As a result, for the purposes of CEQA analysis, the proposed Specific Plan will have a significant and unavoidable impact with regard to AQ.

J. The City's obligations to make findings and adopt a Statement of Overriding Considerations in accordance with Public Resources Code section 21081(a) and CEQA Guidelines sections 15091 and 15093 are met by the Findings of Fact and Statement of Overriding Considerations incorporated herein by this reference. The Planning Commission concurs with the findings set forth therein, including that the alternatives are infeasible for the reasons stated.

K. The Planning Commission has weighed and considered the project's benefits against its significant and unavoidable impacts. The Planning Commission finds that the proposed project's benefits outweigh the significant and unavoidable impacts and, therefore, that those impacts are acceptable in light of the proposed project's benefits as set forth in Section 5 of the of the Findings of Fact and Statement of Overriding Considerations.

SECTION 10: *Subdivision.* With respect to Vesting Tentative Tract Map (VTTM 82806) (SUB 19-03), attached as Exhibit "G," the Planning Commission finds that the evidence in the record does not support any of the findings for denial set forth in ESMC § 14-1-6:

A. The proposed map is consistent with applicable general and specific plans as specified in Government Code § 65451. As set forth in Section 3 of this Resolution, this project generally meets the goals and objectives of the General Plan and it is consistent with the Pacific Coast Commons Specific Plan. Vesting Tentative Map (VTM) No. 82806 proposes 6 new lots. The proposed lots vary in size and meet the minimum lot size requirements established in the Pacific Coast Commons Specific Plan.

B. The design of the proposed subdivision is consistent with applicable general and

specific plans. As set forth in Section 3, the design of this subdivision and the proposed development project meets the goals and objectives of the General Plan.

C. The site is physically suitable for the proposed type of development in that the proposed lots meet the size and dimension requirements to allow the subdivision of the existing project site. The previous land use designation was General Commercial and Parking and the zoning designation for the property was General Commercial (C-3) and Parking (P). The new Pacific Coast Commons Specific Plan allows for the continued operation of the two existing hotels (Fairfield Inn and Suites and Aloft) and allows for both new multiple-family residential uses and expanded commercial development that is consistent with existing development surrounding the Project area.

D. The site is physically suitable for the proposed density of development. The proposed project involves subdivision of an approximately 6.385-acre project site into 6 parcels. The Specific Plan allows 622,398 gross square feet of development including 282,398 square feet of existing development that will remain. The proposed maximum development density is a 2.70 Floor Area Ratio (FAR) after dedications for right-of-way improvements. The Specific Plan allows a maximum of two hundred sixty-three (263) residential dwelling units located among two of the Land Use Districts within the Specific Plan. This density is consistent with the Pacific Coast Commons Specific Plan. Each new lot will meet or exceed the minimum size and dimension requirements.

E. The design of the subdivision or the proposed improvements is unlikely to cause substantial damage or substantially and avoidably injure fish or wildlife or their habitat. The proposed project site is comprised of two blocks and is currently improved with two existing hotels and an existing paved parking lot. The block bounded by Pacific Coast Highway, Holly Avenue, Indiana Street and Mariposa Avenue contains the 350-room Fairfield Inn and Suites and the 246-room Aloft hotels totaling approximately 325,000 gross square feet combined. The portion of the project site on the block to the north of the hotels on the north side of Mariposa Avenue contains the paved surface parking lot. No trees are located on the parking lot site. The project site is also predominately surrounded by developed urban land permanently altered with buildings, roads and hardscape. There are no fish or wildlife habitats on the site that could be damaged by the proposed subdivision or new development.

F. The design of the subdivision and the type of improvements authorized are not likely to cause serious public health problems. Vesting Tentative Map (VTM) No. 82806 proposes 6 new lots. The proposed lots vary in size and meet the minimum lot size requirements established in the Pacific Coast Commons Specific Plan. The subdivision will facilitate a development project consisting of four new buildings consisting of 257 apartment units, 6 townhome condominium units, 11,252 square feet of commercial uses, and parking structures containing 792

parking spaces. The development project is consistent with all the development standards in the Pacific Coast Commons Specific Plan. Before issuance of permits for construction detailed project plans will be submitted and reviewed for compliance with the California Building and Fire Codes and all other applicable safety codes. Furthermore, the development project's potential environmental impacts were evaluated pursuant to CEQA and mitigation measures will be implemented to reduce all impacts to the maximum extent feasible.

G. The design of the subdivision will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. The proposed subdivision is not anticipated to conflict with any known easements located at or near the property.

SECTION 11. *Site Plan Review Findings.* With respect to Site Plan Review No. SPR 19-01, the Planning Commission finds:

A. The proposed development is consistent with the general plan, any applicable specific plan and the Zoning Code

The proposed development is consistent with the goals, policies and objectives of the general plan. A specific plan (the Pacific Coast Commons Specific Plan) is applicable to the property involved in the proposed development which is consistent with the goals, policies and objectives of the general plan. The Pacific Coast Commons Specific Plan establishes the development standards and the design standards. The development project for the project site is consistent with the development standards and design guidelines of the Pacific Coast Commons Specific Plan.

The land use designation of the project site under the general plan will be the Pacific Coast Commons Specific Plan (PCCSP) Zone. The PCCSP has 5 districts within the Pacific Coast Commons Specific Plan (PCCSP) Zone (see Chapter III Land Use Plan in the Pacific Coast Commons Specific Plan). The 5 districts are: PCC Mixed-Use 1 (PCC MU-1), PCC Commercial-1 (PCC COM-1), PCC Commercial-2 (PCC COM-2), PCC Commercial-3 (PCC COM-3), and PCC Mixed-Use 2 (PCC MU-2).

The PCC MU-1 is a mixed-use district that permits a maximum of 120 apartments and various commercial uses generally in the categories of retail, restaurant and office uses.

The PCC Commercial-1 (PCC COM-1) allows hotels and several other commercial uses that either accessory to hotel uses or complementary and compatible commercial uses. PCC COM-1 contains the existing Aloft Hotel which will remain.

The PCC Commercial-2 (PCC COM-2) allows hotels and several other commercial

uses that either accessory to hotel uses or complementary and compatible commercial uses. PCC COM-2 contains the existing Fairfield Inn and Suites Hotel which will remain.

The PCC Commercial-3 (PCC COM-3) allows hotels and several other commercial uses that either accessory to hotel uses or complementary and compatible commercial uses.

The PCC MU-2 is a mixed-use district that permits a maximum of 137 apartments and 6 townhomes, and various commercial uses generally in the categories of retail, restaurant and office uses.

The proposed development is consistent with the goals, policies and objectives of the general plan as outlined in Chapter II Section C of the Pacific Coast Commons Specific Plan.

B. The project is functionally compatible with the area in which it is located.

The project is functionally compatible with the area in which it is located as the project site already has 2 existing hotels. The project site has commercial retail and restaurant uses to the north and south of the project site on the same side of the street and a mix of office uses, and commercial retail and restaurants across the street. Additionally, the project site is located on a portion of Pacific Coast Highway between Grand Avenue and Imperial Highway that is primarily zoned General Commercial (C-3) that allows a mix of office, hotel, retail and restaurant uses. The subject site is currently zoned General Commercial (C-3) and Parking (P) Zone. Multi-family residential uses are located to the west, southwest and northwest of the project site.

C. The proposed development will not adversely affect the general welfare of the City.

The proposed development will not adversely affect the general welfare of the City in that the existing hotels that will remain are permitted uses both under the existing zoning and in the proposed Pacific Coast Commons Specific Plan (PCCSP). The proposed new multi-family residential apartments, townhomes, commercial uses, and parking structures are designed in compliance with the development standards and design standards in the Pacific Coast Commons Specific Plan Zone and its 5 Districts. All of the proposed multi-family uses will be permitted by right as specified in the new PCCSP. The commercial uses will either be permitted by right or by Conditional Use Permit in the PCCSP depending upon the individual type of commercial use.

The physical improvements have been designed to comply with all building code regulations, the Pacific Coast Commons Specific Plan and the City's General Plan. The site has adequate and safe ingress and egress via multiple driveways along

the street frontages of the property and a minimum of one driveway for each legal parcel). The project site has street frontage on Pacific Coast Highway, Mariposa Avenue, Holly Avenue, Indiana Street and Palm Avenue.

Additionally, the project site is surrounded by developed urban land permanently altered with buildings, roads and hardscape. There are no fish or wildlife habitats on the site that could be damaged by the proposed subdivision or new development.

SECTION 12. *Parking Demand Study and Shared Parking Use Findings.* With respect to the Parking Demand Study and Shared Parking Use attached hereto as Exhibit "H," the Planning Commission finds:

A. The parking demand study for shared use demonstrates that no substantial conflict will exist in the peak hours of parking demand for the uses in which joint use is proposed.

A Parking Demand Study and Shared Use Parking Analysis ("Study") was prepared dated February 17, 2021 for the Pacific Coast Commons Specific Plan ("Plan"). The Study assessed the parking demand for the three new development sites ("Fairfield Parking Site", "PCC South Site" and "PCC North Site") within the Plan boundaries along with the existing peak parking demand for the two existing hotel uses. The two hotels, other commercial uses, and the guest parking for the multiple-family residential apartments will share parking spaces in the three parking structures that will be located on Lots 1, 4, and 5 of Vesting Map No. 82806 (PCC South Site, Fairfield Parking Site and PCC North Site respectively). Assigned parking will be provided for the tenants of the multiple-family residences except for 5 unassigned parking spaces each in the PCC South Site and PCC North Site parking structures. The townhomes have their own two-car garages for the residents. The guest parking for the townhomes will be provided on Lot 5 of Vesting Map No. 82806 (PCC North Site) as part of the joint use parking shared with the hotels, other commercial uses, and multiple-family residential guest parking.

The Study determined the peak parking demand rate for Pacific Coast Commons. Peak parking for the two existing hotels was calculated using empirical data collected at the hotel sites in May 2019 based upon the total number of parking spaces and total number of rooms occupied to develop a peak parking rate. Peak parking demand for the commercial uses (other than the hotels) and all of the residential uses were then evaluated for peak occupancy based upon ITE 5th edition peak parking demand again using conservative analysis that did not take any discount for proximity to transit service, internal capture or mode split. Parking rates for commercial uses such as retail and restaurants were based upon El Segundo Municipal Code requirements as referenced in the Pacific Coast Commons Specific Plan. Parking rates for all the residential uses were based

upon requirements in the Pacific Coast Commons Specific Plan which is a modified residential requirement based on unit type/number of bedrooms which is more conservative than the parking demand rate.

The PCC Fairfield Site will provide 215 parking spaces and it will have a peak parking demand of 191 spaces, leaving a 24-space surplus during the peak parking demand period. The PCC North Site will provide 241 parking spaces and it will have a peak parking demand of 160 residential parking spaces and a peak shared parking demand for 49 spaces for all other uses for a total demand of 209 spaces. However, because 189 parking spaces at the PCC North Site are reserved exclusively for residential use, there will only be a 3-space surplus. The PCC South Site will provide 336 parking spaces and it will have a peak parking demand of 144 residential parking spaces and a peak shared parking demand for 192 spaces for all other uses for a total demand of 336 spaces. However, because 165 parking spaces at the PCC South Site are reserved exclusively for residential use, there will be a 21-space deficit for the guest parking and commercial uses at the peak period. This 21-space deficit will be accommodated however by the 24-space surplus at the Fairfield Parking Site and if needed, the 3-space surplus at the PCC North Site. There will be a net 6-space surplus for joint uses among all three parking structures. Therefore, the parking demand study for shared use demonstrated that there will not be substantial conflict in the peak hours of parking demand for the uses in which joint use is proposed.

B. The number of parking stalls which may be credited against the requirements of the structures or uses involved will not exceed the number of stalls reasonably anticipated to be available during different hours of operation; and

The PCC Fairfield Site will provide 215 parking spaces and it will have a peak parking demand of 191 spaces, leaving a 24-space surplus during the peak parking demand period. The PCC North Site will provide 241 parking spaces and it will have a peak parking demand of 160 residential parking spaces and a peak shared parking demand for 49 spaces for all other uses for a total demand of 209 spaces. Due to additional assigned residential parking above the peak demand period requirements to comply with the development standards, the PCC North Site will have a net 3-space surplus during the peak parking demand period. The PCC South Site will provide 336 parking spaces and it will have a peak parking demand of 144 residential parking spaces and a peak shared parking demand for 192 spaces for all other uses for a total demand of 336 spaces. However, because 165 parking spaces at the PCC South Site are reserved exclusively for residential use, there will be a 21-space deficit for the guest parking and commercial uses at the peak period. This 21-space deficit will be accommodated however by the 24-space surplus at the Fairfield Parking Site and if needed, the 3-space surplus at the PCC North Site. There will be a net 6-space surplus for joint uses among all three parking structures.

The peak period demand analysis was conservative as it did not take any adjustments to discount for proximity to transit service, internal capture, or mode split but did take into account time of day, seasonal variations, and average auto occupancy for the hotel demand rates. Therefore, the analysis demonstrated that the number of parking stalls for the joint uses would not exceed the number of stalls reasonably anticipated to be available during different hours of operation.

C. A written agreement, in a form approved by the City Attorney, must be executed by all parties concerned assuming the continued availability of the number of stalls designed for joint use.

Each of the three parking structures that will be located on Lots 1, 4, and 5 of Vesting Map No. 82806 in the Pacific Coast Commons Specific Plan will be used for overflow parking if needed because of on-site parking demand exceeding on-site parking supply for the joint uses as described above. A Shared Use Parking Agreement will be prepared and reviewed to the satisfaction of the City Attorney and then executed and recorded.

SECTION 13. *Street Dedication Waivers.* The Public Works Director has reviewed the request for street dedication waivers set forth in Exhibit I and has recommended approval of the following waivers:

- A 3-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lot 1 of Vesting Tentative Map. No. 82806 resulting in a required 4-foot dedication.

- A 3-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lot 4 of Vesting Tentative Map. No. 82806 resulting in a required 4-foot dedication.

- A 7-foot waiver of the 7-foot dedication along the eastern side of Indiana Street only along the project frontage of Lots 2 and 3 of Vesting Tentative Map No. 82806 resulting in a 0-foot dedication.

- A 3-foot waiver of the 7-foot dedication on the south side of Mariposa Avenue along the project frontage of Lot 4 of Vesting Tentative Map. No. 82806 resulting in a minimum dedication of 4 feet near Indiana Street to a maximum dedication of 12 feet near Pacific Coast Highway to accommodate the proposed 10-foot wide right-turn only lane and 2-foot widening and reconfiguration of the two existing lanes in compliance with the Circulation Element requirements.

In connection with this request, the Planning Commission makes the following findings:

A. The proposed waiver maintains the minimum roadway width necessary for emergency vehicle access as determined by the fire chief;

The proposed waivers maintain the minimum roadway width necessary for emergency vehicle access. Mariposa Avenue will be widened to a minimum 40' curb-to-curb street width and Indiana Street will maintain a 34-foot roadway width, which meets the required 26' clear width needed.

B. The proposed waiver maintains the minimum roadway width and lane width deemed necessary for safe two-directional vehicular passage. The minimum lane width cannot be less than ten (10') feet in width for a travel lane and eight (8') feet in width for a parking lane;

The minimum lane width and parking width standards will be achieved on Mariposa Avenue and Indiana Street with all proposed travel lanes being a minimum of 10-feet wide and proposed parking lanes being a minimum of 8-feet wide.

C. The proposed waiver will maintain the necessary roadway width for the traffic volumes projected during the general plan buildout as determined by the director of development services unless the director determines that the dedication or irrevocable offer to dedicate will require the removal will require the removal of all or a portion of an existing building;

The proposed waivers will maintain the necessary roadway widths for the projected traffic volumes. The traffic study prepared as part of this project's application process has indicated that the surrounding streets can accommodate the projected traffic volumes.

D. The proposed waiver complies with any requirements of state and federal regulations, including without limitation, disabled access requirements for public sidewalks;

Public sidewalks surrounding the project site are a minimum of 5 feet, which complies with state and federal regulations. Additionally, the applicant is required to provide a minimum 4-foot sidewalk clearance around any obstruction in the sidewalk (i.e. posts, power poles, etc.) along any property frontage where new construction is taking place.

E. The proposed waiver would not be detrimental to the neighborhood or district in which the property is located;

A thorough evaluation by the Department of Public Works has revealed no evidence that these waivers would be detrimental to the neighborhood in which this project is located.

F. That the proposed waiver is necessary in order that the applicant is not unreasonably deprived the use or enjoyment of his property; and

Provision of full dedications along Indiana Street and Mariposa Avenue would have the following impacts on the existing and proposed structures on the project site:

- Along Indiana Street, there are existing buildings with a 0-foot setback from the property line. Any dedication along this frontage would require demolition of the existing buildings.

- Along the portions of Indiana Street and Mariposa Avenue where new development is proposed, additional dedication would reduce the buildable area on the Project site. Due to the narrow dimensions of the Project site, any additional reductions in those dimensions would create significant design issues with ramp design in the proposed parking structures and/or reduce the number of parking spaces that could be provided for the existing and proposed uses on the Project site. Further, additional dedication would substantially impact the design and size of proposed residential and commercial uses on the Project site. Finally, the above changes to the project design would jeopardize the financial feasibility of the Project. Therefore, the proposed waivers are necessary in order that the applicant is not unreasonably deprived use of their property.

G. The proposed waiver is consistent with the legislative intent of this title [Title 15].

The proposed waiver is consistent with the legislative intent of Title 15 in that the proposed waiver will still allow roadways and sidewalks along the Project site in compliance with the minimum width standards for local commercial streets specified in the Circulation Element.

SECTION 14: *Recommendations*. Based upon the foregoing and the evidence in the record as a whole, the Planning Commission makes the following recommendations:

A. The Planning Commission recommends that the City Council certify the Environmental Impact Report for Environmental Assessment No. 1248 consisting of the DEIR, the FEIR, and the Additional Responses; adopt a Mitigation Monitoring and Reporting Program; adopt the Findings of Fact and Statement of Overriding Considerations dated February 2022 incorporating the facts set forth in Section 9 of this resolution; and

B. The Planning Commission recommends that the City Council approve General Plan Amendment No. GPA 19-01 for the Pacific Coast Commons Specific Plan and Pacific Coast Commons mixed-use project as set forth in Exhibits “C – F”;

C. The Planning Commission recommends that the City Council adopt the Ordinance attached as Exhibit “B”, including the attachments thereto, which would adopt Zone Change No. ZC 19-01 (Exhibit A to Ordinance), Zone Text Amendment No. ZTA

19-08, the Specific Coast Commons Specific Plan (Exhibit B to Ordinance) and Development Agreement No. DA 19-02 (Exhibit C to Ordinance); and

D. The Planning Commission recommends that the City Council approve Subdivision No. SUB 19-03 (VTM 82806) as set forth in Exhibit "G," Site Plan Review No. SPR 19-01, dated 10.29.2021, Parking Demand Study and Shared Parking Analysis as set forth in Exhibit "H," and waiver of public right-of-way dedications for the Pacific Coast Commons mixed-use project as set forth in Exhibit "I," all subject to the conditions of approval set forth in Exhibit "A."

SECTION 15: *Exhibits.* This Resolution includes the following exhibits which are attached hereto and a part hereof:

A. Project Conditions of Approval
B. Draft Ordinance
    Exhibit A – Zoning Map Changes
    Exhibit B – Pacific Coast Commons Specific Plan
    Exhibit C – Development Agreement

C. Amendment to General Plan Land Use Designations
D. Amendment to General Plan Land Use Plan Northwest Quadrant subsection
E. Amendment to 1992 General Plan Summary of Existing Trends Build-out
F. Amendment to General Plan Land Use Map
G. Vesting Tentative Map (VTM) No. 82806
H. Parking Demand Study and Shared Parking Analysis
I. Street Dedication Map, including waivers

In addition to the Exhibits listed above, this Resolution also includes by reference:

A. The EIR as described in Section 9D, above
B. The Findings of Fact and Statement of Overriding Consideration, dated February 2022
C. The Site Plan dated 10.29.2021

SECTION 16: *Reliance on Record.* Each and every one of the findings and determination in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 17: *Limitations*. The Planning Commission's analysis and evaluation of the project is based on information available at the time of the decision. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. In all instances, best efforts have been made to form accurate assumptions.

SECTION 18. *Summaries of Information*. All summaries of information in the findings, which precede this section, are based on the substantial evidence in the record. The absence of any particular fact from any such summary is not an indication that a particular finding is not based in part on that fact.

SECTION 19: This Resolution will remain effective unless and until superseded by a subsequent resolution.

SECTION 20: The Commission secretary is directed to mail a copy of this Resolution to any person requesting a copy.

PASSED AND ADOPTED this ___ day of February, 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2905

EXHIBIT A

CONDITIONS OF APPROVAL

In addition to all applicable provisions of the El Segundo Municipal Code ("ESMC"), the Applicant agrees to comply with the following provisions as conditions for the City of El Segundo's approval of Environmental Impact Report for Environmental Assessment No. EA-1248, General Plan Amendment and General Plan Map Amendment No. GPA 19-01, Specific Plan No. SP 19-01, Zone Change and Zoning Map Amendment No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, Development Agreement No. DA 19-02, Subdivision No. SUB 19-03 for Vesting Tentative Map (VTM) No. 82806, Site Plan Review No. SPR 19-01, Parking Demand Study and Shared Parking Analysis, and Waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and mixed-use development project ("Project Conditions").

Development Services Department

1. This approval is for the project as shown on the plans dated October 7, 2021, and on file with the Development Services Department.

2. Before the City issues a building, grading, and/or demolition permit for each building site within the Pacific Coast Commons Specific Plan (PCCSP), the applicant must submit plans, showing that the project substantially complies with the plans and conditions of approval on file with the Development Services Department. Any subsequent modification must be referred to the Development Services Director for a determination regarding the need for Planning Commission review and approval of the proposed modification.

3. This approval shall not become effective unless and until the City Council adopts an ordinance approving Specific Plan No. SP 19-01, Zone Change No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, and Development Agreement No. 19-02 and said ordinance takes effect.

4. This approval allows for the following development within the Pacific Coast Commons Specific Plan (PCCSP) area:

    a. Demolition of the existing food and beverage building in the PCC COM-2 Land Use District and the construction of a parking structure with 3,273 gross square feet of new commercial uses;
    b. Construction of a mixed-use building consisting of 120 residential apartment units and 5,756 gross square feet of new commercial uses and a parking structure in the PCC MU-1 Land Use District;
    c. Construction of a mixed-use building consisting of 137 residential apartment units, 2,223 gross square feet of new commercial uses, and a parking structure

in the PCC MU-2 Land Use District;

d. Construction of a building consisting of six townhome residential condominium units with individual garages for each unit in the PCC MU-2 Land Use District.
e. Up to 3,700 gross square feet of the total 11,252 gross square feet of commercial floor area may be used for fast casual restaurant space. The remainder may be used for other commercial uses allowed in the Pacific Coast Commons Specific Plan.

A change in uses or changes in the square footages specified above, must be referred to the Development Services Director for a determination regarding the need for Planning Commission review and approval of the proposed changes.

5. The applicant shall comply with the requirements set forth in Ordinance 1594 (Public Art).

6. New signs proposed for each phase of the project, including monument signs, shall be designed to conform to the sign guidelines and standards of the Pacific Coast Commons Specific Plan. All proposed signage shall require separate application and approval by the Development Services Director or designee. Before the City issues any Certificate of Occupancy a master sign program must be approved by the Development Services Director.

7. All new exterior mechanical equipment shall be architecturally screened in accordance with Pacific Coast Commons Specific Plan design guidelines, to the satisfaction of the Development Services Director.

8. All new utilities to and on the property shall be provided underground for each phase of the project. Existing utilities in the public rights-of-way surrounding each development phase are not required to be relocated underground.

9. Project entrances at the following locations: (i) PCC South entrances/exits on Indiana and Pacific Coast Highway; (ii) Fairfield Parking Structure entrance/exits on Pacific Coast Highway; and (iii) PCC North entrances/exists on Mariposa Avenue and Palm Avenue, shall be provided with admixture colored concrete and/or design that enhance and complement the project, to the satisfaction of the Development Services Director.

10. A trellis or other approved covering must be maintained over any external trash enclosure on the property. Before the City issues building permits for each phase of the project, the applicant must submit plans for Development Services Department review and approval that show the design of the exterior trash enclosures and the required trellis covers. The enclosures and trellises must comply with the PCCSP Design Guidelines to the satisfaction of the Director.

11. The applicant shall submit a photometric lighting plan for each phase of the project that illustrates that there is no light spillover beyond the project property line for review and approval by the Development Services Department and the Police

Department. Exterior lighting design for the project shall comply with the Pacific Coast Commons Specific Plan design guidelines. Light shields shall be used to block light and reduce spill over light and glare as necessary. Light spill over on the property shall be zero foot-candles at the property line. Prior to the final inspection and issuance of a certificate of occupancy, the applicant shall schedule an evening inspection with the Planning Division to verify compliance with this requirement.

12. Each phase of the project site shall be fenced and screened during construction. Signage to report dust, noise and other construction related problems shall be posted on site at a location clearly visible to the public from all public streets surrounding the Project site.

13. The applicant must comply with all mitigation measures identified in the Final Environmental Impact Report prepared for the Project. A Mitigation Monitoring and Reporting Program (MMRP) was prepared as part of the environmental review for the project. The mitigation measures of the MMRP are incorporated into these conditions of approval by reference. All mitigation measures and conditions of approval must be listed on the plans submitted for plan check and the plans for which a building permit is issued.

14. Prior to any demolition, clearing, grubbing or grading or as otherwise appropriate, the applicant shall demonstrate compliance with all of the Mitigation Measures contained in the MMRP. In the event of a conflict between the adopted mitigation measures and these conditions of approval, the stricter of the two shall govern. The applicant is responsible to bear all costs should a consultant be required to manage and implement the MMRP.

15. Before the City issues building permits for each building site within the Pacific Coast Commons Specific Plan (PCCSP), the applicant must submit site specific landscape and irrigation plans to the Development Services Department for review and approval to demonstrate compliance with the project plans on file with the City, the City's Water Conservation regulations and Guidelines for Water Conservation in Landscaping (ESMC §§10-2-1, *et seq*.), and the PCCSP Development Guidelines and standards. The landscaping and irrigation must be completely installed before the City issues a final Certificate of Occupancy.

16. The applicant must plant trees and/or other landscape materials along the entire 15-foot setback area between PCC North and the residential properties to the west extending from Mariposa Avenue to Palm Avenue to contribute to screening and sound attenuation. Before the City issues building permits for the PCC North site, the applicant shall submit detailed landscaping and irrigation plans for Development Services Director review and approval showing trees and/or other landscape materials along the entire 15-foot setback area. The final species, number and location of the trees shall be specified to the satisfaction of the Director.

17. Before the City issues building permits for each building site within the PCCSP, the applicant must submit detailed architectural plans for Development Services Director review and approval, including fully dimensioned site plans, floor plans, elevation, and section drawings identifying the depth of building step-backs as well as dimensions of architectural building features, such as exterior columns, parapets, cornices, balconies, and tower elements.

18. Before the City issues building permits for each building site within the PCCSP, the applicant must submit detailed architectural plans for Development Services Director review and approval that promote a pedestrian oriented design along the Pacific Coast Highway frontage, including recessed storefronts that do not result in the loss of square footage, but provide space for outdoor dining, outdoor retail displays, bicycle parking and similar amenities, to the satisfaction of the Director.

19. The applicant shall replace any existing chain-linked fencing visible from the public right-of-way with other walls and/or fencing at the time of development of the PCC South or the Fairfield Parking, whichever occurs first. Before the City issues building permits for either phase of the development, the applicant shall submit plans for Development Services Director review and approval showing the proposed replacement walls and/or fencing. The replacement walls or fencing must be consistent with the PCCSP Design Guidelines and standards for walls and fencing to the Director's satisfaction.

20. With development of PCC South, the applicant shall install seating that is available to the public along the Pacific Coast Highway frontage between Holly Avenue and Mariposa Avenue, including in front of the Aloft Hotel and the Fairfield Hotel. Six single-occupant chairs shall be located in front of the Fairfield Hotel in the existing landscaped area, and four single-occupant chairs shall be located in front of the Aloft Hotel in the existing landscaped area. Before the City issues building permits for the PCC South phase of the development, the applicant shall submit plans for Development Services Department review and approval showing the location, number and proposed design of the public seating. The seating must be consistent with the PCCSP Design Guidelines to the Director's satisfaction.

21. The applicant shall install six new trees in the Pacific Coast Highway public right-of-way in front of the PCC South portion of the PCCSP. Before the City issues building permits for the PCC South phase of the development, the applicant shall submit detailed landscaping and irrigation plans for Development Services Department review and approval showing the location and species of trees. The trees must be consistent with the City's Master Street Tree Plan to the Director's satisfaction.

22. The applicant shall install new street trees in the Indiana Street public right-of-way on the west side of the street between Holly Avenue and Mariposa Avenue only within existing parkway areas with existing irrigation systems in place. Before the City issues building permits for the PCC South phase of the development, the

applicant shall submit detailed landscaping plans for Development Services review and approval showing the location and species of trees. The trees must be consistent with the City's Master Street Tree Plan to the Director's satisfaction.

23. Before the City issues building permits for the townhomes in the PCC North area of the PCCSP, the applicant shall submit detailed plans for Development Services Director review and approval that incorporate equal detail and variety in building planes and materials on all the elevations to the Director's satisfaction that do not result in the loss of square footage.

24. New trash and recycling enclosures must be provided and shown on site plans that are sufficiently large enough to store the necessary bins required for the regular collection of commercial solid waste and recyclable materials. The site plan with the location and dimensions of the trash and recycling enclosure and an elevation view of the enclosure must be provided to the Development Services Department for review and approval before the City issues building permits.

25. New ground level mechanical equipment, refuse collectors, storage tanks, generators, and other similar facilities must be screened from view consistent with the development standards and design guidelines contained in the Pacific Coast Commons Specific Plan.

26. Exterior lighting must be designed to minimize off-site glare.

27. Buildings must be designed to comply with all ESMC standards for the attenuation of interior noise.

28. Before the City issues a grading permit, building permit, or certificate of occupancy, as applicable, the applicant must provide evidence to the Director of Development Services that all mitigation measures in the MMRP are or will be implemented.

29. Each phase of the project must meet all design guidelines of the Specific Plan to the satisfaction of the Director Development Services.

30. Before the City issues a certificate of occupancy for each parking structure, the applicant must clearly identify the designated residential tenant spaces and the spaces to be shared by retail uses, residential guests, and/or hotel guests. The spaces shall be identified through the use of signage and stencils on the pavement in each parking structure to the satisfaction of the Development Services Director.

31. If any portion of the Project is developed as condominiums, before the City issues a certificate of occupancy for each of the proposed buildings the applicant shall draft and submit CC&Rs for Development Services Director and City Attorney review including provisions for:
    a) Maintenance and cleaning of common areas and landscaping onsite;

b) Maintenance of landscaping in the public right-of-way immediately abutting the subject property;
c) Maintenance and cleaning of the balconies of the residential units; and
d) Cleaning the public sidewalk along the Pacific Coast Highway public right-of-way immediately abutting the commercial uses on each building site (PCC South, Fairfield Parking and PCC North) to maintain it clear of any trash and debris from the commercial uses and project trash facilities.

32. Before the City issues building permits for each of the building sites, the applicant shall submit detailed plans for Development Services Director review and approval, including the locations, materials, and colors of enhanced paving areas on private property, in conformance with Section 5.6 of the Development Agreement, as well as in the public right-of-way immediately abutting the subject property. The enhanced paving must be consistent with the architectural and landscaping plans on file with the City to the satisfaction of the Director.

33. A Shared Parking Agreement shall be prepared and reviewed and approved by the Director of Development Services and the City Attorney. The Shared Parking Agreement shall be recorded after the final map for Vesting Map No. 82806 has been recorded and the Fairfield Parking Site has been constructed and received its Certificate of Occupancy. The Shared Parking Agreement will grant Lots 1 through 5 of Vesting Map No. 82806 rights to shared use of parking provided on Lots 1, 4 and 5 of Vesting Map No. 82806. The shared parking will be permitted for all commercial uses and guest parking for the multi-family residential uses located on Lot 1 and 5 of Vesting Map No. 82806. Guest parking for the townhomes that are located on Lot 6 will be provided on Lot 5 of Vesting Map No. 82806.

The Shared Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance and Use of Off-Site Parking" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway), recorded on July 1, 2015, as Instrument No. 20150792116, of Official Records, Recorder's Office of the County of Los Angeles, California. The Shared Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance and Use of Off-Site Parking" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway), recorded on July 1, 2015, as Instrument No. 20150792117, of Official Records, Recorder's Office of the County of Los Angeles, California. The Shared Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance of Parking Site" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway), recorded on April 1, 2015, as Instrument No. 20150351986, of Official Records, Recorder's Office of the County of Los Angeles, California.

34. After the final map for Vesting Tentative Map No. 82806 has been recorded, a document shall be recorded to rescind the "Covenant and Agreement to Hold Property as One Parcel" for property commonly known as 629 North Pacific Coast Highway (formerly 629 North Sepulveda Boulevard), recorded on April 1, 2015, as

Instrument No. 20150351988, of Official Records, Recorder's Office of the County of Los Angeles, California.

35. A Reciprocal Easement Agreement shall be prepared to provide reciprocal access between Lots 5 and 6 of Vesting Tract Map No. 82806 and reciprocal access to the public rights-of-way of Palm and Mariposa Avenues. The Reciprocal Easement Agreement shall rescind "Reciprocal Easement Agreement", recorded on April 1, 2015, as Instrument No. 20150351989, of Official Records, Recorder's Office of the County of Los Angeles, California. The Reciprocal Easement Agreement shall be reviewed and approved by the Director of Development Services and the City Attorney. The Reciprocal Easement Agreement shall not be recorded until the final map for Vesting Tentative Map No. 82806 is recorded, the Fairfield Parking Site and PCC South Site are constructed, and a building permit is issued for the PCC North Site.

36. A positive balance shall be maintained in all project reimbursement accounts at all times. If the balance of the Reimbursement Account(s) associated with the project becomes negative at any time, all work on the project shall be suspended, including the issuance of permits and project inspections, until such time as the sufficient funds are deposited to return the account(s) to a positive balance.

Building Division Conditions

37. Before the City issues grading permits for each building site in the PCCSP, the applicant must submit a geotechnical/soils report for that building site, along with an associated grading plan that addresses the current code to the Development Services Department for review and approval.

38. Before the City issues grading permits for each building site in the PCCSP, the applicant must submit a soils report for that building site to the Development Services Department for review and approval.

39. Before the City issues building permits for each building site in the PCCSP, the applicant must submit plans for that building site to the Development Services Department for review and approval showing compliance with the version of the California Building Code, as adopted by the ESMC, in effect at the time of building permit application.

40. Before the City issues building permits for the PCC North Site and/or the PCC South Site ("Sites"), the applicant must show proof of Los Angeles County Health Department approval for any public pools proposed for those Sites.

Fire Department Conditions

41. Each phase of the project must comply with all applicable requirements in the California Fire Code and the International Fire Code, as adopted by the ESMC,

and El Segundo Fire Department regulations, in effect at the time of building permit application.

42. Before the City issues a building permit for each building site, the applicant must submit a Fire/Life Safety Plan for that building site to the Fire Chief (or designee) identifying fire safety precautions during demolition and construction, emergency site access during construction, permanent fire department access, fire hydrant locations and any existing or proposed fire sprinkler system and fire alarm systems.

Public Works Department Conditions

General

43. All work in the City's right-of-way or on City-owned and maintained facilities shall require review and approval of the City Engineer or his/her designee. "City Engineer" = City Engineer or his/her designee throughout this document.

44. The applicant shall ensure that encroachment permits are secured from the Public Works Department/Engineering Division before commencing any and all work in the City's public right-of-way (ROW), including lane closures.

45. Construction inspection shall be coordinated with the Public Works Inspector and no construction shall deviate from the approved plans without approval of the City Engineer. If plan deviations are necessary, the applicant shall provide a revised plan or details of the proposed change for review and approval of the City Engineer prior to construction.

46. Prior to issuing of the Certificate of Occupancy, the applicant shall ensure installation of all improvements required by the Public Works Department are inspected and approved by the City Engineer for that building site.

47. All construction-related parking shall be accommodated on-site or on other private property. No construction related parking shall be permitted off-site in the public right-of-way.

48. A grading and drainage plan shall be provided and stamped by a California (CA) State-licensed civil engineer as part of the Building Permit process.

49. A utility plan for each building site shall be provided that shows all existing and proposed utility lines and their sizes (sewer, water, gas, storm drain, electrical, etc.), including easements, within 200 feet of the project site boundary.

50. All record drawings (PDF and CAD format) and supporting documentation shall be submitted to the Public Works Engineering Division prior to scheduling the project's final inspection for that phase.

51. Haul trucks are to use PCH north to Imperial Highway and PCH south to El Segundo Boulevard. All three of these streets are currently designated as truck routes in the City.

52. The applicant shall record Vesting Map No. 82806, subject to review and approval by the Director of Public Works and the Director of Development Services.

Street Improvements & Traffic Control

53. The applicant shall dedicate to the City in fee that certain portion of real property that includes the eastern 25 feet of Indiana Street (from the centerline of Indiana Street) between Mariposa Avenue to the north and Holly Avenue to the south as depicted on Vesting Tentative Tract Map No. 82806. Such dedication shall occur through and upon recordation of the Final Map.

54. The applicant shall dedicate to the City in fee that certain portion of real property that includes the northern 25 feet of Holly Avenue (from the centerline of Holly Avenue) between Indiana Street to the west and Pacific Coast Highway to the east as depicted on Vesting Tentative Tract Map No. 82806. Such dedication shall occur through and upon recordation of the Final Map.

55. Before the recording of the Final Map, the applicant shall record a lot tie covenant if any buildings are to be constructed across existing lot lines or if any building location does not meet the development standards of the Pacific Coast Commons Specific Plan (PCCSP) due to the location of the existing lot lines. No Certificates of Occupancy shall be granted for any use or structure until the recording of the Final Map.

56. General Provisions regarding dedications and improvements in Conditions 57 through 59:
    a. Improvements and dedication shall be required in conjunction with the development of the lot immediately adjacent to the street or streets where the improvement and dedication is required.
    b. The applicant shall prepare a grant deed and legal description of the land to be dedicated, subject to review and approval by the City Attorney for any required dedications.
    c. All dedications shall be in favor of the City of El Segundo.
    d. Before the issuance of a building permit for the related site, the applicant shall submit Street and Public Right-of-Way Improvement Plans for review and approval to the Director of Public Works and the Director of Development Services. Said plans shall include any required dedications, roadway widening, sidewalks and parkway in accordance with the conditions below, to be developed to City standards, except as modified by these conditions.
    e. All required right-of-way dedications shall be made prior to the issuance of a Certificate of Occupancy for any building on the related site.
    f. All right-of-way improvements shall be completed before the issuance of a

"Final Inspection Approval." The improvements shall be reviewed and approved by the City Engineer and Director of Development Services.

g. The applicant shall be responsible for the costs to modify and construct the roadway widening and sidewalk improvements as described in conditions 57 through 59.

57. Street dedication and improvement conditions related to the development of Lot 4 of Vesting Tentative Tract Map No. 82806 (Pacific Coast Commons – Fairfield Parking Site):

a. The applicant shall construct a new 10-foot wide right-turn only lane along the south side of Mariposa Avenue, roadway widening improvements, and a new public sidewalk.

b. The applicant shall dedicate a variable width dedication on the south side of Mariposa Avenue ranging from a minimum of 4 feet on the west at Indiana Street, prior to the 10-foot wide right-turn only lane, to a maximum of 12 feet on the east at Pacific Coast Highway to accommodate the 10-foot wide right-turn only lane and 2-foot widening and reconfiguration of the two existing lanes in compliance with the Circulation Element requirements.

c. In addition to the 25-foot dedication required by Condition 53 above, the applicant shall dedicate an additional 4 feet along the eastern side of Indiana Street along the frontage of Lot 4 of Vesting Tentative Map. No. 82806.

d. Before the construction of the right-of-way improvements on the south side of Mariposa Avenue, including the new right-turn lane that would intersect Pacific Coast Highway and any improvements on Pacific Coast Highway, the applicant shall obtain a Caltrans Encroachment Permit, if required, for any alteration to Pacific Coast Highway. All alterations shall be in accordance with relevant Caltrans Encroachment Permit requirements and conditions shall be shown on the Final Working Drawings.

58. Street dedication and improvement conditions related to the development of Lot 1 of Vesting Tentative Map No. 82806 (Pacific Coast Commons South Site):

a. In addition to the 25-foot dedication required by Condition 54 above, the applicant shall dedicate an additional 7 feet along the northern side of Holly Avenue along the frontage of Lot 1 of Vesting Tentative Map No. 82806.

b. In addition to the 25-foot dedication required by Condition 53 above, the applicant shall dedicate an additional 4 feet along the eastern side of Indiana Street only along the frontage of Lot 1 of Vesting Tentative Map. No. 82806.

c. Before the construction of the right-of-way improvements on the north side of Holly Avenue, including the 2-foot roadway widening that would intersect Pacific Coast Highway and any improvements on Pacific Coast Highway, the applicant shall obtain a Caltrans Encroachment Permit, if required, for any alteration to Pacific Coast Highway. All alterations shall be in accordance with relevant Caltrans Encroachment Permit requirements and conditions shall be shown on the Final Working Drawings.

59. Street dedication and improvement conditions related to the development of Lot 5 and Lot 6 of Vesting Tentative Map No. 82806 (Pacific Coast Commons North Site). These conditions shall apply with the development of Lot 5 or Lot 6, whichever develops first:
    a. The applicant shall dedicate 7 feet on the north side of Mariposa Avenue along the frontage of Lot 5.
    b. The applicant shall dedicate 12 feet on the south side of Palm Avenue along the frontage of Lot 6.

60. The applicant shall provide reciprocal access agreements, subject to review and approval by the City Attorney, between any parcels that do not have independent direct vehicle access to a public right-of-way. Such agreements shall be recorded before issuance of any Certificate of Occupancy for a building on an affected parcel.

61. All new sidewalk, curb & gutter, driveway approaches, and curb ramps shall be constructed per the latest Standard Plans for Public Works Construction (SPPWC) "Greenbook" and City standards.

62. All existing sidewalk, curb & gutter, driveway approaches, and curb ramps that are broken or not in conformance with the latest SPPWC or City standards shall be removed and constructed per the latest SPPWC and City standards.

63. Any obstruction located within existing curb ramps shall be relocated.

64. All unused driveways shall be removed and replaced with full-height curb, gutter and sidewalk per SPPWC standards and City standards.

65. The applicant shall provide a minimum 4' sidewalk clearance around any obstruction in the sidewalk i.e. posts, power poles, etc. along any property frontage where new construction is taking place. This condition does not apply on Indiana Street along the frontage of proposed Lot 2 and 3 of Vesting Tentative Map No. 82806.

66. PG-64-10 tack coat and hot mix asphalt shall be used for all slot paving required next to new concrete installations. Slot paving shall be 3 feet wide and 1 foot deep, consisting of 6 inches of asphalt over 6 inches of base.

67. The applicant shall coldmill 2" Asphalt Concrete (AC) pavement surface and overlay with 2" AC PG-64-10 the curb-to-curb full street width of Mariposa Avenue along the property frontages and the curb-to-centerline half street width of Palm Avenue, Indiana Street, and Holly Avenue along the property frontages. AC mix specification shall conform to Standard Specifications for Public Works Construction (SSPWC) "Greenbook", section 203-1.

68. The applicant shall provide street signing and striping plans for the new development. All striping in the public ROW shall consist of thermoplastic paint per the latest CA Manual on Uniform Traffic Control Devices (MUTCD).

69. The applicant shall provide traffic control plans for all work requiring a lane closure.

70. The work scheduled in the public right-of-way on major arterial streets shall be Monday through Friday from 9am to 3pm, except holidays. Work scheduled on all other street classifications shall be Monday through Friday from 7am to 4pm. Contractor shall obtain prior approval from the City Engineer for performing weekend work, night work, or work on a holiday.

71. During construction, it shall be the responsibility of the applicant to provide safe pedestrian traffic control around the site. A pedestrian protection plan shall be submitted to the Public Works Department for review and approval by the City Engineer. This may include but not be limited to signs, flashing lights, barricades and flag persons.

72. Once the ROW improvements are accepted by the City Engineer, they are not to be used for staging building construction activities, including but not limited to, storage of construction materials and equipment. The street and sidewalks shall be kept free of construction debris, mud and other obstacles and shall remain open to traffic at all times. The applicant shall bear the entire cost of replacement or repair to any damage to improvements caused by its use, or its Contractors' and Subcontractors' use, of the improvements after acceptance by the City Engineer.

73. The applicant shall submit any new traffic signal plans to the City Public Works Department and LA County Department of Public Works (LACDPW) for review and approval. The applicant will coordinate all inspections with the LACDPW inspector for acceptance of the traffic signal poles and related equipment. The applicant will inform the City of any updates during this process.

Water

74. The proposed improvement will impact the capacity of the existing City owned water main lines. The applicant must submit a water study to determine if there is a capacity deficiency in the affected water main lines and if so, water main upgrades will be required. The water study shall be reviewed and approved by the City Engineer.

75. Any existing water meters, potable water service connections, fire backflow devices and potable water backflow devices for each new building site must be upgraded to current City Water Division standards. These devices shall be placed or relocated onto private property.

76. The applicant must submit plans for water system upgrades for each new building site to the City of El Segundo Public Works Department for review and approval.

77. Any unused water laterals for each new building site shall be abandoned and properly capped at the City main. The Contractor is to obtain necessary permits and licenses, and provide traffic control plans and shoring plans.

Sewer

78. The proposed improvement will impact the capacity of the existing City owned sewer main lines. The applicant must submit a sewer study for each new building site to determine if there is a capacity deficiency in the affected sewer main lines and if so, sewer upgrades will be required for that new building site. The sewer study shall be reviewed and approved by the City Engineer.

79. Prior to issuance of a Certificate of Occupancy for each new building site, the sewer connection fee for must be paid to the City of El Segundo Public Works Department for that building site.

80. Any unused sanitary sewer laterals shall be abandoned and properly capped at the City main for each new building site. The Contractor is to obtain necessary permits and licenses, and provide traffic control plans and shoring plans.

Storm Drain

81. Provide a Low Impact Development Study (LID) signed and stamped by a registered Civil Engineer. Make sure to comply with the project design requirements to retain on site (infiltrate or store for use) volume of runoff from ¾ inch storm or the 85th percentile 24-hour storm, whichever is greater (SWQDv) for each phase of the project.

82. Hydrologic and hydraulic calculations shall be submitted to size appropriate storm drain facilities to control on-site drainage and mitigate off-site impacts. Refer to the most recent Los Angeles County Hydrology Manual. Instructions and the manual are available at the County website at http://dpw.lacounty.gov/wrd/Publication/index.cfm. Calculations shall be signed by a registered civil engineer.

83. The project shall comply with the National Pollutant Discharge Elimination System (NPDES) requirements and shall provide Best Management Practices (BMPs) for sediment control, construction material control and erosion control.

Landscaping & Irrigation

84. Irrigation plans shall be submitted to the Public Works Department for review and approval for each new building site. All irrigation meters and mechanical equipment shall meet the City Water Division standards.

85. All public landscape improvements shall be designed to City standards and approved by the Parks & Recreation Department.

86. The property owner shall maintain all landscaping and irrigation in the public ROW fronting the property.

87. The applicant shall coordinate any tree removals in the public right-of-way with the Parks & Recreation Department prior to the start of construction.

Police Department Conditions

88. Prior to the issuance of building permits, the applicant must submit a Photometric Lighting Plan complying with El Segundo Security Code, Ordinance 1540, Sections, 13-20-15.E; 13-20-16.L; 13-20-17.M.

89. Prior to the issuance of building permits, the applicant submit a Wayfinding Plan complying with El Segundo Security Code, Ordinance 1540, Sections, 13-20-15.C.

90. Prior to the issuance of building permits, the applicant must submit a Construction Site Security Plan complying with El Segundo Security Code, Ordinance 1540, Section, 13-20-20.C.

91. Prior to the issuance of building permits, the applicant must submit an Emergency Access Plan complying with El Segundo Security Code, Ordinance 1540, Sections, 13-20-18 and 13-20-19.C.

92. Prior to the issuance of building permits, the applicant must provide a Parking Surveillance Camera Plan parking structures complying with the following standards:

    a) High Definition color cameras shall be installed at all vehicle and pedestrian entrances and be capable of clearly capturing an entire vehicle including license plate and driver. Cameras at pedestrian entrances shall clearly capture the entire person and a recognizable face image.
    b) Camera images shall be digitally stored for at least 30 days.
    c) A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed as part of the construction plans.

93. Prior to authorization to use, occupy, and/or operate, the applicant shall arrange for and have passed an inspection, to be performed by the Police Department, to ensure compliance with the Parking Surveillance Camera Plan.

94. Prior to authorization to use, occupy, and/or operate, the applicant shall arrange for and have passed an inspection, to be performed by the Police Department, to ensure compliance with the Emergency Access Plan.

Impact Fee Conditions

95. Pursuant to ESMC §§ 15-27A-1, *et seq*., and before building permits are issued, the applicant must pay a one-time fire services mitigation fee in accordance with City Council Resolution No. 4687 for the building that the permit is applicable to.

96. Pursuant to ESMC §§ 15-27A-1, *et seq*., and before building permits are issued, the applicant must pay a one-time police services mitigation fee in accordance with City Council Resolution No. 4687 for the building that the permit is applicable to.

97. Pursuant to ESMC §§ 15-27A-1, *et seq.,* and before building permits are issued, the applicant must pay a one-time park services mitigation fee in accordance with City Council Resolution No. 4687 for the building that the permit is applicable to.

98. Before building permits are issued, the applicant must pay the required sewer connection fees (as specified in ESMC Title 12-3) for the building that the permit is applicable to.

99. Pursuant to ESMC §§ 15-27A-1, *et seq*., and before the City issues a certificate of occupancy for buildings within the Specific Plan, the applicant must pay a one-time traffic mitigation fee in accordance with City Council Resolution No. 4443 for the building that the permit is applicable to.

100. Subject to any applicable limitations set forth in the Development Agreement, permittee agrees to pay City any development impact fees ("DIFs") that may be applicable to the Project. Permittee takes notice pursuant to Government Code § 66020(d) that City is imposing the DIFs upon the Project in accordance with the Mitigation Fee Act (Government Code § 66000, et seq.). The permittee is informed that it may protest DIFs in accordance with Government Code § 66020.

101. Before building permits are issued, the applicant must pay the required School Fees. This condition does not limit the applicant's ability to appeal or protest the payment of these fees to the school districts(s).

Miscellaneous

102. Residential lease agreements shall prohibit the storage of bicycles and goods on balconies of residential units. The prohibition against storage on balconies shall not prevent typical use of balconies as private outdoor space.

103. Unless otherwise provided by the Development Agreement, the vesting tentative map will expire pursuant to Government Code § 66452.6 and ESMC § 14-1-12.

104. Approval of this Project shall not be construed as a waiver of applicable and appropriate zoning regulations, or any Federal, State, County and/or City laws and regulations. Unless otherwise expressly specified herein or in the Development

Agreement or Pacific Coast Commons Specific Plan, all other requirements of the El Segundo Municipal Code shall apply.

105. Failure to comply with and adhere to all of these conditions of approval may be cause to revoke the approval of the project by the Planning Commission, pursuant to the provisions of the El Segundo Municipal Code.

106. In the event that any of these conditions conflict with the recommendations and/or requirements of another permitting agency or City Department, the stricter standard shall apply.

107. The Applicant, agrees to indemnify and hold the City harmless from and against any claim, action, damages, costs (including, without limitation, attorney's fees), injuries, or liability, arising from the City's approval of an Environmental Impact Report for Environmental Assessment No. EA-1248, General Plan Amendment No. GPA 19-01, Specific Plan No. SP 19-01, Zone Change and Zoning Map Amendment No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, Development Agreement No. DA 19-02, Subdivision No. SUB 19-03 for Vesting Tentative Map (VTM) No. 82806, Site Plan Review No. SPR 19-01, Parking Demand Study ad Shared Parking Analysis, and Waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and mixed-use development. Should the City be named in any suit, or should any claim be brought against it by suit or otherwise, whether the same be groundless or not, arising out of the City approval of an Environmental Impact Report for Environmental Assessment No. EA-1248, General Plan Amendment No. GPA 19-01, Specific Plan No. SP 19-01, Zone Change and Zoning Map Amendment No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, Development Agreement No. DA 19-02, Subdivision No. SUB 19-03 for Vesting Tentative Map (VTM) No. 82806, Site Plan Review No. SPR 19-01, Parking Demand Study and Shared Parking Analysis, and Waiver of public right-of-way dedications for the Pacific Coast Commons Specific Plan and mixed-use development project, the Applicant, agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise. For purposes of this section "the City" includes the City of El Segundo's elected officials, appointed officials, officers, and employees.

By signing this document, Patrick Volz, on behalf of BRE EL SEGUNDO PROPERTY OWNER A LLC, BRE EL SEGUNDO PROPERTY OWNER B LLC, and BRE EL SEGUNDO PARKING LLC, certifies that he has read, understood, and agrees to the Project Conditions listed in this document.

_____

Patrick Volz, Vice President
BRE EL SEGUNDO PROPERTY OWNER A LLC,
BRE EL SEGUNDO PROPERTY OWNER B LLC,
BRE EL SEGUNDO PARKING LLC

PLANNING COMMISSION RESOLUTION NO. 2905
EXHIBIT "B"

ORDINANCE NO. _____

AN ORDINANCE APPROVING ZONE CHANGE AND ZONING MAP AMENDMENT NO. 19-01, SPECIFIC PLAN NO. SP 19-01, ZONE TEXT AMENDMENT NO. ZTA 19-08, AND DEVELOPMENT AGREEMENT NO. DA 19-02 FOR THE PACIFIC COAST COMMONS SPECIFIC PLAN AND PACIFIC COAST COMMONS MIXED-USE PROJECT AT 475-629 PACIFIC COAST HIGHWAY.

The City Council of the city of El Segundo does ordain as follows:

SECTION 1: The Council finds and declares as follows:

A. On May 31, 2019, BRE El Segundo Holdco, LLC, submitted applications for an Environmental Assessment (EA No. 1248), General Plan Amendment and General Plan Map Amendment No. GPA 19-01, Specific Plan No. SPA 19-01, Zone Change and Zoning Map Amendment No. ZC 19-01, Zone Text Amendment No. ZTA 19-08, Development Agreement No. DA 19-02, and Subdivision No. SUB 19-03 for Vesting Tentative Map No. 82806 for the Pacific Coast Commons Specific Plan and Pacific Coast Commons Mixed-Use Project at 475-629 North Pacific Coast Highway ("Project");

B. The project applications were reviewed by the City's Development Services Department for, in part, consistency with the General Plan and conformity with the ESMC;

C. The City reviewed the project's environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

D. An Environmental Impact Report (EIR) was prepared pursuant to the requirements of CEQA and the CEQA Guidelines;

E. The Development Services Department completed its review and scheduled a public hearing regarding the application before the Planning Commission for November 18, 2021;

F. On November 18, 2021, the Planning Commission opened a duly noticed public hearing to receive public testimony and other evidence regarding the application;

G. On November 18, 2021, the Planning Commission continued the public hearing to December 9, 2021; and

H. On December 8, 2021 a letter was submitted to the City by Mitchell M. Tsai, Attorney At Law, on behalf of the Southwest Regional Council of Carpenters ("Carpenters' Letter") objecting to the Project and referring to an earlier letter which had never been received by the City which raised issues with the EIR; and

I. Based on the submission of the Carpenters' Letter the City determined that it would be necessary to continue the hearing to allow time to respond, but nevertheless took testimony at the continued public hearing held on December 9, 2021; and

J. During the public testimony portion of the hearing, a letter was submitted by the Lozeau Drury law firm on behalf of Supporters Alliance For Environmental Responsibility ("SAFER letter");

K. On February 10, 2022, the Planning Commission held a new duly noticed public hearing to receive public testimony and other evidence regarding the application;

L. After the close of the public hearing, the Planning Commission adopted Resolution No. 2905 recommending that the City Council approve the Project including, without, limitation, adopting this Ordinance;

M. On _____, 2022, the City Council held a public hearing and considered the information provided by City staff, public testimony, and representatives of BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC regarding this Ordinance; and

N. This Ordinance and its findings are made based upon the entire administrative record including, without limitation, testimony and evidence presented to the City Council at its _____, 2022 hearing and the staff report submitted by the Development Services Department.

SECTION 2: *Environmental Assessment.* Prior to adopting this Ordinance, the City Council adopted Resolution No. ____ certifying a Final Environmental Impact Report (FEIR), adopting Findings of Fact and a Statement of Overriding Considerations (SOC) and adopting a mitigation monitoring and reporting program (MMRP) for this Project which, among other things, properly assesses the environmental impact of this Ordinance, and the Project, in accordance with CEQA. This Ordinance incorporates by reference the environmental findings and analysis set forth in Resolution No. ____.

SECTION 3: *General Plan Amendment.* Prior to adopting this Ordinance, the City Council adopted Resolution No. ____ for General Plan Amendment No. 19-01, changing the land use designation for the property at 475-629 North Pacific Coast Highway from General Commercial and Parking to Pacific Coast Commons Specific Plan (PCCSP).

SECTION 4: *Factual Findings and Conclusions*. The City Council finds that the following facts exist:

A. The subject property is located at 475-629 North Pacific Coast Highway in the northwest quadrant of the City of El Segundo.

B. The property site is a level 6.385 gross acre site located on two blocks along Pacific Coast Highway.

C. The project site is comprised of two blocks and is currently improved with two existing hotels and two existing paved parking lots. The block bounded by Pacific Coast Highway, Holly Avenue, Indiana Street and Mariposa Avenue is currently developed with the 350-room Fairfield Inn and Suites and the 246-room Aloft hotels totaling approximately 325,000 gross square feet combined and a paved parking lot. The portion of the project site on the block north of Mariposa Avenue and south of Palm Avenue is developed with a paved surface parking lot. No trees are located on the parking lot site.

D. The project is a residential and commercial mixed-use concept. The Specific Plan would allow 622,398 gross square feet of development including 282,398 square feet of existing development that would remain. The proposed maximum development density is a 2.70 Floor Area Ratio (FAR) after dedications for right-of-way improvements. The Specific Plan would allow a maximum of two hundred sixty-three residential dwelling units including thirty-two affordable housing units located among three of the Land Use Districts within the Specific Plan. Each new lot will meet or exceed the minimum size and dimension requirements.

E. The surrounding land uses include a fast food restaurant (Carl's Jr.), a vacant restaurant and parking lot, and multi-family residential uses to the north and a gas station on the northwest corner of Mariposa Avenue and Pacific Coast Highway; restaurants and office uses, a Ralphs market, two commercial shopping centers with retail and restaurant uses, and a 6-story office building to the east; a small commercial shopping center with a drug store, bank, two restaurants and retail store to the south; and multi-family residential uses to the west.

F. Development standards for allowable uses have been developed for the Specific Plan and all uses within the Plan area must be compliant. The allowed uses identified in the development standards include multiple-family residential uses including both townhomes and apartments, and a range of commercial uses including but not limited to, hotel, retail, restaurant, and offices.

G. This Ordinance rezones the area from the General Commercial (C-3) Zone and Parking (P) Zone to the Pacific Coast Commons Specific Plan (PCCSP) Zone and adopts the Pacific Coast Commons Specific Plan.

H. The PCCSP contains five land use designations. These are: PCC Mixed-Use 1 (PCC MU-1), PCC Commercial-1 (PCC COM-1), PCC Commercial-2 (PCC COM-2), PCC Commercial-3 (PCC COM-3), and PCC Mixed-Use 2 (PCC MU-2). The

PCC MU-1 designation applies to one parcel comprised of 1.241 acres after right-of-way dedications. The PCC COM-1 designation applies to one parcel comprised of 0.905 acres after right-of-way dedications. The PCC COM-2 designation applies to one parcel comprised of 1.549 acres after right-of-way dedications. The PCC COM-3 designation applies to one parcel comprised of acres after 0.728 acres after right-of-way dedications. The PCC MU-1 designation applies to two parcels comprised of 1.806 acres after right-of-way dedications.

I. The Project includes completion of a roadway widening on Mariposa Avenue and the addition of a new eastbound dedicated right-turn only travel lane that turns south onto Pacific Coast Highway. The Project also includes roadway widening on Holly Avenue.

SECTION 5: *Zone Change Findings.*

A. Based on the factual findings set forth in Section 4 of this Ordinance, the proposed Zone Change is necessary to carry out the proposed project because the proposed General Plan Amendment changes the land use classification of the project site from General Commercial and Parking to Pacific Coast Commons Specific Plan (PCCSP). The Zone Change changing the property and the Zoning Map from General Commercial (C-3) and Parking (P) to Pacific Coast Commons Specific Plan (PCCSP) is necessary to maintain consistency with the proposed General Plan land use designation of Pacific Coast Commons Specific Plan.

B. ESMC Title 15 is intended to be the primary tool for implementing the goals, objectives and policies of the El Segundo General Plan. The zone change will maintain consistency with the proposed change in General Plan land use designation to Pacific Coast Commons Specific Plan and is also consistent with the General Plan goals, objectives and policies set forth in Section 3 of Resolution No. ____. Those findings of consistency are incorporated by reference as if fully set forth below.

SECTION 6: *Zone Text Amendment Findings.* Based on the factual findings in Resolution No. _____, as incorporated into this Ordinance, the Zone Text Amendment is necessary to implement the Project and establish the proposed Pacific Coast Commons Specific Plan (PCCSP) Zone. An amendment to ESMC § 15-3-2(A) to add a new subsection (12) to create the Pacific Coast Commons Specific Plan (PCCSP) Zone is necessary for consistency with the General Plan.

SECTION 7: *Specific Plan Findings.* The Pacific Coast Commons Specific Plan (PCCSP) will provide the comprehensive planning and zoning regulations for the proposed residential and commercial mixed-use development concept. Based on the factual findings set forth herein and in Resolution No. ___, together with the evidence in the administrative record as a whole, the City Council finds that the PCCSP will further the goals, policies and objectives of the General Plan and will not obstruct their attainment. The City Council further finds that the PCCSP contains all of the elements required of a

specific plan pursuant to Government Code section 65451.

SECTION 8: *Development Agreement Findings.* Pursuant to City Council Resolution No. 3268, adopted June 26, 1984, the City Council finds that:

A. The project is consistent with the objectives, policies, general land uses, and programs specified in the general plan and any applicable specific plan. The Development Agreement would provide the following public benefits in exchange for valuable development rights (fifteen-year entitlement with a five-year extension option):

1. Create a Specific Plan with a range of multiple-family residential and commercial uses that will contribute to the City's housing stock including the addition of affordable housing units and contribute to job creation opportunities and balance growth with local resources and infrastructure capacity. Additionally, the addition of housing units will improve the jobs-housing balance within the City.

2. The project will provide thirty-two affordable housing units for occupancy by low income and very low-income households for 55 years.

3. The project will help foster economic development in the City by contributing to a strong business climate, with positive outcomes such as business retention and attraction, as well as effective levels of City services to all members of the community.

4. The project will increase the City's tax base including utility user tax, property tax and sales tax, and therefore provide the City with resources to provide high-quality services to residents and the daytime population.

5. The project includes the payment of $25,000 to the City for either the costs to implement a permit parking district adjacent to the Project site if the residents petition for such district or, to be used by the City for public improvements in the geographical vicinity of the Project site.

6. Community Non-Profit Space. The project will provide 1,000 square feet of community space on the ground floor of the Fairfield parking structure.

7. Landscaping improvements. Additional landscaping and trees will be provided on the west side of Indiana Street between Mariposa Avenue and Holly Avenue. Enhanced landscaping and pedestrian seating will be provided in the existing landscaped areas in front of the Fairfield Inn and Suites and Aloft hotels that will be installed with the development of the PCC South Site. Six new street trees will be planted along the PCC South Site development street frontage. Enhanced landscaping will be provided with the development of the PCC North Site along the western block wall.

8. Enhanced on-site paving improvements. Enhanced on-site paving improvements will be provided at several vehicular entrances/exits to the three new development areas.

9. EV Charging. The project will include 200 EV capable spaces including 50 installed EV chargers across the PCC Specific Plan area.

10. Solar Panels. Solar panels will be installed in the PCC North and PCC South residential developments that will generate sufficient power for their respective common areas power needs.

11. Battery Storage. The project will comply with the battery storage system requirements consistent with the 2022 Building Energy Efficiency Standards (Title 24 Energy Code) for both PCC North and PCC South.

12. Fencing improvements. Chain link fencing at the Fairfield and Aloft Hotel sites will be removed and replaced with decorative fencing.

13. The increase in density, which is located along a major bus route corridor and approximately ½ mile from the existing Metro Green Line Light Rail Station at Mariposa Avenue and Nash Street, helps implement regional planning programs and plans such as the SCAG Regional Transportation Plan/Sustainable Communities Strategy and efforts towards improving mobility and livability.

14. The increase in density close to the existing Metro Green Line light rail station also implements General Plan Land Use Element Policy LU 4-4.6 promoting denser mixed-use development near the City's existing Metro Green Line stations.

B. The project is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located. The proposed project includes a new land use designation and zoning classification, which establishes the permitted uses and development standards that would apply to the project. These uses and development standards are similar and compatible with the other commercially zoned districts in the City.

C. The project conforms to public convenience, general welfare and good land use practice. The Pacific Coast Commons Specific Plan includes a range of multiple-family residential and commercial uses that will contribute to the City's housing stock including affordable units, contribute to job creation opportunities, balance growth with local resources and infrastructure capacity, and improve the jobs-housing balance within the City. The project will provide roadway improvements on Holly Avenue and on Mariposa Avenue including a new dedicated eastbound (to southbound) right turn lane on Mariposa Avenue.

D. The project will not be detrimental to the health, safety and general welfare. An EIR was completed to evaluate the project which reviewed issue areas such as Aesthetics, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems. All feasible mitigation has been incorporated into the project to reduce or eliminate potential impacts and to maintain public health, safety and general welfare. The EIR concluded that the project will have a significant, unavoidable impact with regard to air quality due to the fact that it will result in slightly higher population growth than that anticipated in the SCAG 2016 RTP/SCS for the 2016-2040 period (an increase of 618 individuals as opposed to the 600 anticipated by SCAG). Notwithstanding the fact that the project would slightly increase the City's population growth beyond SCAG's projections for the 2016-2040 period, the City Council finds that the project will not be detrimental to the health, safety and general welfare.

E. The project will not adversely affect the orderly development of property or the preservation of property values. This project is surrounded by previously developed multiple-family residential and commercially developed land and the proposed uses of the Pacific Coast Commons Specific Plan are consistent with surrounding development and will not adversely affect the value of neighboring properties. The proposed Pacific Coast Commons Specific Plan development standards and development agreement will ensure that the project will be developed in an orderly fashion. All mitigation measures will be implemented at the time and place impacts occur.

SECTION 9: Actions. The City Council takes the following actions:

A. ESMC § 15-3-2(A) is amended to add subsection 12 to read as follows:

"12. Pacific Coast Commons Specific Plan (PCCSP):

There are five classes of use districts intended to be used within the boundaries of the Pacific Coast Commons Specific Plan. These districts are:

PCC Mixed-Use-1 (PCC MU-1)
PCC Commercial-1 (PCC COM-1)
PCC Commercial-2 (PCC COM-2)
PCC Commercial-3 (PCC COM-3)
PCC Mixed-Use-2 (PCC MU-2)"

B. The current Zoning Map is amended by changing the Project site from "Parking" and "General Commercial (C-3)" to "Pacific Coast Commons Specific Plan," including the zoning district designations within the Specific Plan. The corresponding changes to the Zoning Map are set forth in attached Exhibit "A," which is incorporated into this Ordinance by reference.

C. The "Pacific Coast Commons Specific Plan" is adopted as set forth in attached Exhibit "B," which is incorporated into this Ordinance by reference.

D. The Development Agreement by and between the City of El Segundo and BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, AND BRE El Segundo Parking LLC, as set forth in attached Exhibit "C," and incorporated into this Ordinance by reference, is approved. The Mayor is authorized to execute the Development Agreement in a form approved by the City Attorney.

E. To the extent they are not otherwise adopted or approved by this Ordinance, the City Council approves Zone Change and Zoning Map Amendment No. ZC 19-1 and Zone Text Amendment No. ZTA 19-08.

SECTION 10: *Exhibits.* This Ordinance includes the following exhibits which are attached hereto and made a part hereof:

A. Zoning Map Changes
B. Pacific Coast Commons Specific Plan
C. Development Agreement

SECTION 11: *Reliance on Record.* Each and every one of the findings and determinations in this Ordinance are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the City Council in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 12: *Limitations.* The City Council's analysis and evaluation of the Project is based on the best information currently available. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. One of the major limitations on analysis of the project is the City Council's knowledge of future events. In all instances, best efforts have been made to form accurate assumptions. Somewhat related to this are the limitations on the City's ability to solve what are in effect regional, state, and national problems and issues. The City must work within the political framework within which it exists and with the limitations inherent in that framework.

SECTION 13: *Summaries of Information.* All summaries of information in the findings which precede this section, are based on the substantial evidence in the record. The absence of any particular fact from any such summary is not an indication that a particular finding, is not based in part on that fact.

SECTION 14: *Construction*. This Ordinance must be broadly construed in order to achieve the purposes stated in this Ordinance. It is the City Council's intent that the

provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 15: *Enforceability*. Repeal of any provision of the ESMC does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 16: *Validity Of Previous Code Sections.* If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the ESMC or other city ordinance by this Ordinance will be rendered void and cause such previous ESMC provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 17: *Severability.* If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 18: *Certification and Recordation.* The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of El Segundo's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause a summary thereof to be published or posted in accordance with California law. Additionally, the City Clerk is directed to record the Development Agreement.

SECTION 19: *Effective Date.* This Ordinance shall take effect 30 days after its passage and adoption.

PASSED AND ADOPTED this ___ day of _____, 2022.

_____
Drew Boyles, Mayor

APPROVED AS TO FORM:

By: _____
Mark D. Hensley, City Attorney

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF EL SEGUNDO)

I, Tracy Weaver, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Ordinance No. _____ was duly introduced by said City Council at a regular meeting held on the ___ day of _____ 2022, and was duly passed and adopted by said City Council, approved and signed by the Mayor, and attested to by the City Clerk, all at a regular meeting of said Council held on the ___ day of _____, 2022, and the same was so passed and adopted by the following vote:

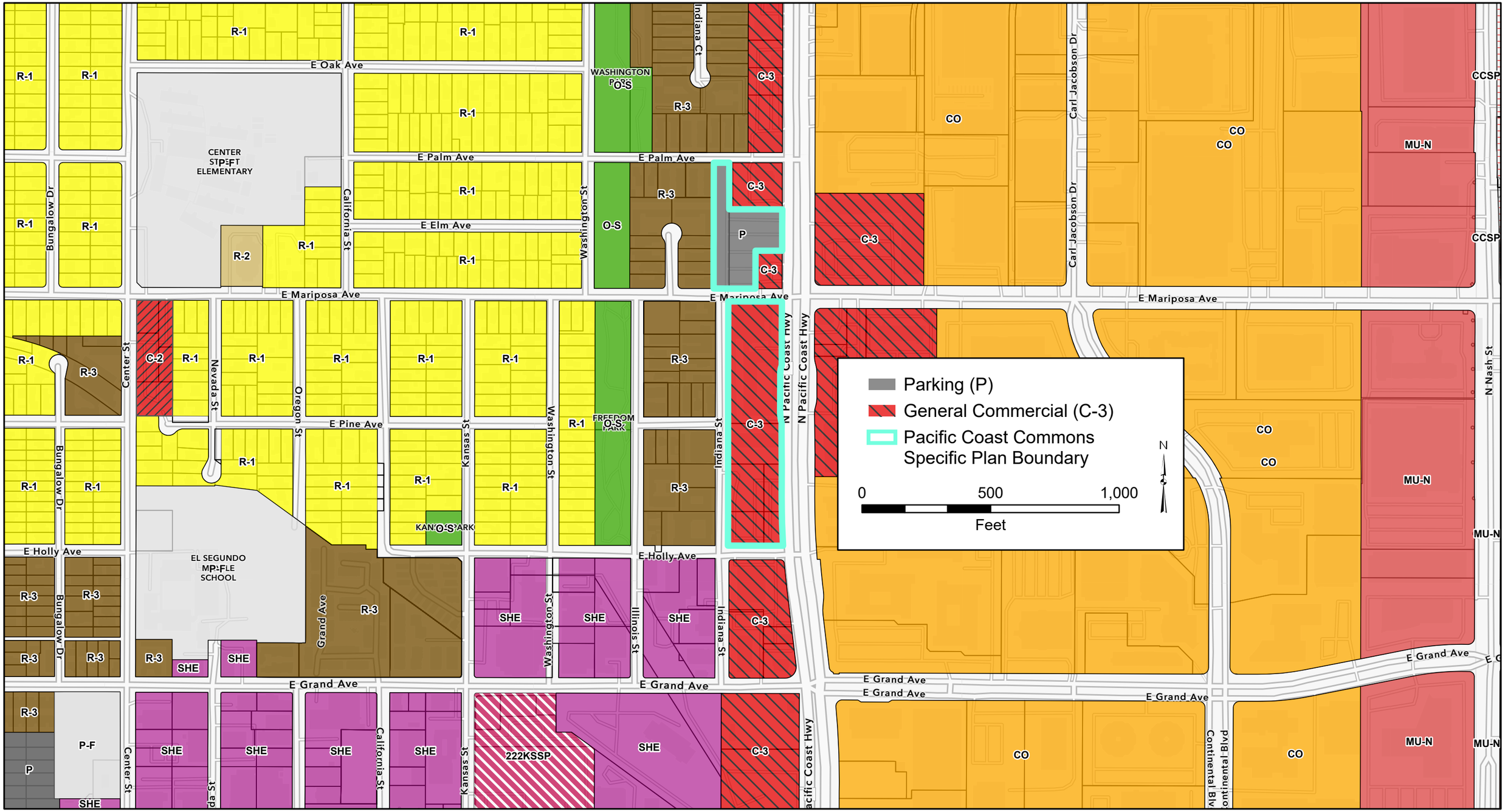
AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Tracy Weaver, City Clerk



City of El Segundo

Pacific Coast Commons Specific Plan
Existing Zoning

CITY OF EL SEGUNDO



City of El Segundo

Pacific Coast Commons Specific Plan
Proposed Specific Plan and Zoning Districts

CITY OF EL SEGUNDO

PACIFIC COAST COMMONS SPECIFIC PLAN

Specific Plan No. SP 19-01



August 2021

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I. INTRODUCTION

A. SPECIFIC PLAN AREA

Pacific Coast Commons Specific Plan (PCCSP) area is located in the City of El Segundo, County of Los Angeles, California. El Segundo is situated approximately 15 miles southwest of downtown Los Angeles. The City of El Segundo is located south of the City of Los Angeles, west of the City of Hawthorne and the County of Los Angeles, north of the City of Manhattan Beach, and east of the City of Los Angeles and the Pacific Ocean (refer to Exhibit 1, *Regional Vicinity Map*).

More specifically, the roughly 6.385 gross acre area within the Specific Plan (6.23 net acres post street dedications) is located in the northwest quadrant of the City of El Segundo, approximately three quarters of a mile south of the Los Angeles International Airport (LAX) and the Glen Anderson Century Freeway (I-105), approximately two and one quarter miles west of the San Diego Freeway (SR-405), and approximately two and a half miles southwest of the juncture of these two freeways.

The site encompasses a "superblock" bounded by Pacific Coast Highway, Mariposa Avenue, Holly Avenue and Indiana Street containing the Aloft and Fairfield Inn and Suites hotels. The site also includes a parking lot on a portion of the block to the north of the hotel "superblock" that has frontage on Pacific Coast Highway, Mariposa Avenue to the south and Palm Avenue to the north (refer to Exhibit 2, *Local Vicinity Map*, and Exhibit 3, *Local Vicinity Aerial View*).

The adjacent land uses and zoning include the following (refer to Exhibit 4, Existing Development):

North: The adjacent land uses to the north include: a fast food restaurant and a vacant restaurant and parking lot in the General Commercial (C-3) Zone; and multi-family residential uses in the Multi-Family Residential (R-3) Zone. A gas station is located on the northwest corner of Mariposa Avenue and Pacific Coast Highway in the General Commercial (C-3) Zone, which is north of the superblock that contains the two existing hotels and southeast of the parking lot for the Fairfield Inn and Suites Hotel located along Pacific Coast Highway between Mariposa and Palm Avenues. A fast-food restaurant, Carl's Jr., is located northeast of the same parking lot. Carl's Jr. is located at the southwest corner of Pacific Coast Highway and Palm Avenue.

East: The adjacent land uses to the east across Pacific Coast Highway include: a property with restaurants and office uses in the Corporate Office (CO) Zone; a Ralphs market and two commercial shopping centers with retail and restaurant uses in the General Commercial (C-3) Zone, and a 6-story office building in the Corporate Office (CO) Zone.

South: The adjacent land uses to the south of Holly Avenue include a small commercial shopping center with a drug store, bank, two restaurants and a retail store in the General Commercial (C-3) Zone.

West: The adjacent land uses to the west include multi-family residential uses in the Multi-Family Residential (R-3) Zone.

B. BACKGROUND

In 1957 a 386-room hotel known as the Thunderbird International Hotel was built on the property that is contained within the Specific Plan area. A restaurant, coffee shop, banquet rooms and lounge were added in 1958. The coffee shop was later renovated and re-opened in August 1962 as the Huki Lau restaurant with Polynesian décor and cuisine. The hotel was sold in the 1960's and renamed the Hacienda International Hotel which was later shortened to the Hacienda Hotel. The restaurant was renamed the Tiki Hut at that time as well.

The hotel was further expanded over the years and enlarged to include a maximum of 640 rooms at its peak with a reputation as the 10th largest hotel in the County of Los Angeles. In 1987, the hotel was granted a new Conditional Use Permit (EA-132; CUP 87-01) to allow for further renovations and the construction of a 60-foot tall sign tower with a 150 square-foot sign. Parking for the Hacienda Hotel was provided in multiple locations that included a parking lot located on the same block to the south of the Hacienda Hotel, a parking lot across the street on the block to the north of the hotel at 629 North Pacific Coast Highway, and some parking spaces interspersed around the hotel buildings.

On October 9, 2014 the Planning Commission approved two new conditional use permits (EA-1061; CUP 14-01 and CUP 14-02) to allow the existing Hacienda Hotel with 619 guest rooms to be split into two hotels, renovated and modernized. The North Hotel (located at 525 and 545 North Pacific Coast Highway) was renamed the Fairfield Inn and Suites and the South Hotel was renamed the Aloft Hotel (located at 475 North Pacific Coast Highway). The Aloft Hotel was reduced from 263 to 246 guest rooms and included a 6,640 square-foot addition to the existing 9-story hotel that provided a front desk area, lounge, self-serve food area, bar, multi-purpose room and exercise room. The Aloft Hotel includes an outdoor pool and an outdoor dining patio. The Aloft Hotel is 106,747 gross square feet in size. The Fairfield Inn and Suites was reduced from 356 to 350 guest rooms. The Fairfield Inn and Suites includes 3 buildings: a 9-story tower containing guest rooms, a 4-story building (with a central courtyard and pool area) that contains a lobby area, restaurant, bar, meeting rooms, a fitness room, and guest rooms, and a 2-story "food and beverage" building that contains banquet rooms, a restaurant/bar, and storage uses. The total square footage of the existing Fairfield Inn and Suites Hotel (3 buildings) is 217,311 gross square feet in size. Parking for the Aloft Hotel is provided in the existing parking lot to the south of the hotel (167 parking spaces). Additionally, 23 spaces are currently provided off-site pursuant to an off-site parking covenant in the existing parking lot at 629 North Pacific Coast Highway. Parking for the Fairfield Inn and Suites Hotel is provided primarily off-site with 213 parking spaces provided pursuant to an off-site parking covenant in the existing parking lot at 629 North Pacific Coast Highway and 33 parking spaces provided on-site.

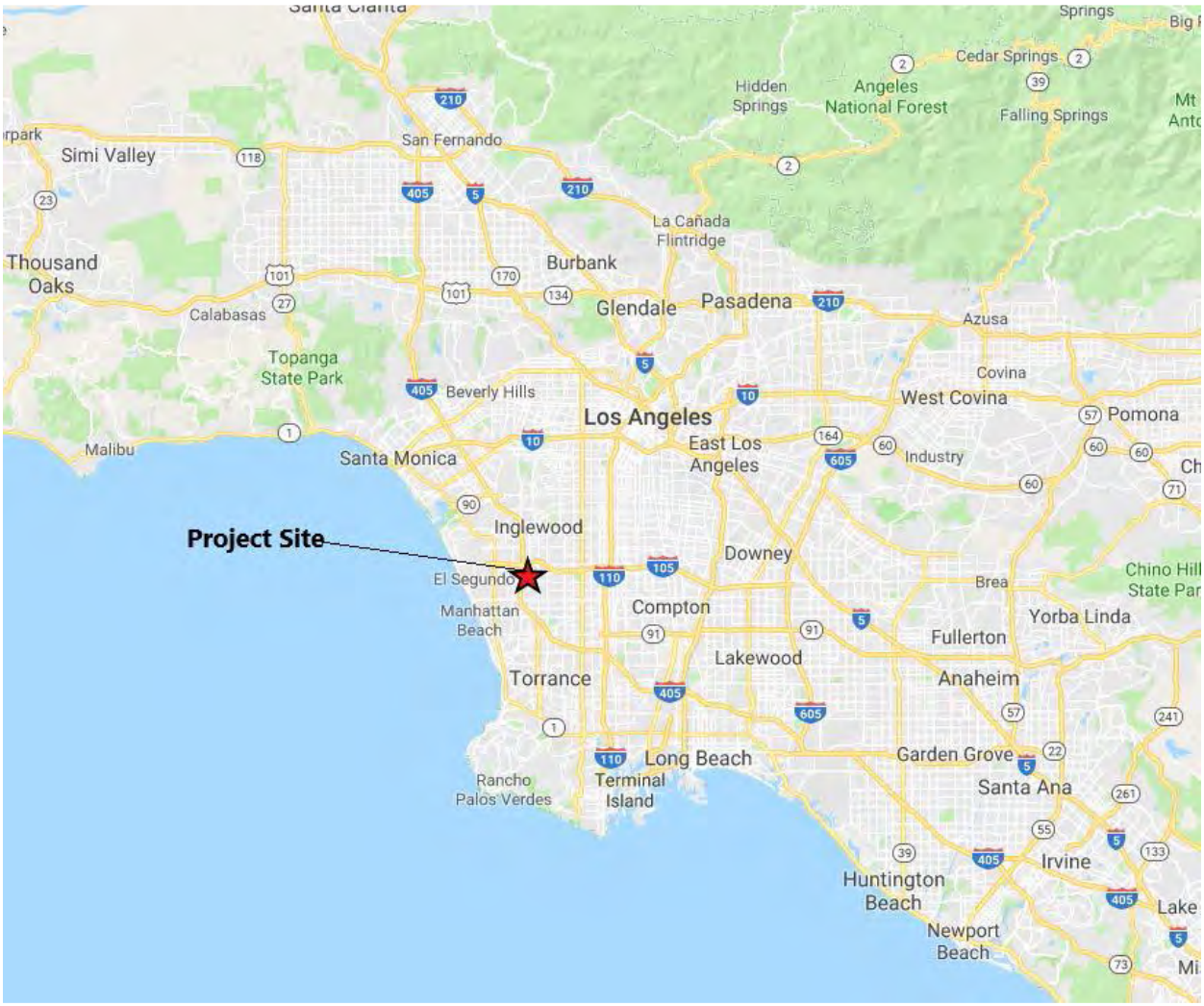


EXHIBIT 1
REGIONAL LOCATION MAP

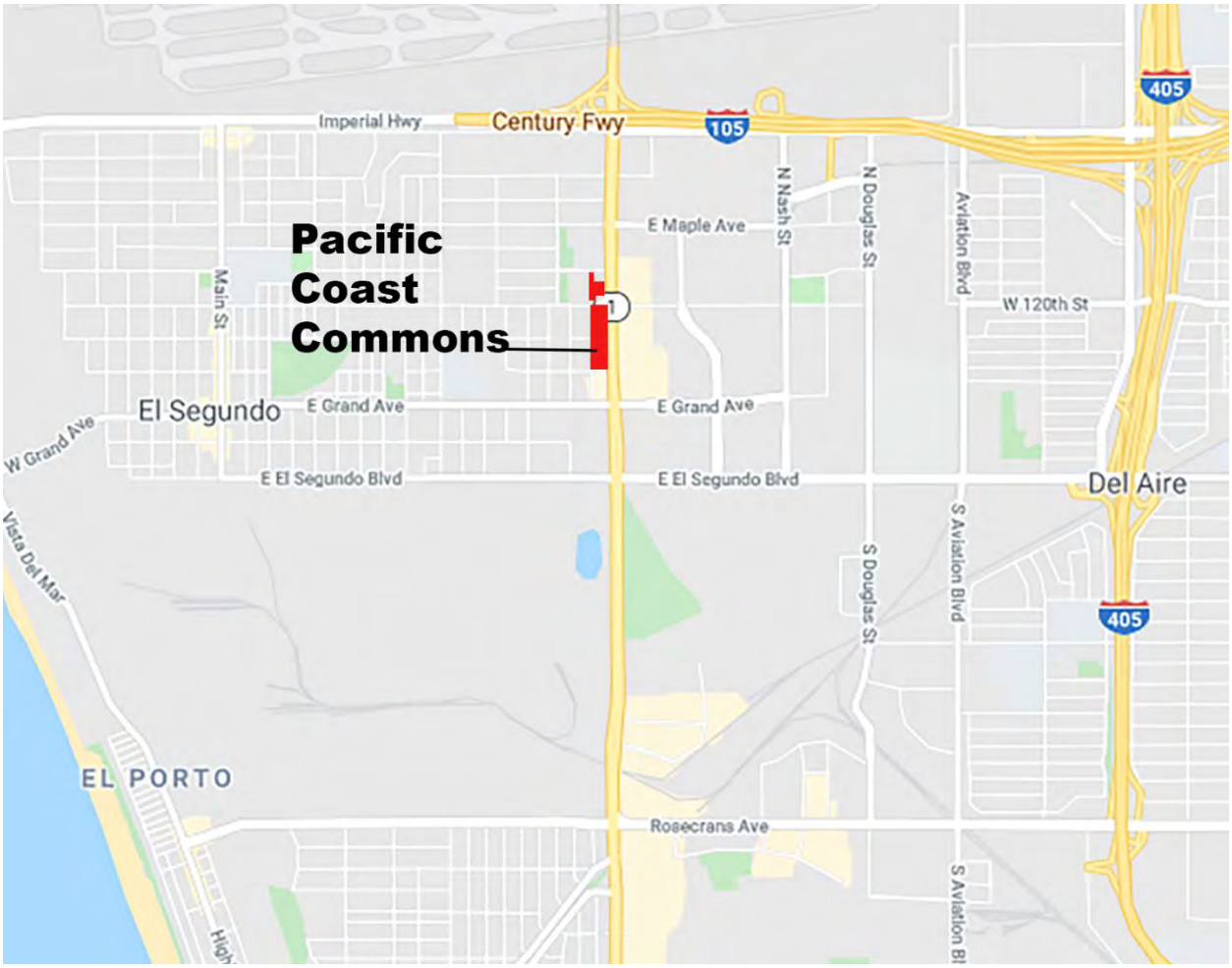


EXHIBIT 2
LOCAL VICINITY MAP



EXHIBIT 3
LOCAL VICINITY AERIAL VIEW



EXHIBIT 4
EXISTING DEVELOPMENT

The Aloft Hotel is 98,741 net square feet in size with an existing 0.992 FAR based upon its current lot size and configuration where a maximum of 1.0 FAR is allowed. The 3 buildings that comprise the Fairfield Inn and Suites Hotel total 190,026 net square feet in size with an existing 1.94 FAR where 1.0 FAR is allowed (existing legal, non-conforming condition). Both properties are non-conforming in regard to many development standards as they were built prior to the current development standards of the General Commercial (C-3) Zone.

The existing uses consist of:

Table I-1
Existing Uses

Building	Use	Net Square Footage	Gross Square Footage
Aloft Hotel	246 guest rooms, lobby/check-in area, lounge/bar, retail (food self-serve), multi-purpose meeting room/hospitality suite, fitness room, outdoor pool	98,741	106,747
Fairfield Inn and Suites Hotel	350 guest rooms, lobby/check in area, restaurant/bar, meeting room/event space (banquet rooms), office, storage , outdoor pool and patio area	190,028	217,311
Total		**288,767 square feet**	**324,058 square feet**

Under the existing General Commercial (C3) development standards no additional development could occur as the existing hotels utilize the maximum FAR allowed. Further, the parking lot to the north is currently zoned Automobile Parking (P) which only allows surface parking lots and parking structures. Commercial development is not permitted in the Automobile Parking (P) Zone. Therefore, a Specific Plan is needed in order to allow the proposed mixed-use residential/commercial development to be added to the site along with the two existing hotels that will remain.

BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE EL Segundo Parking LLC (collectively, "BRE El Segundo") filed for this Specific Plan along with other applications. The other applications include an Environmental Assessment, a General Plan and General Plan Map Amendment, Zone Change, Zoning Map Amendment, Zone Text Amendment, a Development Agreement, a Subdivision of Land (Vesting Tentative Map), Site Plan Review, a Parking Demand Study and Shared Parking Analysis, street dedication waivers for a portion of the dedication requirements for Mariposa Avenue and Indiana Street, reciprocal access agreements, an amendment to Resolution Nos. 2759 and 2760 to rescind the previous approvals of SUB No. 1405, Lot Tie Covenant No. 14-03, Off-site Parking Covenant Nos. MISC 14-03 and 14-06, leaving in place CUP Nos. 14-01 for the Fairfield Inn and Suites Hotel and CUP No. 14-02 for the Aloft Hotel, along with alcohol service at both hotels with modifications to the conditions

of approval accordingly, and new off-site parking covenants to replace the previously approved Parking Covenant Nos. MISC 14-03 and 14-06. The intent of the Specific Plan is to allow the development of the Specific Plan area with the combination of new and existing development with allowed residential and commercial uses with an average floor area ratio (FAR) of 2.15:1, a minimum floor area ratio (FAR) of 0.16:1 in any one land use district and a maximum floor area ratio (FAR) of 2.70:1 in any one land use district. The majority of the new development will target adding new housing stock to the community to meet existing and future housing needs through the development of existing surface parking lots and demolition of 41,660 gross square feet of a portion of the Fairfield Inn and Suites hotel ("Food and Beverage" Building") located at the southwest corner of Mariposa Avenue and Pacific Coast Highway. The adoption of this Specific Plan will allow expansion of the uses permitted on the site with development standards tailored to the unique mix of hotel, residential and commercial (retail and office) uses on the site.

C. DEMOGRAPHICS

According to the 2010 United States Census, as of 2010 El Segundo had a population of 16,654 persons and a total of 7,410 dwelling units. From 2000 to 2010, El Segundo's population increased by 4%. The California Department of Finance reported a population of 17,066 persons in May 2019. The 2019 Profile of the City of El Segundo prepared by the Southern California Association of Governments ("SCAG") indicates that as of 2017 there were 48,515 jobs in the City of El Segundo.

D. ECONOMIC CONTEXT

At its peak before the economic recession in 2008, El Segundo had a daytime population of approximately 85,000 persons compared to its resident population of approximately 17,000 persons. There was a net loss of jobs in the City between 2007 and 2012 with the number of jobs beginning to increase again in 2013. According to SCAG's 2015 profile the total number of jobs dropped from 56,559 persons in 2007 to 38,447 jobs in 2012. In addition to the fiscal benefits including increased sales tax, utility tax and property tax that will be provided as a result of the added residential and commercial uses, the potential for approximately 56 additional jobs that will be created by this Specific Plan will improve the overall economic health of the City. The additional jobs will be the result of the new commercial uses as no changes in employment are anticipated at the two existing hotels with the adoption of this Specific Plan. The additional jobs and increased tax base will contribute to the City's ability to provide high quality municipal services to the benefit of the City's resident and business community. The addition of 263 housing units will have a positive effect on the jobs/housing balance by increasing the number of housing units in the City to support El Segundo's jobs rich environment.

II. OVERVIEW OF THE SPECIFIC PLAN

A. PURPOSE AND AUTHORITY OF SPECIFIC PLAN

The purpose of this Specific Plan is to provide a foundation for the proposed land uses on the subject property through the application of regulations, standards and design guidelines. The Pacific Coast Commons Specific Plan provides text and exhibits which describe the proposed land uses and associated guidelines.

This Specific Plan is adopted pursuant to Government Code §§ 65450 through 65457.

Pursuant to Government Code § 65451, a Specific Plan must include text and a diagram or diagrams which specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space within the area covered by the plan.
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy and other essential facilities proposed to be located within the land area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, programs, public works projects and financing measures necessary to carry out the above items.
- A discussion of the relationship of the Specific Plan to the General Plan.

A thorough review of the El Segundo General Plan shows that this Specific Plan is compatible and consistent with the goals and policies outlined in the General Plan. This Specific Plan will further the goals and policies of the General Plan as more fully described below.

This Specific Plan was prepared to provide the essential relationship between the policies of the El Segundo General Plan and actual development in the Project area. By functioning as a regulatory document, the Pacific Coast Commons Specific Plan provides a means of implementing the City of El Segundo's General Plan. All future development plans and entitlements within the Specific Plan boundaries must be consistent with the standards set forth in this document. The Specific Plan is the sole regulatory document for development standards and design standards except where explicit references are made to the El Segundo Municipal Code or where terms used in this Specific Plan are defined in the El Segundo Municipal Code Section 15-1-6 and are not defined herein.

B. SPECIFIC PLAN SCOPE AND GOALS

The City of El Segundo is an employment-led community and accordingly, development has been led by employment rather than housing growth. The Pacific Coast Commons Specific Plan will: 1) serve the mission of economic development in the City which is to create, maintain, and implement a business climate that fosters a strong economic community; 2) provide opportunities for new high-quality multiple-family housing (apartments and townhomes) that will increase housing supply to meet the needs of El Segundo residents and employees in El Segundo's expanding business community; 3) improve the jobs/housing balance by increasing housing supply; 4) add affordable housing to the City; 5) provide benefits to air quality through the reduction of greenhouse gas emissions by providing new housing in close proximity to jobs and public transit; 6) enhance sustainability through the design of the development; and 7) maintain the quality of life that has characterized El Segundo for more than one hundred years.

Permitted uses within the Specific Plan area will create both housing and job opportunities for the residential and business community. The new commercial uses (restaurant, retail and office) allowed by the Specific Plan will create a synergy with the existing hotels, the new multi-family residential uses, and other existing commercial and industrial uses in the surrounding area. The commercial uses will provide needed amenities for the residents of the multi-family residential uses and the multi-family residential uses will support the growth of the surrounding commercial businesses. The design of the project will provide a high-quality pedestrian environment that will be compatible with the surrounding uses and create a sense of place for the surrounding neighborhood. The development allowed under the Specific Plan will provide a basis for a positive contribution to the maintenance and expansion of El Segundo's economic base as development typically increases the City's business license taxes, increases the City's utility user taxes, and increases the City's sales taxes. An increased economic base will provide the City with resources to provide high-quality services to its residents and daytime population.

C. CONSISTENCY WITH THE GENERAL PLAN

The El Segundo General Plan provides the underlying fundamentals of the Pacific Coast Commons Specific Plan, which serves both as a planning and regulatory document. The Specific Plan is the document implementing the El Segundo General Plan for the Specific Plan area.

Proposed development plans, tentative maps, and any other development approvals must be consistent with the Specific Plan. Projects consistent with this Specific Plan will be automatically deemed consistent with the General Plan.

Concurrent with the adoption of the Pacific Coast Commons Specific Plan the City also processed a General Plan Amendment that changes the Land Use Designation from General Commercial for the block bounded by Pacific Coast Highway, Mariposa Avenue, Indiana Street, and Holly Avenue to the Pacific Coast Commons Specific Plan and from Parking for the remaining parcels to the Pacific Coast Commons Specific Plan with an accompanying Land Use map change. The Specific Plan is therefore consistent with the General Plan of the City of El Segundo. More specifically, the Specific Plan directly implements or furthers the intent of the following goals, objectives and policies of the General Plan:

ECONOMIC DEVELOPMENT ELEMENT

Goal ED1: To create in El Segundo a strong, healthy economic community in which all diverse stakeholders may benefit.

Objective ED1-1 *To build support and cooperation among the City of El Segundo and its business and residential communities for the mutual benefits derived from the maintenance and expansion of El Segundo's economic base.*

Policy ED1-1.1: Maintain economic development as one of the City's and the business and residential communities' top priorities.

Policy ED1-2.1: Seek to expand El Segundo's retail and commercial base so that the diverse needs of the City's business and residential communities are met.

Policy ED1-2.2: Maintain and promote land uses that improve the City's tax base, balancing economic development and quality of life goals.

LAND USE ELEMENT

Policy LU1-5.8: Innovative land development and design techniques as well as new materials and construction methods should be encouraged.

Goal LU3: Promote the health, safety, and well-being of the people of El Segundo by adopting standards for the proper balance, relationship, and distribution of the residential land uses.

Objective LU3-1: *Preserve, protect, and extend, if possible, existing Single-Family Residential uses.*

Policy LU3-2.1: Promote construction of high quality Multi-Family Residential development with ample open space, leisure and recreational facilities.

Policy LU3-2.2: Multi-family development will be located only in appropriate places and evaluated carefully to insure that these developments are not detrimental to the existing single-family character.

Objective LU3-3.1: *Adopt and enforce recreational area requirements for large multiple unit developments.*

Goal LU4: **Provide a stable tax base for the City through development of new commercial uses, primarily within a mixed-use environment, without adversely affecting the viability of Downtown.**

Objective LU4-1: *Promote the development of high quality retail facilities in proximity to major employment centers.*

Policy LU4-1.1: Require landscaping, its maintenance, and permanent upkeep on all new commercial developments.

Policy LU4-1.2: All commercial facilities shall be built and maintained in accordance with Health and Safety Code requirements and shall meet seismic safety regulations and environmental regulations.

Policy LU4-1.4 New commercial developments shall meet seismic safety standards and regulations, as well as comply with all noise, air quality, water and environmental regulations.

Objective LU4-4: *Provide areas where development has the flexibility to mix uses, in an effort to provide synergistic relationships which have the potential to maximize economic benefit, reduce traffic impacts, and encourage pedestrian environments.*

Policy LU4-4.6: Promote mixed-use development near transit nodes and encourage modes of transportation that do not require an automobile.

Goal LU7: **Provide the highest quality public facilities, services, and public infrastructure possible to the community.**

Policy LU7-1.2: No new development shall be allowed unless adequate public facilities are in place or provided for.

Policy LU7-2.3: All new development shall place utilities underground.

CIRCULATION ELEMENT

Goal C1: **Provide a safe, convenient, and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.**

Objective C1-1: *Provide a roadway system that accommodates the City's existing and project land use and circulation needs.*

Policy C1-1.8: Provide all residential, commercial, and industrial areas with

efficient and safe access to the major regional transportation facilities.

Policy C1-1.9: Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy C1-1.14: Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further require the implementation of appropriate mitigation measures prior to, or in conjunction with project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system, intersection improvements, and other measures. Mitigation measures shall be provided by or paid for by the project developer.

Objective C1-3: *Ensure that the City's Master Plan Truck Route System efficiently serves the shipping needs of the commercial and industrial land uses in El Segundo while balancing potential conflicts with residential and recreation land uses throughout the City.*

Policy C1-3.2: Ensure that the development review process incorporates consideration of off-street commercial loading requirements for all new projects.

Objective C2-1: *Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.*

Policy C2-1.6: Encourage shopping areas to design their facilities for ease of pedestrian access.

Policy C2-1.7: Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.

Objective C2-2: *Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.*

Policy C2-2.1: Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises; i.e., through development, private grants, signing of shared routes.

Policy C2-2.2: Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.

Policy C2-5.1: Ensure that Transportation Demand Management (TDM) measures are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

Policy C3-1.8: Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.

Policy C3-2.1: Ensure the provision of sufficient on-site parking in all new development.

HOUSING ELEMENT

Goal 3: Provide opportunities for new housing construction in a variety of locations and a variety of densities in accordance with the land use designations and policies in the Land Use Element.

OPEN SPACE AND RECREATION ELEMENT

Goal OS1: Provide and maintain high quality open space and recreational facilities that meet the needs of the existing and future residents and employees within the City of El Segundo.

CONSERVATION ELEMENT

Policy CN2-5: Require new construction and development to install water-conserving fixtures and appliances to reduce the amount of new demand.

Policy CN2-7: Require new construction and development to incorporate the principles and practices of sound landscape design and management, particularly those conserving water and energy.

Policy CN2-8: Encourage the retrofitting of existing landscapes to incorporate the principles and practices of sound landscape design and management, particularly those conserving water and energy.

Policy CN2-11: Encourage, whenever appropriate and feasible, development techniques which minimize surface run-off and allow replenishment of soil moisture. Such techniques may include, but not be limited to, the on-site use and retention of storm water, the use of pervious paving material (such as walk-on-bark, pea gravel, and cobble mulches), the preservation of vegetative covers, and efficiently designed and managed irrigation systems.

AIR QUALITY ELEMENT

Goal AQ3: Vehicle work trip reduction for private employees.

Objective AQ-3-1: Increase the proportion of work trips made by transit.

Goal AQ12: Reduction in Residential, Commercial, and Industrial Energy Consumption.

Objective AQ-12-1: Enact the recommendations of the AQMP Energy Working Group for commercial and residential buildings and adopt ordinances to mitigate air quality impacts from water and pool heating systems.

Policy AQ-12-1.2: It is the policy of the City of El Segundo that the City encourage the incorporation of energy conservation features in the design of new projects and the installation of conservation devices in existing developments.

NOISE ELEMENT

Goal N1: Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise.

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Objective N1-2: It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1: Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A: Address noise impacts in all environmental documents for discretionary approval projects, to insure that noise sources meet City Noise Ordinance standards. These sources may include mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

PUBLIC SAFETY ELEMENT

Goal PS1: Protect the public health and safety and minimize the social and economic impacts associated with geologic hazards.

Objective PS1-1: It is the objective of the City of El Segundo to reduce exposure to potentially hazardous geological conditions through land use planning and project review.

Policy PS1-1.1: Continue to review proposals for new development and for the expansion of existing development in areas of potential geological hazards.

Program PS1-1.1A: The City shall review projects to ensure that slope design considers the potential effects of high rainfall, private sewage systems, landscaping irrigation, and possible runoff from adjacent future development.

Policy PS1-1.2: Enforce, monitor and improve development standards which place the responsibility on the developer, with advice from qualified engineers and geologists, to develop and implement adequate mitigation measures as conditions for project approval.

Program PS1-1.2A: The City shall review projects to ensure that adequate geotechnical investigation has been completed in areas susceptible to land sliding and debris flows and in areas where collapsible or expansive soils occur, and to approve only those which mitigate these hazards to the satisfaction of the City Engineer.

Policy PS2-1.2: The City shall assist in the prevention of structural damage in areas with a high potential for liquefaction, landslides, and mudslides by requiring geotechnical studies for new development to mitigate potential impacts.

Goal PS6: A fire safe community.

Objective PS6-1: It is the objective of the City of El Segundo that the City minimize threats to public safety and protect property from

wildland and urban fires.

Policy PS6-1.1: Review projects and development proposals, and upgrade fire prevention standards and mitigation measures in areas of high urban fire hazard.

Policy PS6-1.2: Continue efforts to reduce fire hazards associated with older buildings, high-rise buildings, and fire-prone industrial facilities, and maintain adequate fire protection in all areas of the City. Review projects and development proposals, and upgrade fire prevention standards and mitigation measures in areas of high urban fire hazard.

Program PS6-1.2C: The City shall continue to require that all property be maintained in compliance with the fire code.

Goal PS7: Protect public health, safety, and welfare, and minimize loss of life, injury, property damage, and disruption of vital services, resulting from earthquakes, hazardous material incidents, and other natural and man-made disasters.

D. ENTITLEMENTS

The following entitlements are required in conjunction with this Specific Plan (SP No. 19-01):

- Environmental Assessment No. EA-1248 for the proposed mixed-use development that will add 263 housing units, approximately 11,250 square feet of commercial uses (comprised of retail, restaurant and hotel support based office uses), and 1,727 square feet of commercial floor area that cannot be occupied by commercial businesses[1], and three parking structures to provide parking for the uses in the Specific Plan area.

- General Plan Amendment No. GPA 19-01 to change the land use designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use map change.

- Zone Text Amendment No. ZTA 19-08 to add a new ESMC §15-3-2(A)(12) "Pacific Coast Commons Specific Plan (PCCSP)."

- Zone Change No. ZC 19-01 to rezone the property from "General Commercial (C-3)" and "Parking (P)" to "Pacific Coast Commons Specific Plan (PCCSP)" and an accompanying Zoning map change.

[1] This commercial floor area is located in the Fairfield Parking Site and is comprised of lobby area and access to the multiple levels of the parking structure and any central circulation areas such as hallway access from the rear of commercial businesses to the lobby and parking structure that is not usable floor area located within those commercial businesses. This square footage is labeled as lobby area in Table III-II in this Plan.

- Development Agreement No. DA 19-02 between the City of El Segundo and BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC.

- Vesting Tentative Tract Map No. (VTTM 82806) SUB 19-03 – for merger, subdivision and residential/commercial condominium purposes reconfiguring 3 parcels (comprised of 12 existing lots) on the block bounded by Pacific Coast Highway, Mariposa Avenue, Indiana Street and Holly Avenue and 3 parcels (comprised of portions of 4 existing lots) on the block north of Mariposa Avenue and south of Palm Avenue in the Specific Plan Area into 6 new individual lots. Additionally, the Vesting Tentative Tract Map No. 82806 will allow: a) 1 residential ground and airspace parcel for 120 apartments and a maximum of 10 airspace parcels for commercial condominiums on Lot 1; b) a ground and airspace parcel for the parking structure and up to a maximum of 10 airspace parcels for commercial condominiums on Lot 4; and c) 1 residential ground and airspace parcel for 137 apartments and up to a maximum of 20 airspace parcels for commercial condominiums on Lot 5; and d) 6 residential condominiums (townhomes) on Lot 6.

- Site Plan Review No. SPR 19-01 to allow the site plan and architectural design to construct the mixed-use commercial and residential development for the 263 residential units, 11,252 square feet of new commercial development, 1,727 square feet of commercial floor area that cannot be occupied by commercial businesses[2], and 3 parking structures.

- Modification of Resolution Nos. 2759 and 2760 to rescind the previous approvals SUB No. 14-05, Lot-Tie Covenant No. 14-03, Off-site Parking Covenant Nos. MISC 14-03 and 14-06, leaving in place CUP No. 14-01 for the Fairfield Inn and Suites Hotel and CUP No. 14-02 for the Aloft Hotel, along with alcohol service at both hotels with modifications to the conditions of approval accordingly.

- Parking Demand Study and Shared Parking Analysis to establish the parking requirements for the proposed commercial and residential development combined with the existing hotel development.

- Shared Parking Agreement in conjunction with the Parking Demand Study and Shared Parking Analysis, to replace the previous approval of Off-Site Parking Covenant Nos. MISC 14-03 and MISC 14-06.

- Reciprocal Access Agreements for driveways and drive aisles accessing multiple parcels.

[2] This commercial floor area is located in the Fairfield Parking Site and is comprised of lobby area and access to the multiple levels of the parking structure and any central circulation areas such as hallway access from the rear of commercial businesses to the lobby and parking structure that is not usable floor area located within those commercial businesses. This square footage is labeled as lobby area in Table III-II in this Plan.

- Street dedication waiver requests for a portion of the dedication requirements for the south side of Mariposa Avenue and for a portion of the dedication requirements for the east side of Indiana Street.

Findings justifying the General Plan Amendment and Zone Change include:

1. The primary objective of the Specific Plan is to provide for superior, more comprehensive site planning of the Specific Plan area and zoning standards that address the needs of the unique master planned site that will maintain the existing hotel uses and construct new mixed-use multiple-family residential and commercial neighborhood serving uses in three phases.

2. Uses permitted within the Specific Plan area are consistent with the proposed zoning and are compatible with adjacent uses.

3. The Specific Plan will provide for additional housing opportunities in a variety of housing sizes, types and densities in support of the goals of the Housing Element of the General Plan.

E. EXISTING LAND USES

The City of El Segundo has distinctive land use patterns, which are divided into four quadrants by the intersection of Pacific Coast Highway and El Segundo Boulevard. Compatibility of an individual land use is determined mainly by its relationship to other uses within its quadrant. The Pacific Coast Commons Specific Plan area is located in the northwestern quadrant of the City of El Segundo, which is west of Pacific Coast Highway and north of El Segundo Boulevard. The design and implementation of this Specific Plan relate directly to its position within this larger context.

The Pacific Coast Commons Specific Plan is located in the northwest quadrant of the City. The northwest quadrant of the City has the most varied mix of uses within the City. All of the City's residential units, the Downtown area, the Civic Center, the commercial uses and hotel uses along the west side of the Pacific Coast Highway corridor and the industrial area of Smoky Hollow, are located in this quadrant.

The northeast quadrant of the City lies east across Pacific Coast Highway and north of El Segundo Boulevard. It consists primarily of corporate office and urban mixed uses which allow for office and commercial uses. The southwest quadrant of the City lies south of El Segundo Boulevard and west of Pacific Coast Highway. It consists primarily of an oil refinery/heavy industrial use. The southeast quadrant of the City lies south of El Segundo Boulevard and east of Pacific Coast Highway. It consists primarily of the light industrial land use category which allows a mixture of industrial and office uses. This quadrant also contains a commercial region which is home to the retail developments of Plaza El Segundo and the Point, which are both lifestyle commercial retail shopping centers that total approximately 500,000 square feet and the Lakes Municipal Golf Course. A Multimedia Overlay Zone overlies both the southeast and northeast quadrants of the City.

Before the adoption of the Pacific Coast Commons Specific Plan (PCCSP) the property was designated as General Commercial and Parking in the General Plan Land Use Element with General Commercial (C-3) and Parking (P) zoning.

Adjacent land uses include the following:

North: The adjacent land uses to the north include: a fast food restaurant, a vacant restaurant and parking lot, and multi-family residential uses. A gas station is located on the northwest corner of Mariposa Avenue and Pacific Coast Highway which is north of the superblock that contains the two existing hotels and south east of the parking lot for the Fairfield Inn and Suites Hotel located along Pacific Coast Highway between Mariposa and Palm Avenues. A fast-food restaurant, Carl's Jr., is located northeast of the same parking lot. Carl's Jr. is located at the southwest corner of Pacific Coast Highway and Palm Avenue.

East: The adjacent land uses to the east across Pacific Coast Highway include: a property with restaurants and office uses, a Ralphs market, two commercial shopping centers with retail and restaurant uses, and a 6- story office building.

South: The adjacent land uses to the south of Holly Avenue include a small commercial shopping center with a drug store, bank, two restaurants and retail store.

West: The adjacent land uses to the west include multi-family residential uses.

III. LAND USE PLAN

The Pacific Coast Commons Specific Plan encompasses 6.38 gross acres of existing developable area that includes the "superblock" bounded by Pacific Coast Highway, Mariposa Avenue, Holly Avenue and Indiana Street and a portion of the block to the north of the "superblock" that has frontage on Pacific Coast Highway, Mariposa Avenue to the south, and Palm Avenue to the north, see Exhibit 5, *Land Use Plan,* and Exhibit 6, *Conceptual Site Plan*. The Pacific Coast Commons Specific Plan ("PCCSP") has 5 land use districts within the plan boundary which is discussed in detail below.

Table III-I provides a Land Use Summary with the square footage of the new development and the existing development. Table III-II provides greater detail of the project development scenario with the uses on each Parcel (per the Vesting Tentative Map), the acreage of the parcel, the building area (gross and net), and the FAR.

The existing Aloft Hotel will remain. Two of the three buildings that comprise the existing Fairfield Inn & Suites Hotel will remain. The 41,660 square-foot, 2-story building at the southwest corner of Pacific Coast Highway and Mariposa Avenue commonly called the "Food and Beverage" building (primarily comprised of conference/meeting rooms and restaurant space) will be demolished and replaced with a parking structure that contains parking primarily for the Fairfield Inn and Suites Hotel and 3,273 gross square feet of new commercial uses at the front of the structure. Access to the parking structure occurs primarily from an existing driveway on Pacific Coast Highway.

The existing parking lot located at the south end of the PCCSP bounded by Holly Street to the south, Indiana Street to the west, Pacific Coast Highway to the east and the Aloft Hotel to the north will be replaced with new development. The new development will be a residential/commercial mixed-use project with a parking structure integrated into the building design. The new building will include 120 residential units (apartments) and 5,756 gross square feet of commercial uses. The parking structure will have access from existing driveways on Pacific Coast Highway and Indiana Street.

The existing northern parking lot that is on the block north of the Fairfield Inn and Suites Hotel with frontage on Pacific Coast Highway, bounded by Mariposa Avenue to the south and Palm Avenue to the north will be replaced with new development. The new residential/commercial mixed-use project will include 137 residential units (apartments) and 2,223 gross square feet of new commercial development. It will have a parking structure integrated into the building design with access to the structure from existing driveways on both Mariposa and Palm Avenues. The north parking lot site will also include 6 townhomes which are located directly west of the Carl's Jr. restaurant and south of Palm Avenue.

A. DEVELOPMENT CONCEPT

The Specific Plan establishes the general type, parameters and character of the development in order to develop an integrated Project area that is also compatible with and complements the surrounding area. The proximity of the Specific Plan Area to other residential and commercial

uses, freeways, major arterials, and the Metro Rail makes it an appropriate and attractive location for a residential/commercial mixed-use development that provides both housing and facilitates economic development in El Segundo.

The Pacific Coast Commons Specific Plan development concept provides a transition from the multi-family neighborhoods to the west and the large-scale commercial uses to the east of Pacific Coast Highway. The Pacific Coast Commons Specific Plan provides for both the maintenance of both the existing Aloft hotel and the Fairfield Inn and Suites hotel within the Specific Plan boundaries with the addition of new mixed-use residential/commercial development to complement the hotel uses and to provide compatible uses to the surrounding neighborhood. The development will include 3 parking structures incorporated into the development to provide both replacement parking for the hotels from the loss of surface parking as well as provide parking for new uses.

On an overall basis, the maximum development potential within the 6.23-acre (post dedications) Specific Plan is based upon an average floor area ratio (FAR) of 2.15. A 2.15 FAR results in a maximum development intensity of 622,398 gross square feet. The 622,398 gross square feet includes 282,398 gross square feet of existing development that will remain and 340,000 gross square feet of new square footage of residential and commercial uses combined. The floor area ratio varies in each of the 5 land use districts that range from a minimum of 0.16 to a maximum of 2.70 based upon how the uses are configured combined with the nonconforming conditions for the two existing hotels (see Table III-III).

Residential uses are proposed in 2 of the 5 land use districts, namely the PCC Mixed-Use 1 (PCC MU-1) district at the southern end of the Specific Plan area and the PCC Mixed-Use 2 (PCC MU-2) district at the northern end of the Specific Plan area. There are 120 dwelling units (apartments) in the PCC MU-1 land use district and 143 dwelling units in the PCC MU-2 land use district comprised of 137 apartments and 6 townhomes. The density in the PCC MU-1 land use district is approximately 97 dwelling units to the acre (96.67 dwelling units to the acre based upon 54,072 square feet of land area) and the density in the PCC MU-2 land use district is approximately 80 units to the acre (79.17 dwelling units to the acre based upon 78,686 square feet of land area). The average density of the two land use districts combined is 86.31 units to the acre and the average density within the entire Specific Plan area is 42.22 units to the acre. If the land area of either PCC Mixed-Use 1 or PCC Mixed-Use 2 is reduced, the number of dwelling units to the acre would increase accordingly.

The Pacific Coast Commons Specific Plan allows affordable housing and provides reduced requirements for parking in the Development Standards Chapter of this Specific Plan. The 263 residential units permitted in this Specific Plan including affordable housing units will contribute significantly to the City's housing allocation requirements specified in the Regional Housing Needs Assessment (RHNA) established by State law.

B. LAND USE PLAN

The Pacific Coast Commons Specific Plan is based upon the following land uses (refer to Exhibit 5, *Land Use Plan*):

1. PCC Mixed-Use 1 (PCC MU-1)

The PCC Mixed-Use 1 (PCC MU-1) land use designation is located on the southernmost parcel with frontage on Pacific Coast Highway, Holly Avenue and Indiana Street, totaling 1.242 net acres (the developable portion of the proposed parcel after dedication of right-of-way). It is both a corner parcel and a through lot. The PCC MU-1 area allows for multiple-family residential uses (apartments) and several commercial uses. The specific residential and commercial uses are limited in this land use category as specified in the Specific Plan's development regulations. The parcel that contains the PCC Mixed-Use 1 (PCC MU-1) land use district currently contains the parking lot for the Aloft hotel that is located on the adjacent parcel, as shown in the conceptual site plan in Exhibit 6, *Conceptual Site Plan*.

2. PCC Commercial-1 (PCC COM-1)

The Commercial-1 (COM-1) land use designation is located on the parcel to the north of the PCC Mixed-Use 1 (PCC MU-1) land use designation with frontage on both Pacific Coast Highway and Indiana Street (it is a through lot). The PCC Commercial-1 (PCC COM-1) land use category totals 0.905 net acres (the developable portion of the proposed parcel after dedication of right-of-way). The PCC Commercial-1 (PCC COM-1) area allows hotels and several other commercial uses that are either accessory to hotel uses or complementary uses. The specific commercial uses in this land use category are specified in the Specific Plan's development regulations. The parcel currently contains the existing Aloft Hotel which will remain, as shown in the conceptual site plan in Exhibit 6, *Conceptual Site Plan*.

3. PCC Commercial-2 (PCC COM-2)

The PCC Commercial-2 (PCC COM-2) land use designation is located on the parcel to the north of the PCC Commercial-1 (PCC COM-1) land use designation with frontage on both Pacific Coast Highway and Indiana Street (it is a through lot). The PCC Commercial-2 (PCC COM-2) land use category totals 1.549 net acres (the developable portion of the proposed parcel after dedication of right-of-way). The PCC Commercial-2 (PCC COM-2) area allows hotels and several other commercial uses that are either accessory to hotel uses or complementary uses. The permitted commercial uses in this land use category are specified in the Specific Plan's development regulations. The parcel currently contains the existing Fairfield Inn and Suites hotel (3 buildings) which will remain, as shown in the conceptual site plan in Exhibit 6, *Conceptual Site Plan*. One of the three existing buildings known as the "Food and Beverage" building which is partially located in the PCC COM-2 land use district and partially located in the PCC COM-3 land use district will be demolished.

4. PCC Commercial-3 (PCC COM-3)

The PCC Commercial-3 (PCC COM-3) land use designation is located on the parcel to the

north of the PCC Commercial-2 (PCC COM-2) land use designation with frontage on Pacific Coast Highway, Mariposa Avenue, and Indiana Street (it is a through lot). The PCC Commercial-3 (PCC COM-3) land use category totals 0.728 net acres (the developable portion of the proposed parcel after dedication of right-of-way). The PCC Commercial-3 (PCC COM-3) area allows hotels and several other commercial uses that are either accessory to hotel uses or complementary uses. The specific commercial uses in this land use category are specified in the Specific Plan's development regulations. The parcel currently contains the existing Fairfield Inn and Suites hotel food and beverage building that will be demolished and replaced with other commercial uses and a parking structure, as shown in the conceptual site plan in Exhibit 6, *Conceptual Site Plan*.

5. PCC Mixed-Use 2 (PCC MU-2)

The PCC Mixed-Use 2 (PCC MU-2) land use designation is located on the northernmost parcel with frontage on Pacific Coast Highway, Mariposa Avenue and Palm Avenue, totaling 1.806 net acres (the developable portion of the proposed parcels after dedication of right-of-way). The PCC MU-2 area allows for multiple-family residential (apartments and condominiums) and several commercial uses. The specific residential and commercial uses are limited in this land use category as specified in the Specific Plan's development regulations. The parcel currently contains a parking lot that provides parking for the Fairfield Inn and Suites. The parking lot will be demolished and replaced with multiple-family residential uses (a mix of apartments and townhomes) and commercial uses, as shown in the conceptual site plan in Exhibit 6, *Conceptual Site Plan*. The PCC Mixed-Use 2 (PCC MU-2) land use district is proposed to be comprised of 2 parcels as shown in the Vesting Tentative Map with one parcel containing 137 multiple family residential units (apartments) and commercial uses. The other parcel contains 6 townhomes (condominium units).

Table III-1, *Land Use Summary-Project Development Scenario*, and Table III-II, *Land Uses-Project Development Scenario,* show the anticipated project development scenario for the implementation of the uses and standards of this Specific Plan based upon the Conceptual Site Plan shown in Exhibit 6, *Conceptual Site Plan* and the Vesting Tentative Map shown in Exhibit 7A, *Vesting Tentative Map No. 82806*. An additional exhibit is provided for greater clarity of existing and proposed lot configuration conditions which is also provided in Exhibit 7B, *Existing and Proposed Lot Configuration Diagram.* Table III-III, *Land Use Summary-Specific Plan Scenario* shows the maximum allowable floor area for each of the 5 land use districts.

Table III-1
Land Use Summary – Project Development Scenario

Land Use	Building Area (Net) (square feet)	Building Area (Gross) (square feet)
New Development		
Multi-family Residential (Apartments) (120 dwelling units in the PCC MU-1 District)	136,571	140,794
Multi-family Residential (Apartments) (137 dwelling units in the PCC MU-2 District)	159,062	163,472
Multi-family Residential (Townhomes /Condominiums) (6 dwelling units in the PCC MU-2 District)	9,540	10,344
Commercial uses (PCC MU-1 District)	5,583	5,756
Commercial uses (PCC COM-3 District)	4,345	4,479
Commercial uses (PCC MU-2 District)	2,156	2,223
Subtotal New Development	***317,257***	***327,068***
Existing Development		
Hotel (Aloft)	98,741	106,747
Hotel (Fairfield Inn and Suites)	190,026	217,311
Subtotal Existing Development	***288,767***	***324,058***
Existing Development To Be Demolished (Fairfield Inn and Suites "Food and Beverage" Building)	***- 36,605***	***- 41,660***
Subtotal Existing Development After Demolition of "Food and Beverage" Building	***252,162***	***282,398***
Total Site Development	**569,419**	**609,466**

Table III-II
Land Uses – Project Development Scenario

Subdivision Parcel	Use	Acreage[3]	Building Area (Net)	Building Area (Gross)[4]	FAR[5]
PCC Mixed-Use 1 (PCC MU-1))					
1	Multiple-family Residential (120 apartments)		136,571	140,794	-
1	Commercial Uses		5,583	5,756	-
1	Parking Structure		-	-	-
Subtotal		**1.242 (54,072 square feet)**	**142,154**	***146,550***	***2.63***
PCC Commercial-1 (PCC COM-1)					
2	Commercial – Existing Hotel (Aloft)		98,741	106,747	-
Subtotal		**0.905 (39,425 square feet)**	**98,741**	***106,747***	***2.51***
PCC Commercial-2 (PCC COM-2))					
3	Commercial-Existing Hotel (Fairfield Inn and Suites)		190,026	217,311	-
4	Existing Hotel (Fairfield Inn & Suites - Food & Beverage Building)		-36,605	-41,660	-
Subtotal		**1.549 (67,487 square feet)**	**153,421**	***175,651***	***2.28***
PCC Commercial-3 (PCC COM-3)					
4	Commercial Uses		3,175	3,273	-
4	Parking structure/ lobby		1,170	1,206	-
Subtotal		**0.728 (31,693 square feet)**	**4,345**	***4,479***	***0.14***
PCC Mixed-Use 2 (PCC MU-2)					
5	Multiple-family Residential (137 apartments)		159,062	163,472	-
5	Commercial Uses		2,156	2,223	-
5	Parking Structure		-	-	-
6	Multiple-family Residential (6 townhomes)		9,540	10,344	-
Subtotal		**1.806 (78,686 square feet)**	**170,758**	***176,039***	***2.24***
TOTAL DEVELOPMENT		**6.23 (271,363 square feet)**	**569,419**	**609,466**	**2.15**

[3] Acreage is based upon net acreage post dedications.
[4] Total allowable intensity per the Specific Plan is capped at 622,398 gross square feet (both existing and new development combined).
[5] FAR calculation is based upon net floor area and developable lot area. See Chapter VI for definitions of gross and net floor area.

Table III-III
Land Use Summary – Specific Plan Scenario

Land Use District	Building Area (Net) (square feet)	Building Area (Gross) (square feet)	Floor Area Ratio (FAR)
PCC Mixed-Use-1 (PCC MU-1)	145,500	150,000	2.70
PCC Commercial-1 (PCC COM-1)	98,741	106,747	2.51
PCC Commercial-2 (PCC COM-2)	153,421	175,651	2.28
PCC Commercial-3 (PCC COM-3)	4,850	5,000	0.16
PCC Mixed-Use-2 (PCC MU-2)	179,450	185,000	2.29
Total Development (New + Existing)	**581,962**	**622,398**	**2.15**



EXHIBIT 5
LAND USE PLAN

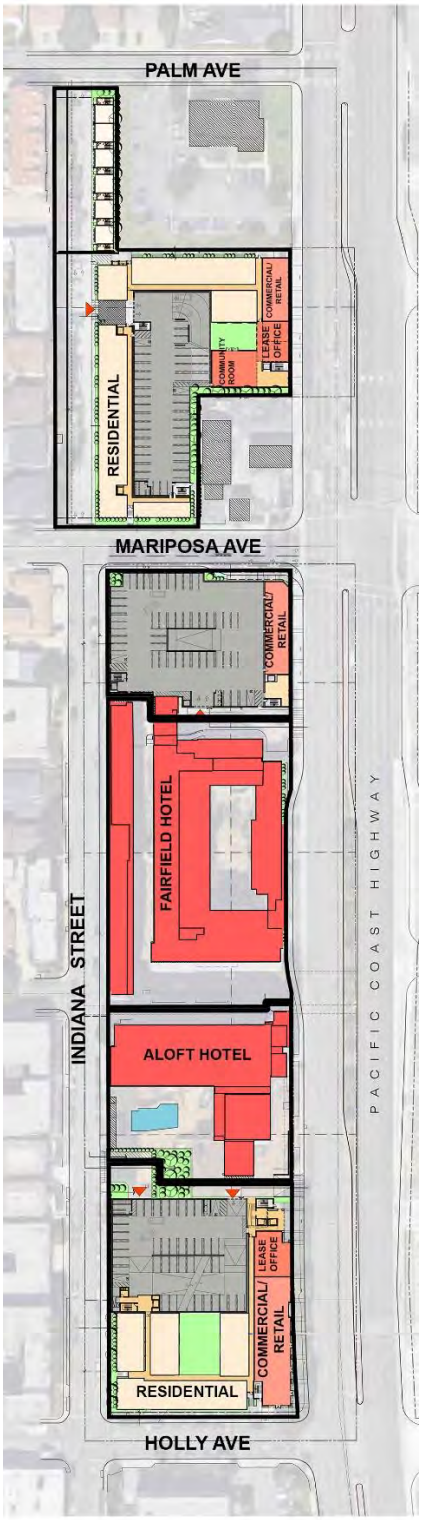


EXHIBIT 6
CONCEPTUAL SITE PLAN

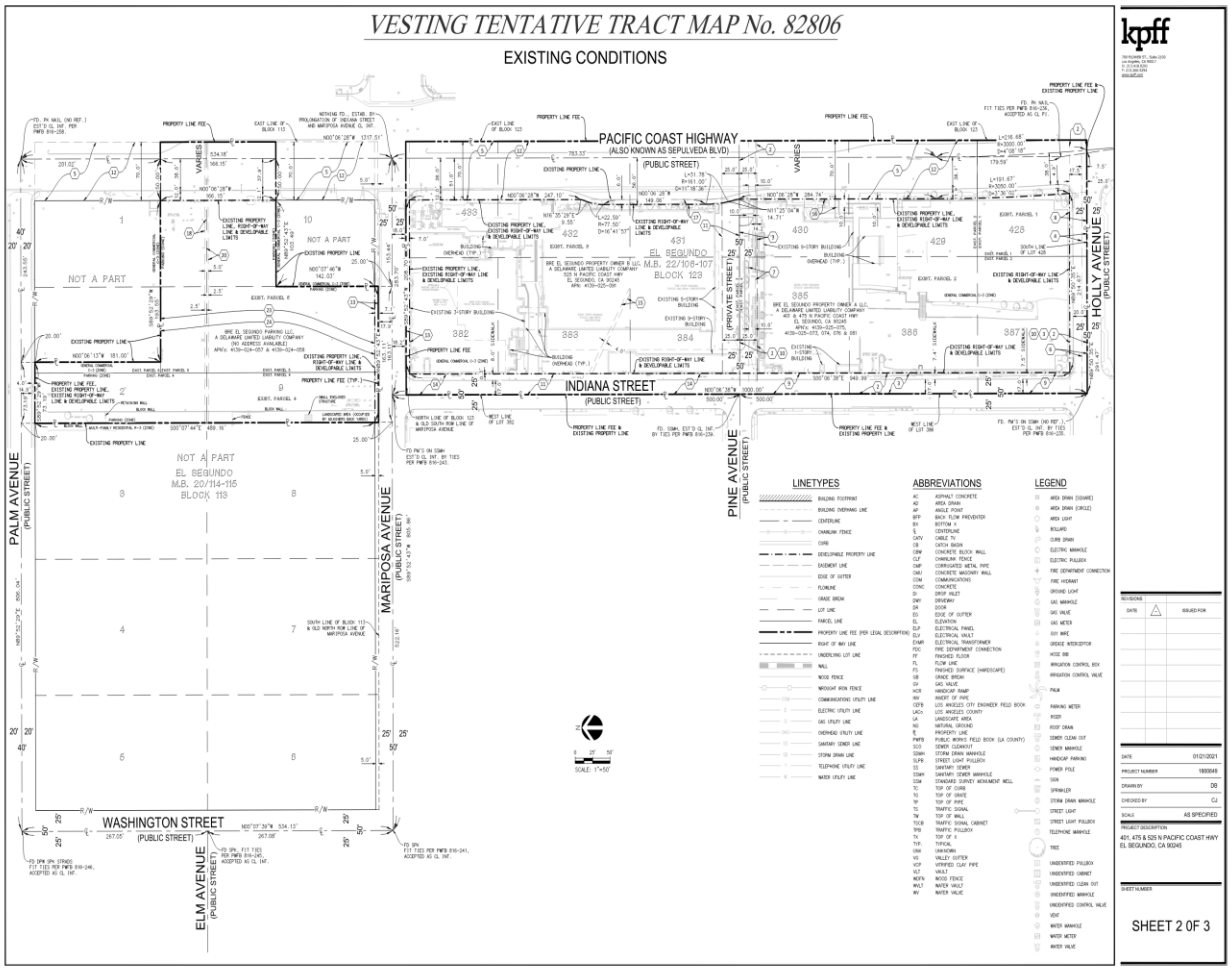


EXHIBIT 7A
VESTING TENTATIVE MAP # 82806
(EXISTING CONDITIONS)

(Source: KPFF)

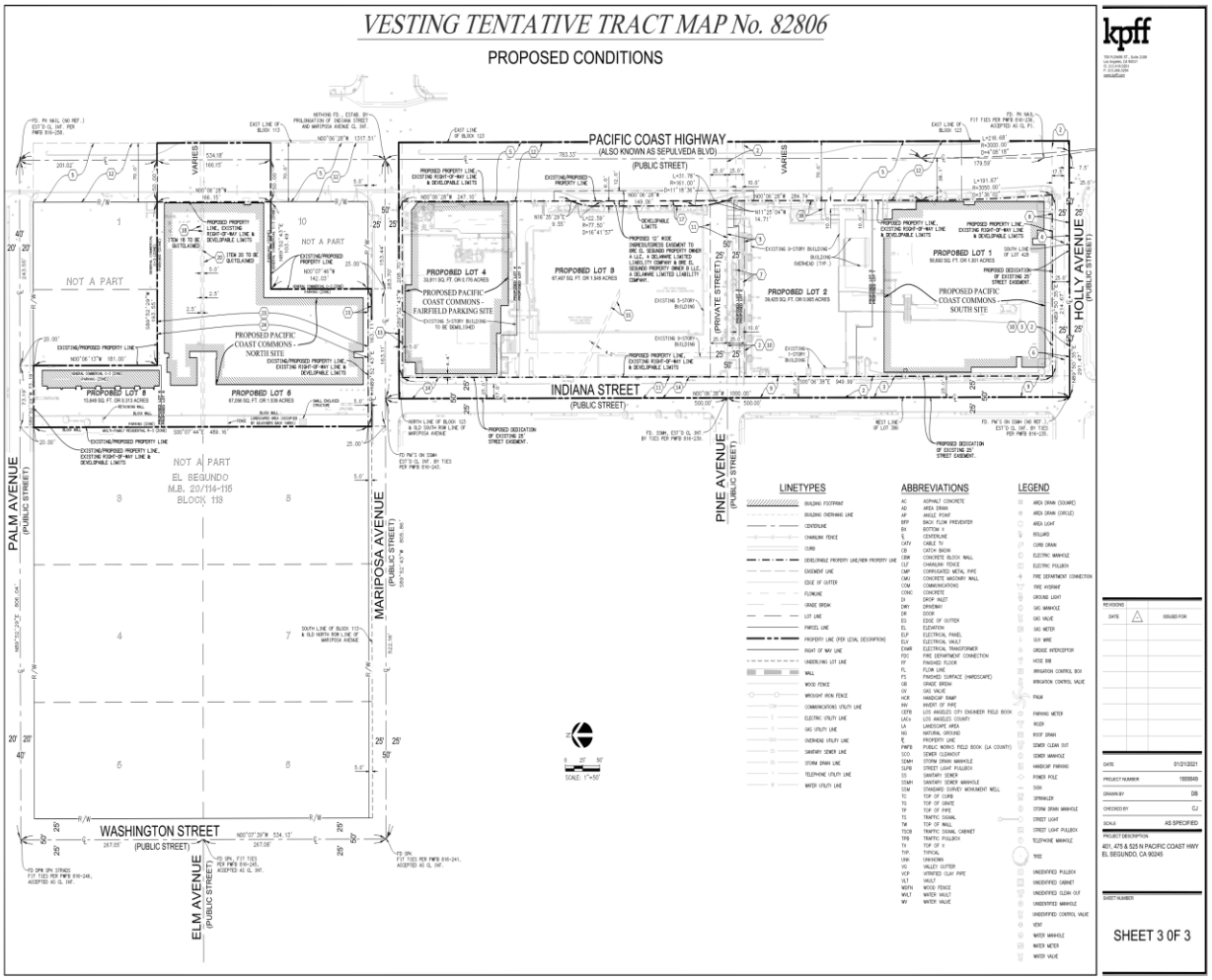


EXHIBIT 7A
VESTING TENTATIVE MAP # 82806
(PROPOSED CONDITIONS)

(Source: KPFF)

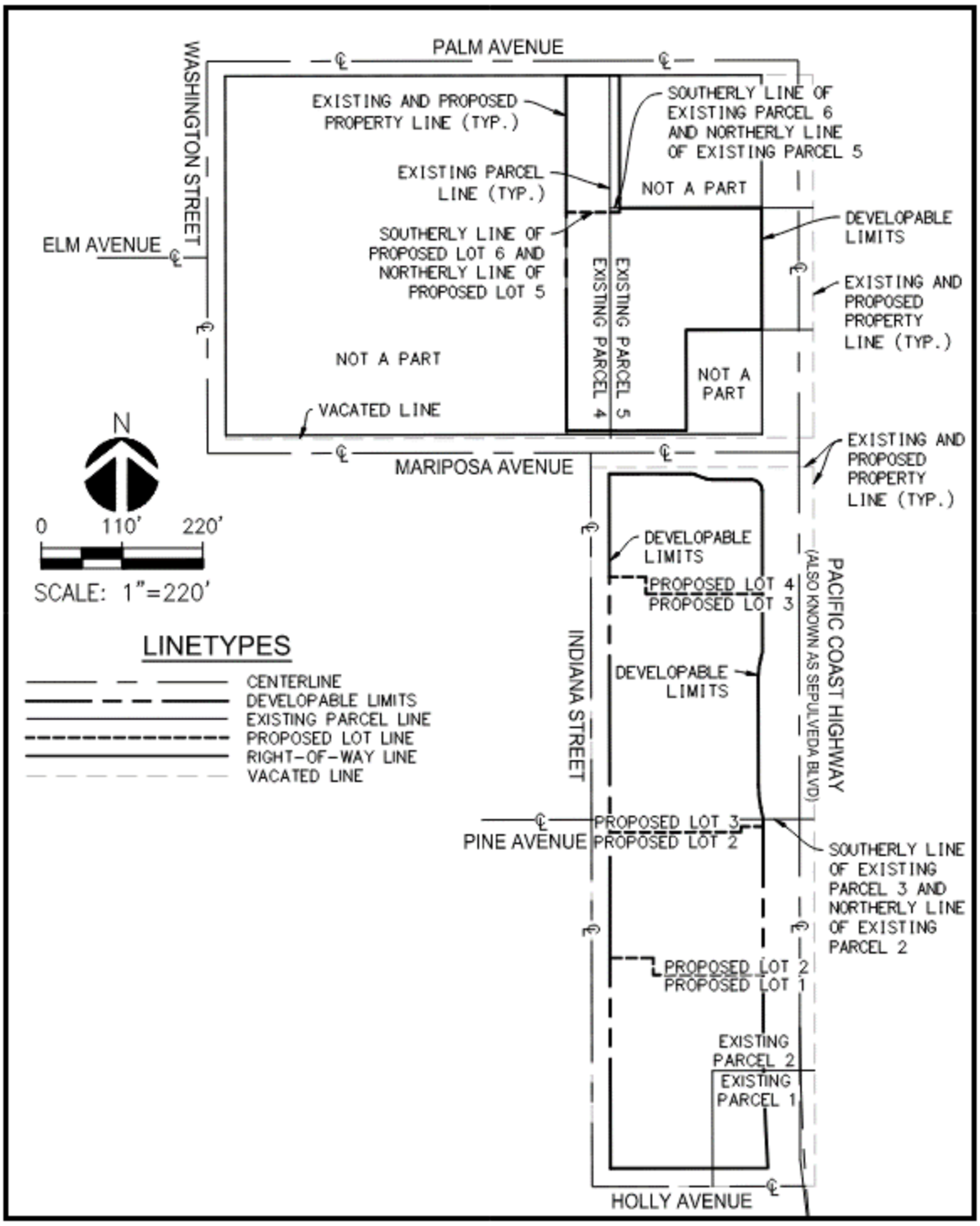


EXHIBIT 7B
EXISTING AND PROPOSED FINAL LOT CONFIGURATION DIAGRAM
(Source: KPFF)

C. PHASING

Construction of the new development areas would occur in three phases. The first phase of construction would occur in the PCC Commercial-3 (PCC COM-3) land use district at the Fairfield Parking Site/Area 4. The second phase of construction would consist of the South Site/Area 1 development in the PCC Mixed-Use 1 (PCC MU-1) land use district. The third phase of construction would consist of the North Site/Area 5 development in the PCC Mixed-Use 2 (PCC MU-2) land use district. It is currently anticipated that these phases will occur sequentially and if so, are anticipated to be completed within 4 1/2 years of EIR certification and project approval. However, if the second and third phases of development occur concurrently, construction is anticipated to be completed within 2 years and 8 months of EIR certification and project approval.

D. CIRCULATION PLAN

Regionally, the Specific Plan site is accessible from the San Diego freeway (405), Century Freeway (105), the Metro Green Line, multiple bus lines, and the major arterial Pacific Coast Highway. No public rights-of-way are proposed within the boundaries of the Specific Plan. However, the Specific Plan site has several vehicular access points off four of the streets surrounding the Specific Plan area including Pacific Coast Highway, Mariposa Avenue, Indiana Street and Palm Avenue. The development of the Specific Plan will facilitate on-site circulation and parking. Access will be provided for emergency vehicles to Area 5 in the PCC Mixed-Use 2 (PCC MU-2) land use district via the two vehicle access points to the fire lane from Mariposa and Palm Avenues. Development within the Specific Plan site will provide infrastructure and facilitate access for various modes of travel including automobiles, bicycles, and pedestrians. Pedestrian and handicap access will be provided between buildings and to public sidewalks on the five street frontages along the site.

VEHICULAR CIRCULATION

The proposed street dedications and street dedication waivers discussed in the sections below are depicted in Exhibit 7C, *Conceptual Street Dedication Plan.*

Pacific Coast Highway. Pacific Coast Highway is an existing public major arterial street that abuts the property on its eastern edge. No additional right-of-way improvements are required as a result of the development allowed in the Specific Plan. No additional curb cuts besides the three existing curb cuts that provide access and circulation to the two existing hotels may be allowed along Pacific Coast Highway in the Specific Plan area. The two existing driveways that access the north parking lot at 629 North Pacific Coast Highway will be removed.

Mariposa Avenue. Mariposa Avenue is an existing public 2-lane collector street that abuts the property between the northern and southern blocks of the Specific Plan area. Some additional right-of-way improvements are required as a result of the development allowed in the Specific Plan. A waiver request was granted for a portion of the street dedication requirements on the south side of Mariposa Avenue. No additional curb cuts besides the one existing curb cut on the north side of the street (which also serves as a fire lane) may be allowed along the north side of

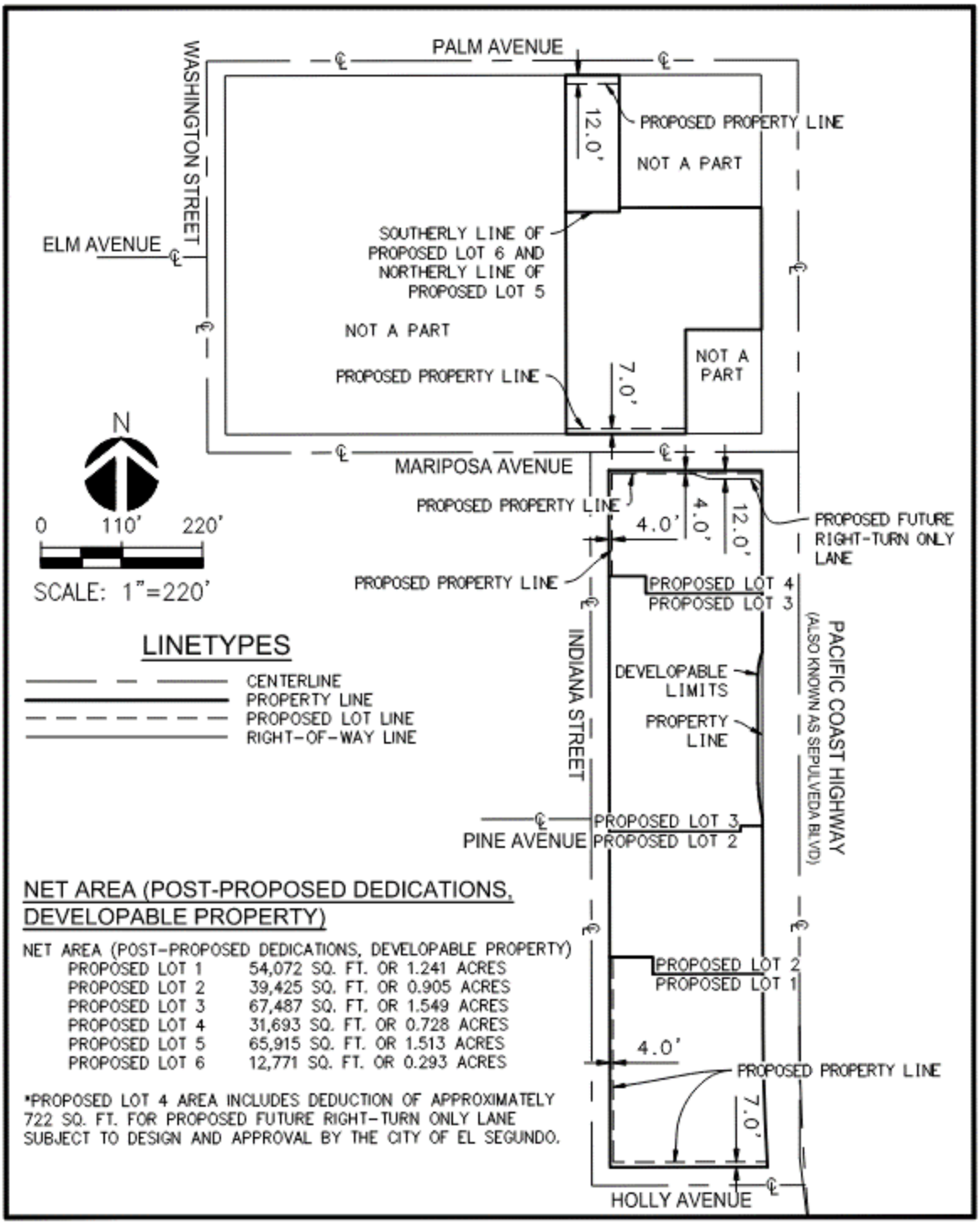


EXHIBIT 7C
CONCEPTUAL STREET DEDICATION PLAN
(Source: KPFF)

Mariposa Avenue in the Specific Plan area. No curb cuts may be allowed along the south side of Mariposa Avenue within the Specific Plan area.

Palm Avenue. Palm Avenue is an existing public local commercial/residential street that abuts the property on its northern edge. Palm Avenue has been classified as a local commercial street for the frontage of the Specific Plan area. Some additional right-of-way improvements are required as a result of the development allowed in the Specific Plan. No additional curb cuts besides the one existing curb cut (which also serves as a fire lane) may be allowed along Palm Avenue within the Specific Plan area. Street dedication to expand the width of the public right-of-way will be provided.

Holly Avenue. Holly Avenue is an existing public local commercial/residential street that abuts the property on its southern edge. Holly Avenue is classified as a local commercial street for the block fronting the Specific Plan area. Some additional right-of-way improvements are required as a result of the development allowed in the Specific Plan. There are no existing curb cuts along this block of Holly Avenue. No curb cuts may be allowed along Holly Avenue in the Specific Plan area. Street dedication to expand the width of the public right-of-way will be provided.

Indiana Street. Indiana Street is an existing public local commercial/residential street that abuts the property on its western edge. Some additional right-of-way improvements are required as a result of the development allowed in the Specific Plan. The project includes dedication of 25 feet of existing roadway and sidewalk (to the centerline of the street) to the City of El Segundo. Currently, the roadway and sidewalk are privately owned and the City of El Segundo only has easement rights. An additional dedication of 4 feet will be provided on the east side of the street along the frontage of Proposed Lots 1 and 4 only. A waiver request was granted for a 3-foot portion of the street dedication requirements to expand the right-of-way on the east side of the street for the portions of the block where new development is proposed in the PCC COM-3 and a the PCC MU-1 land use districts (along the frontage of proposed Lots 1 and 4). Additionally, a waiver request was granted for a 7-foot portion of the street dedication requirements to expand the right-of-way on the east side of the street for the portion of the block where existing development is located in the PCC COM-1 and PCC COM-2 land use districts (along the frontage of proposed Lots 2 and 3). No additional curb cuts besides the three existing curb cuts may be allowed along Indiana Street.

Public Transit

Public transit includes the Metro C Line and multiple bus lines that operate in the vicinity of the Specific Plan. The Metro C line is a light rail line running between Redondo Beach and Norwalk. The line runs north/south east of the project site along Nash Street with the closest station at Nash Street and Mariposa Avenue. The Mariposa C Line station is approximately ½ mile away from the project site.

There are two Metro bus lines, one Beach Cities bus line, and two LADOT Commuter Express lines that run in the vicinity of the Specific Plan. Metro Line 232 provides local service between the City of El Segundo and downtown Long Beach and runs along Pacific Coast Highway. LADOT Commuter Express 574 provides express service on weekdays from Encino to the City

of Hawthorne along Pacific Coast Highway and then heads east along El Segundo Boulevard south of the project site. Beach Cities Line 109 provides local service between the City of Redondo Beach and Los Angeles International Airport and runs along Pacific Coast Highway south of Grand Avenue (one block south of the Specific Plan area) and turns onto Grand Avenue to Downtown El Segundo to Main Street and north to Imperial Highway. Metro Line 625 provides local service between the City of El Segundo and Los Angeles International Airport and it runs along Imperial Highway north of the Specific Plan area. LADOT Commuter Express 438 provides express service on weekdays from El Segundo to the Downtown Los Angeles Financial District along Imperial Highway north of the project site. LADOT Commuter Express 439 provides express service on weekdays from El Segundo to Downtown Los Angeles along Douglas Street and Imperial Highway to the east of the site.

NON-VEHICULAR CIRCULATION

Walkways will be provided connecting the buildings, uses (hotels, residential and commercial uses), parking structures and surfaces areas, and the public sidewalks on the five (5) surrounding streets (Pacific Coast Highway, Mariposa Avenue, Palm Avenue, Holly Avenue and Indiana Street). Marked crosswalks are provided at all major arterial intersections.

The City of El Segundo adopted the South Bay Bicycle Plan and it has implemented some of the bicycle improvements in the proposed Bicycle Plan network including 4.9 miles of Class III Bike Routes (where vehicles and bicycles share travel lanes) on several City streets. The Bike Routes that are closest to the Specific Plan area are on Grand Avenue from Loma Vista Street to Duley Road and on Nash Street from Imperial Highway to El Segundo Boulevard. The Bicycle Master Plan includes Class I Bike Paths, Class II Bike Lanes, Class III Bike Routes and Bike-Friendly streets. The nearest proposed facilities are a Class II Bike Lane running east-west on Mariposa Avenue and a Class I Bike Path on Washington Street one block west of the Specific Plan boundary.

Bicycle parking facilities in accordance with Municipal Code and California Green Building Code requirements will be provided in multiple locations in the parking structures and surface parking areas in the Specific Plan.

E. GRADING CONCEPT

Some rough grading will be required at the South Site located in the PCC Mixed-Use 1 (PCC MU-1) land use district, the Fairfield Parking Site located in the PCC Commercial-3 (PCC COM-3) land use district, and the North Site located in the PCC Mixed-Use 2 (PCC MU-2) land use district. No grading will be required for the areas where the existing hotel buildings will remain.

Site grading will require a combination of cut and fill to create a building/parking structure pad and to accommodate one level of subterranean parking and retaining walls on the South Site as a result of the existing sloped topography. The property slopes down from Pacific Coast Highway to Indiana Street and slopes down toward Holly Avenue as well with the lowest point at the intersection of Indiana Street and Holly Avenue. The grading is estimated to result in approximately 27,700 cubic yards of cut and fill resulting in 17,700 cubic yards of soil export.

The Fairfield Parking Site and the North Site are relatively flat. The Fairfield Parking site is estimated to require 6,000 cubic yards of cut and fill for site rebalancing that will result in 0 cubic yards of export. The North Site is estimated to require 15,000 cubic yards of cut and fill for site rebalancing resulting in 0 cubic yards of soil export. Final grading plans will be approved by the City Engineer before the City issues grading permits.

IV. UTILITIES AND INFRASTRUCTURE

The following is a summary of existing and proposed public infrastructure for development of the Specific Plan area. All infrastructure will be constructed in accordance with the standards of the governing agency.

A. WATER SERVICE

EXISTING CONDITION

Water utility service is provided by the City of El Segundo and is currently available within the Specific Plan area and serves the two existing hotels. Water is purchased through West Basin Municipal Water District which is a member of The Metropolitan Water District of Southern California.

There is an existing City of El Segundo 10-inch asbestos-cement water line located 11 feet west of the centerline of Indiana Street. This water line is scheduled to be replaced with a new 10-inch ductile iron water main in FY 2020-2021. There are also two existing water lines in Pacific Coast Highway. One is a City of El Segundo 10-inch ductile iron pipe located 32-feet west of the street centerline. The other is a 10-inch pipe located 33-feet east of the street centerline. In Palm Avenue north of the Specific Plan area, there is a City of El Segundo 10-inch asbestos-cement pipe located 6 feet north of the street centerline. In Holly Street south of the Specific Plan area, there is a City of El Segundo 10-inch asbestos-cement pipe located 13 feet south of the street centerline. There is also an existing City of El Segundo 10-inch ductile iron water line in Mariposa Avenue, located 6-feet south of the street centerline (refer to Exhibits 8A, 8B and 8C, *Conceptual Water Plan South Site, Conceptual Water Plan Fairfield Parking Site, and Conceptual Water Plan North Site respectively*).

Water for fire suppression is provided by on-site building sprinklers and from 7 off-site fire hydrants. Existing fire hydrants owned by the City of El Segundo are located along Pacific Coast Highway, Holly Avenue, and Indiana Street.

PROPOSED CONDITION

The water service connection for domestic water and fire protection shall be made to one or more of the existing City of El Segundo water lines. The specific location of these connections and pipe sizing will be based upon the City of El Segundo's approval. The system shall provide adequate water supply for operation of the building's domestic requirements, automatic sprinkler systems and on-site fire hydrants (if required by the State or City Fire Marshal). A Conceptual Water Utility Plan has been developed for the Specific Plan Area (refer to Exhibits 8A, 8B and 8C, *Conceptual Water Plan South Site, Conceptual Water Plan Fairfield Parking Site, and Conceptual Water Plan North Site respectively*).

Fire flows for the proposed development will be based on the requirements listed in that version of the California Fire Code that is in effect at the time of plan submission, as amended by the City.

Demands for domestic water in the proposed condition were calculated with the assumption that they will be 120% of the sewer demand rates. s

Based on the requirements outlined by the El Segundo Fire Department in Regulation H-2-a for Fire Hydrant and Private Fire Main System Installation, 2 additional fire hydrants may need to be installed in order to provide coverage for portions of the proposed buildings that are in excess of 150-feet from a public fire hydrant. Coordination with the El Segundo Fire Department Fire Prevention Division is required to determine whether the additional fire hydrants will be located in the public street and/or within the development.

The minimum number of fire hydrants required was calculated using Table C102.1 from the California Fire Code. The spacing between fire hydrants for all three sites will be 300-feet for public fire hydrants, as stated in the City of El Segundo Fire Prevention Division "Regulation H-2-a Fire Hydrant and Private Fire Main System Installation" document (see Table IV-2 below for the hydrant and number spacing requirements).

Table IV-2. Required Number and Spacing of Fire Hydrants.

	Minimum Number of Hydrants	Spacing Between Hydrants
North Site	3	
Fairfield Parking	1	300 ft (typ.)
South Site	3	

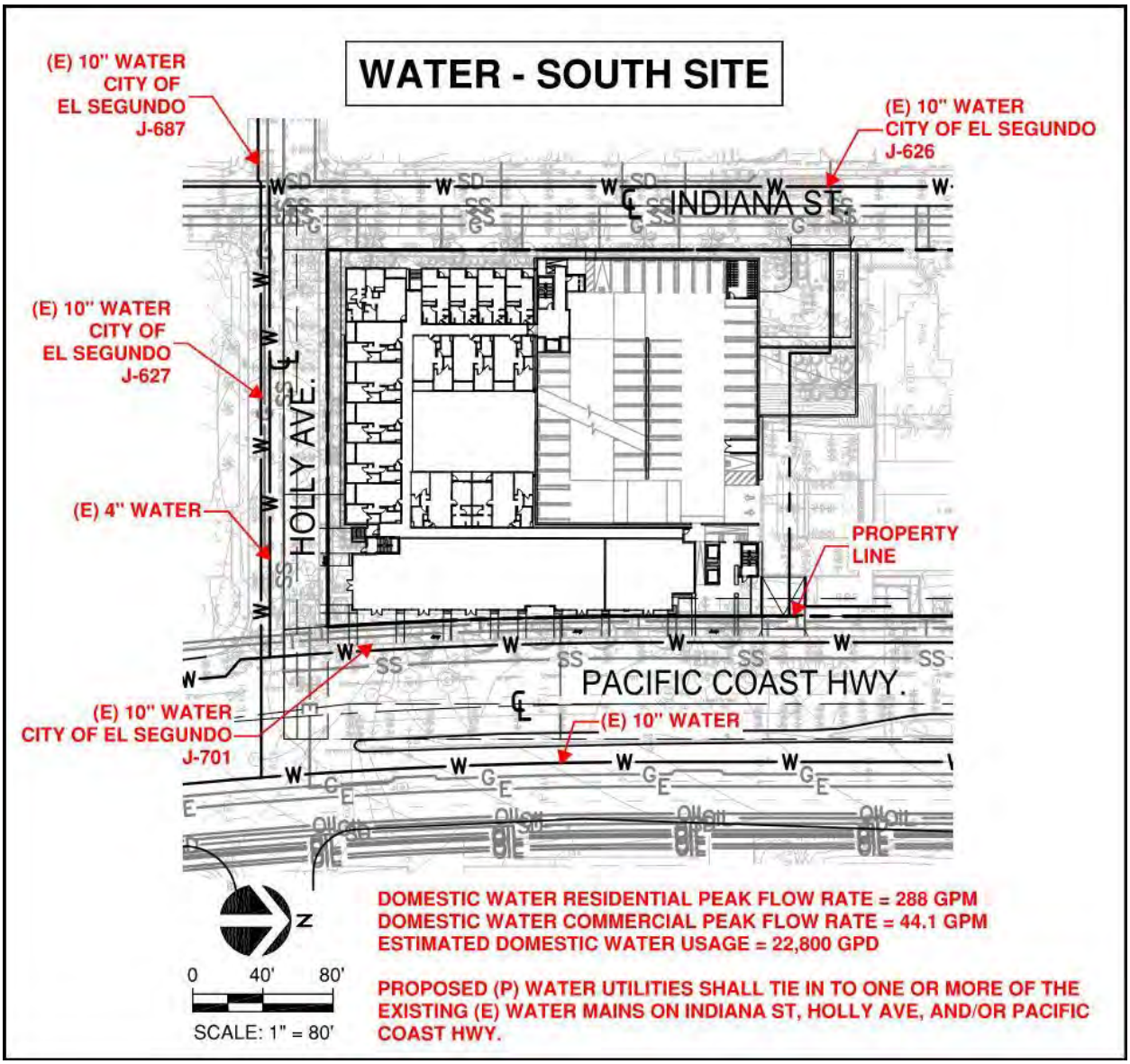


EXHIBIT 8A
CONCEPTUAL WATER PLAN
SOUTH SITE IN THE PCC MU-1 DISTRICT

(Source: KPFF)

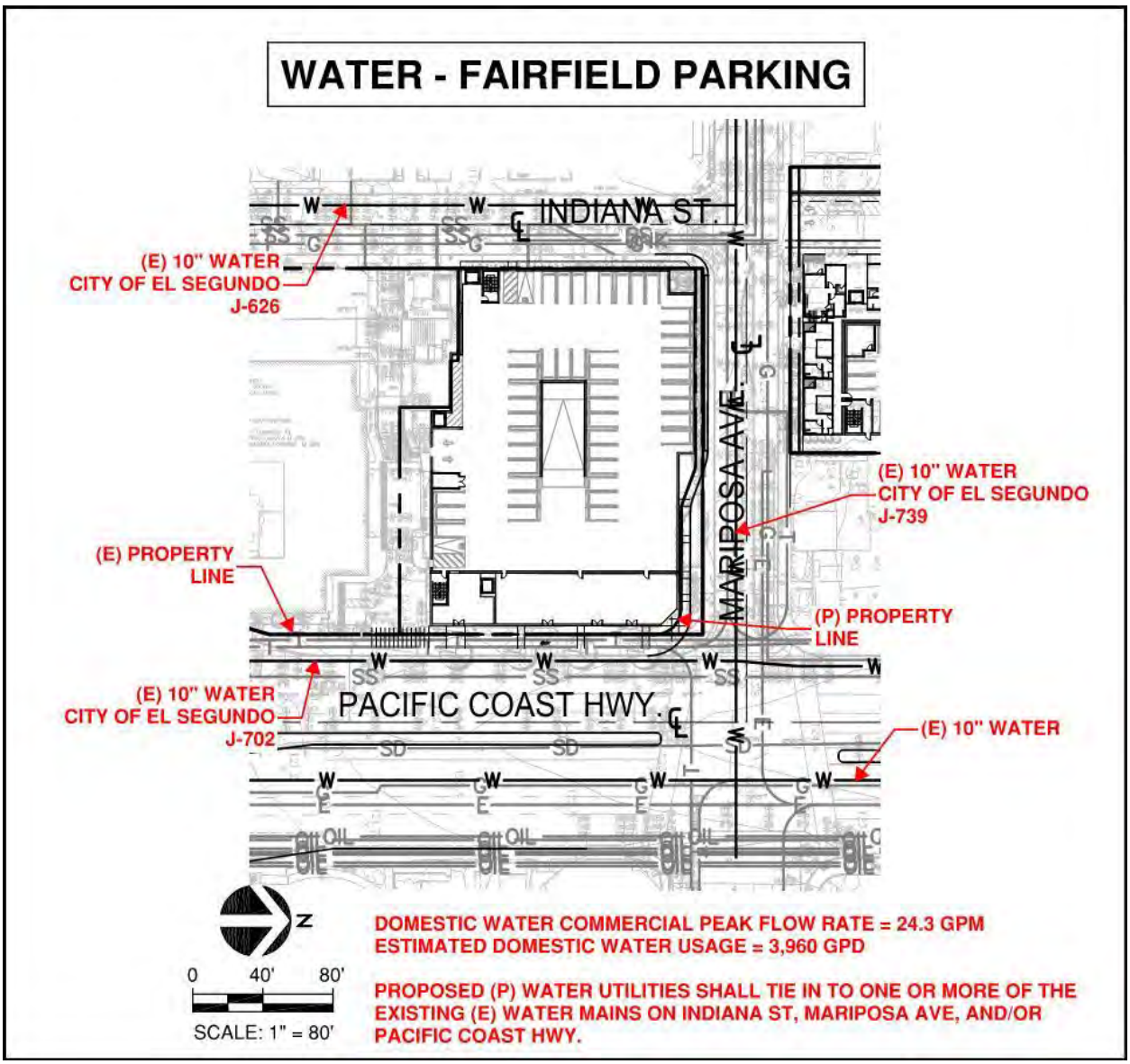


EXHIBIT 8B
CONCEPTUAL WATER PLAN
FAIRFIELD PARKING SITE IN THE PCC COM-3 DISTRICT

(Source: KPFF)

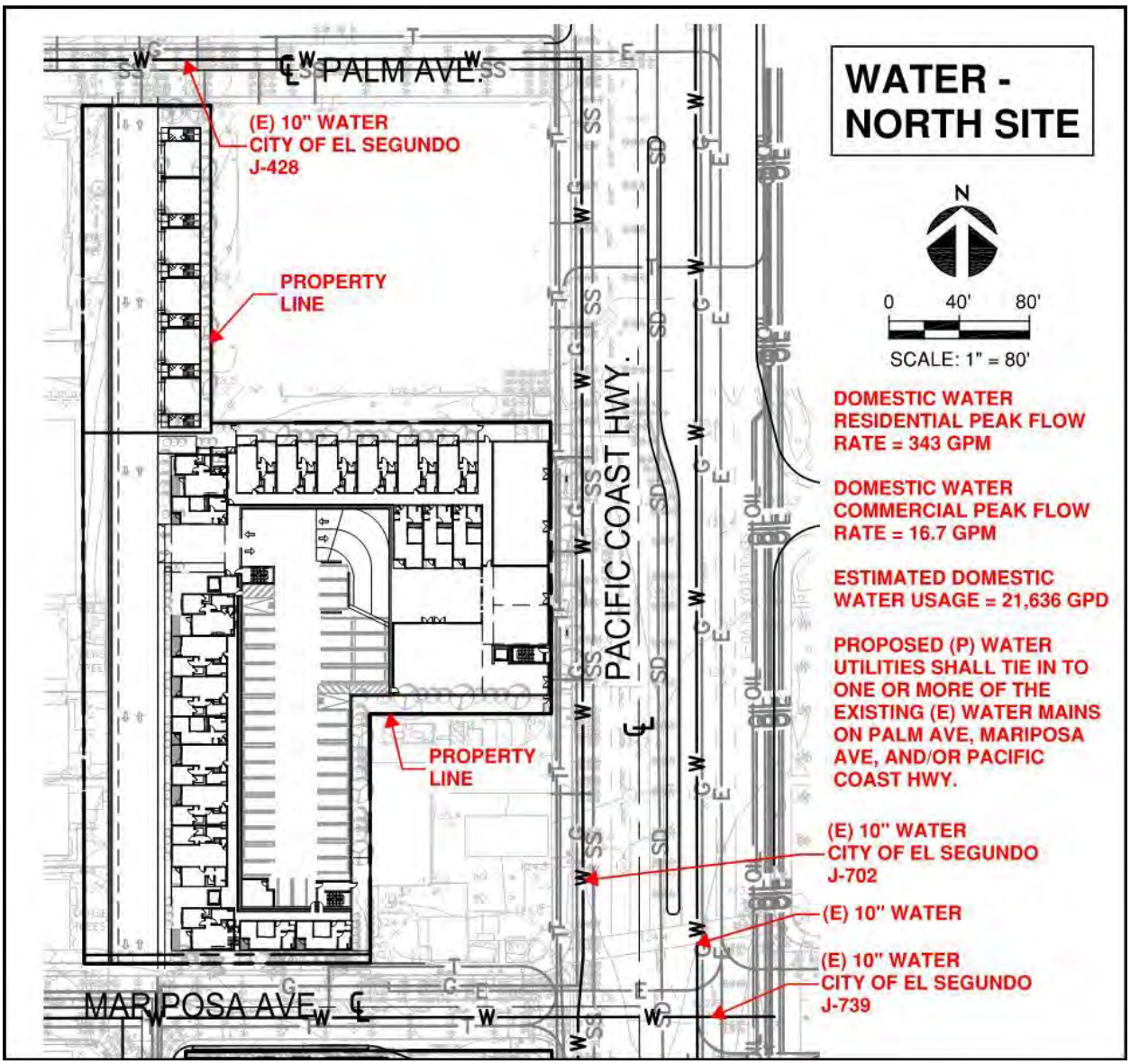


EXHIBIT 8C
CONCEPTUAL WATER PLAN
NORTH SITE IN THE PCC MU-2 DISTRICT

(Source: KPFF)

B. RECLAIMED WATER

EXISTING CONDITION

Reclaimed water utility service is provided by the West Basin Municipal Water District from a treatment plant on Hughes Way. There are no existing reclaimed water mains in the streets adjacent to the project. According to West Basin Municipal Water District record drawings, the closest reclaimed water main is located in Washington Avenue adjacent to Washington Park at the intersection with Elm Street, approximately 500-feet from the intersection of Palm Avenue and Indiana Street.

PROPOSED CONDITION

Future reclaimed water service is anticipated to be provided through the existing point of connection on Washington Avenue. Should West Basin Municipal Water District extend the reclaimed water lines adjacent to the Specific Plan area in the future, exact points of connection will be based on West Basin Municipal Water District's and the City of El Segundo's input. Reclaimed water service may not be available at the time of project completion.

C. SEWER SERVICE

EXISTING CONDITION

All existing sanitary sewer lines in the streets surrounding the project site are owned by the City of El Segundo. Sewer utility service is provided by the City of El Segundo and the Los Angeles County Sanitation District and is currently available within the site.

An 8-inch vitrified clay pipe (VCP) gravity line is located west of the site under the centerline of Indiana Street, with a depth varying from 2-feet to 9-feet below grade to the pipe invert. The sewer begins at a manhole located approximately 98-feet south of Mariposa Avenue, before sloping south where it connects to two 12-inch sewer lines—one on Holly Avenue and one that continues south on Indiana Street. In Indiana Street, there is also a 10-inch ductile iron pressure sewer located 6-ft east of the street centerline.

In Pacific Coast Highway, there is an existing 12-inch VCP gravity line located 26-feet west of the street centerline. The pipe slopes from north to south and varies in depth from 6-feet to 18-feet. At the intersection with Holly Avenue, the pipe connects to a 12-inch sewer running west on Holly Avenue.

An existing 8-inch VCP gravity line is located under the street centerline of Palm Avenue. This sewer has a high point elevation at a manhole located approximately 390-feet west of Pacific Coast Highway. The pipe slopes to drain out to both mainlines on both sides of the manhole. On the east end, it connects to the 12-inch sewer located in Pacific Coast Highway.

There are two existing sewer lines on Mariposa Avenue, west of Indiana Street. One is an 8-inch VCP gravity line located on the street centerline. It slopes from east to west and connects to an 8-

inch sewer line on Illinois Court. The other sewer line on Mariposa Avenue is a 10-inch pressure sewer located 5 feet north of the street centerline. A sewer study has been conducted that determined the existing sewer system has sufficient capacity to accommodate the additional flow that will be generated by the new development.

PROPOSED CONDITION

New sewer laterals are proposed for all the new buildings. It is anticipated that the new sewer laterals will connect to several of the existing gravity lines surrounding the project. The proposed project does not currently impact the existing pressure lines. The sewer laterals will be designed to slope at a minimum of 2% and maintain a minimum scouring velocity of 2-feet/second. Points of connection will be based on the City of El Segundo's input and will require a Sewer Connection Permit from the City of El Segundo. A conceptual sewer plan has been developed for the Specific Plan area (refer to Exhibits 9A, 9B and 9C, *Conceptual Sewer Plan South Site, Conceptual Sewer Plan Fairfield Parking Site, and Conceptual Sewer Plan North Site respectively*).

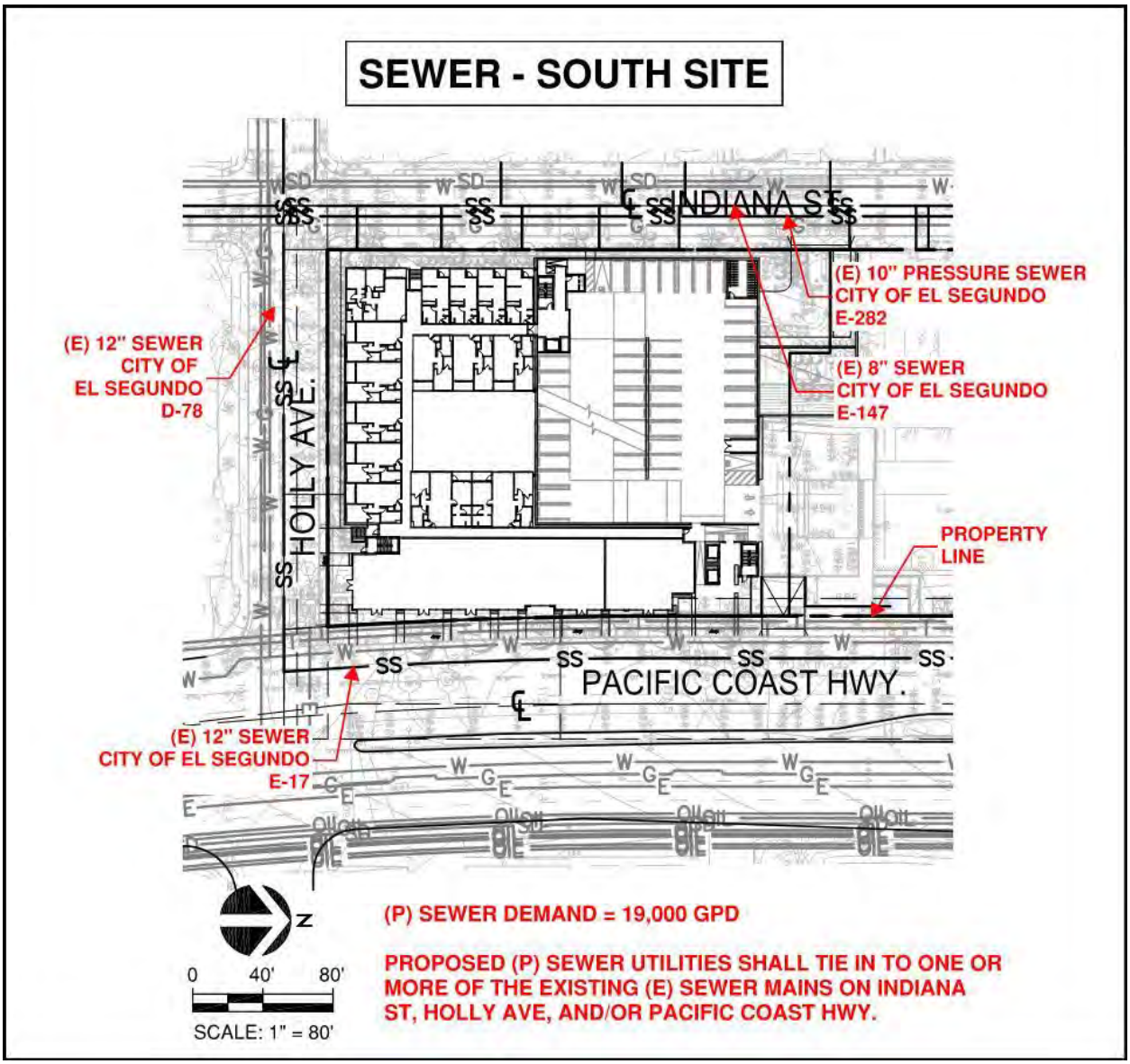


EXHIBIT 9A
CONCEPTUAL SEWER PLAN
SOUTH SITE IN THE PCC MU-1 DISTRICT

(Source: KPFF)

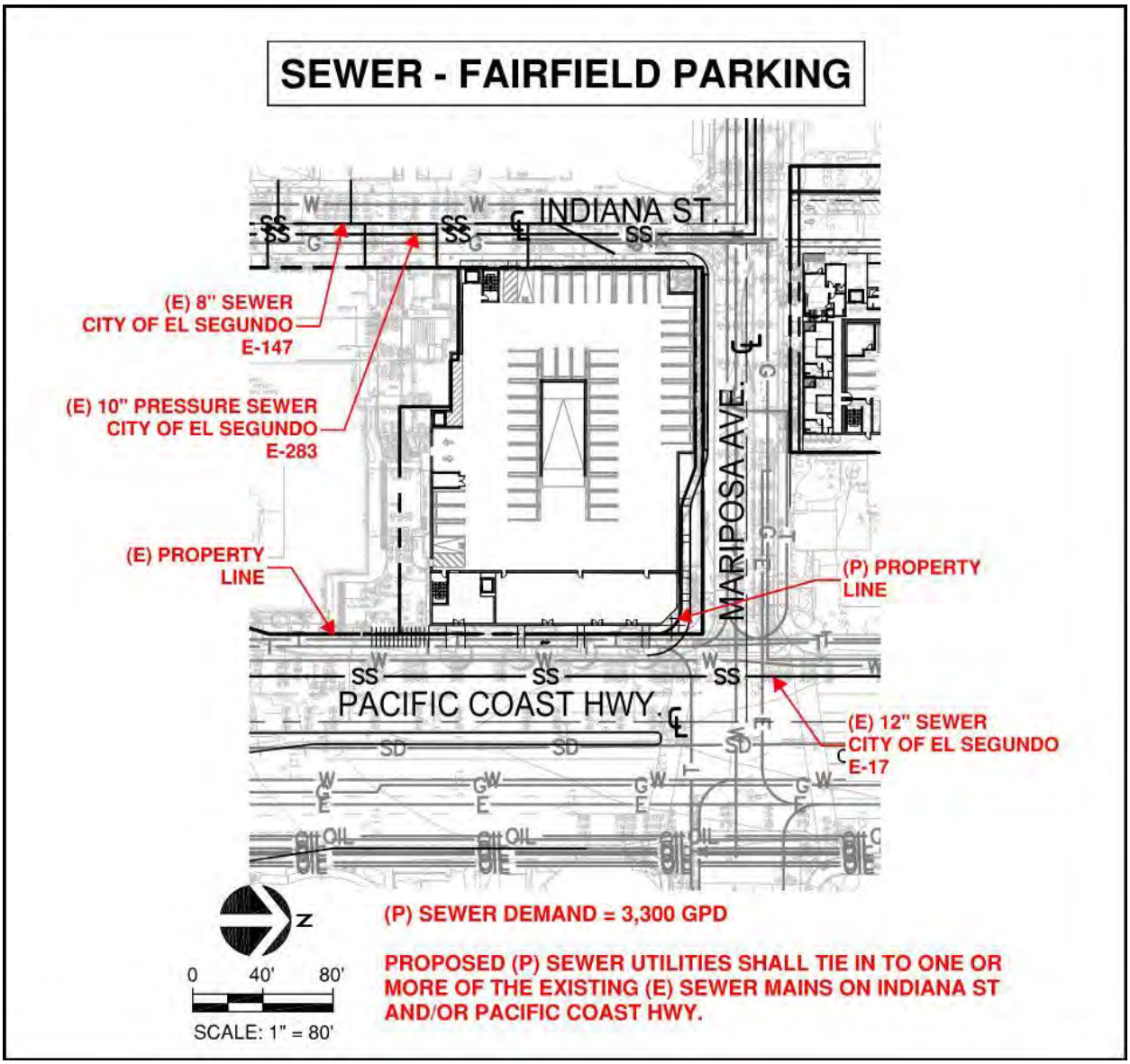


EXHIBIT 9B
CONCEPTUAL SEWER PLAN
FAIRFIELD PARKING SITE IN THE PCC COM-3 DISTRICT

(Source: KPFF)

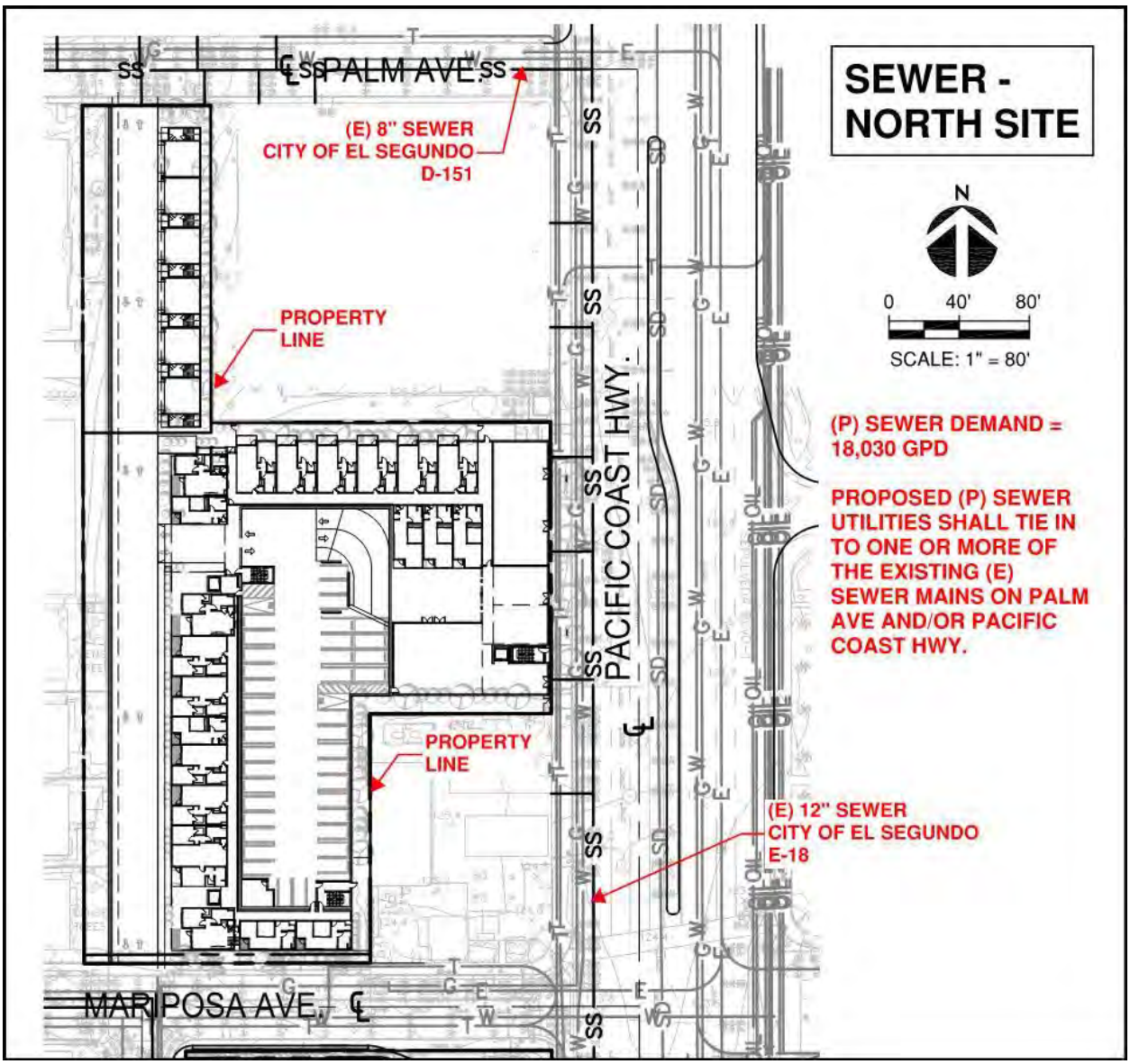


EXHIBIT 9C
CONCEPTUAL SEWER PLAN
NORTH SITE IN THE PCC MU-2 DISTRICT

(Source: KPFF)

D. DRAINAGE

EXISTING CONDITION

There are two existing storm drains near this project that are owned by Caltrans and the City of El Segundo.

The existing Caltrans storm drain is located below Pacific Coast Highway. The storm drain is comprised of reinforced concrete pipe (RCP) and varies in size from 18-inches to 24-inches. The variable width existing RCP storm drain is located 66.5-feet east of the centerline in the portion of the street that is south of Pine Avenue and is located approximately 23-feet east of centerline in the portion that is north of Pine Avenue, although this location varies. The pipe flows from north to south. The depth of the pipe invert varies from approximately from 4-feet to 6-feet below grade.

The City of El Segundo storm drain is an existing 24-inch, RCP storm drain that runs through Indiana Street, and flows from north to south. It conveys stormwater from a catch basin on the west side of Indiana Street and is located 39 feet west of the project's property line. This storm drain runs south and ties in to another storm drain on Holly Avenue that runs west before ultimately discharging into a basin located approximately 0.5-miles southwest of the Specific Plan area, at the intersection of Center Street and Grand Avenue. The catch basin is located approximately 230-feet north of Holly Avenue.

Federal Emergency Management Agency (FEMA) map #06037C1770F shows this Project site is located within Zone X, which is described to be an area of minimal flood hazard and determined to be outside of the 0.2% annual chance floodplain. There are no Special Flood Hazards on-site.

PROPOSED CONDITION

Drainage must comply with all applicable laws and regulations, including without limitation, the City's National Pollution Discharge Elimination System (NPDES) Permit.

Proposed drainage will include stormwater treatment features on multiple sites within the Specific Plan area, in accordance with the City of El Segundo Low Impact Development (LID) requirements. The storm water quality design volume required by Los Angeles County Low Impact Development (LID) standards will be stored in the system and infiltrate into the soil beneath the underground system within 48 hours. These treatment features are designed to treat the 85th percentile storm event, while overflow drainage features will be designed based on the 25-year storm event.

Infiltration is feasible for stormwater treatment within the Specific Plan area. It appears that one drywell at each of the three new development sites within the Specific Plan area will be able to capture the required volume and will be able to treat that volume as quickly as it enters the drywell system. The same drywell design will be used at each site. The drywells will include overflow piping that will be sized based on the 25-year storm event. Overflow features will convey water to Indiana Street or Mariposa Avenue and into the City of El Segundo catch basin on Indiana Street. Thus, stormwater in the proposed condition will flow only to the City of El Segundo storm drain.

Because the peak flow rate will be reduced in the proposed condition, it is assumed that the City of El Segundo storm drain will have more than enough capacity to handle the flow rate generated.

A Conceptual Drainage Plan has been developed for the Specific Plan area that provides both existing and proposed conditions (refer to Exhibits 10A, 10B, 10C, 10D, 10E, and 10F, *Existing Drainage Plan South Site, Conceptual Drainage Plan South Site, Existing Drainage Plan Fairfield Parking Site, Conceptual Drainage Plan Fairfield Parking Site, Existing Drainage Plan North Site, and Conceptual Drainage Plan North Site respectively*).

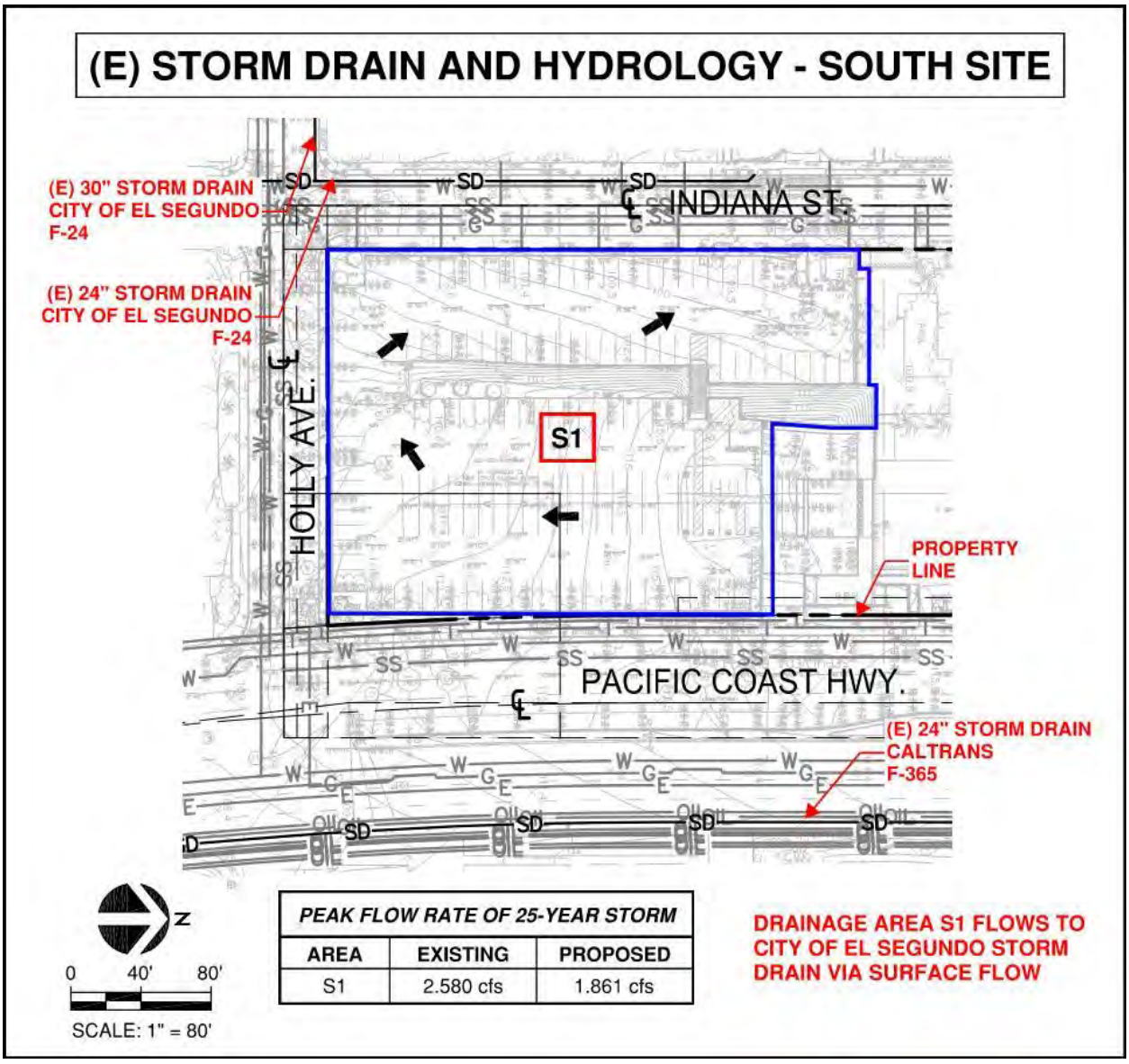


EXHIBIT 10A
EXISTING DRAINAGE PLAN
SOUTH SITE IN THE PCC MU-1 DISTRICT

(Source: KPFF)

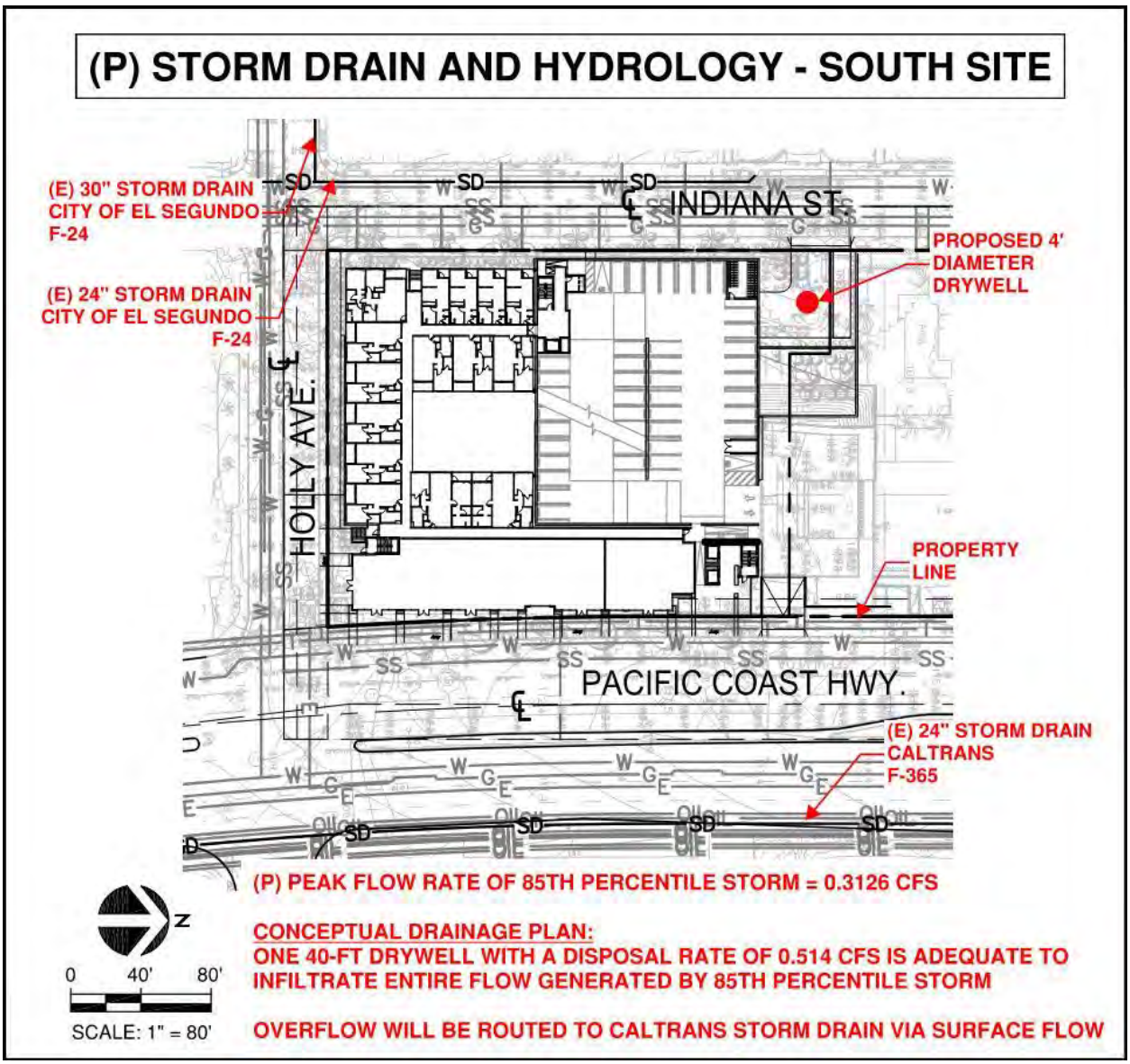


EXHIBIT 10B
CONCEPTUAL DRAINAGE PLAN
SOUTH SITE IN THE PCC MU-1 DISTRICT

(Source: KPFF)

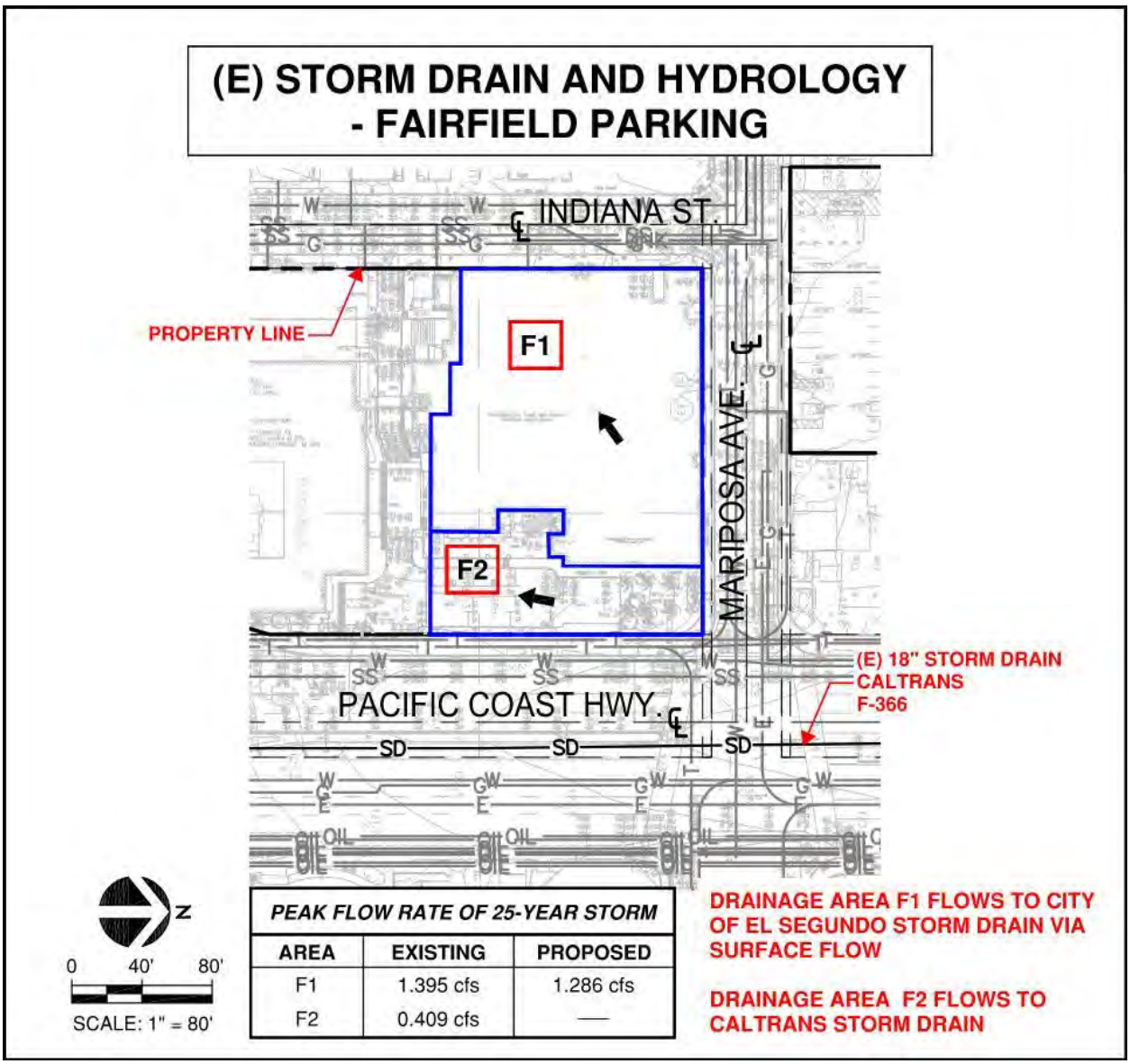


EXHIBIT 10C
EXISTING DRAINAGE PLAN
FAIRFIELD PARKING SITE IN THE PCC COM-3 DISTRICT

(Source: KPFF)

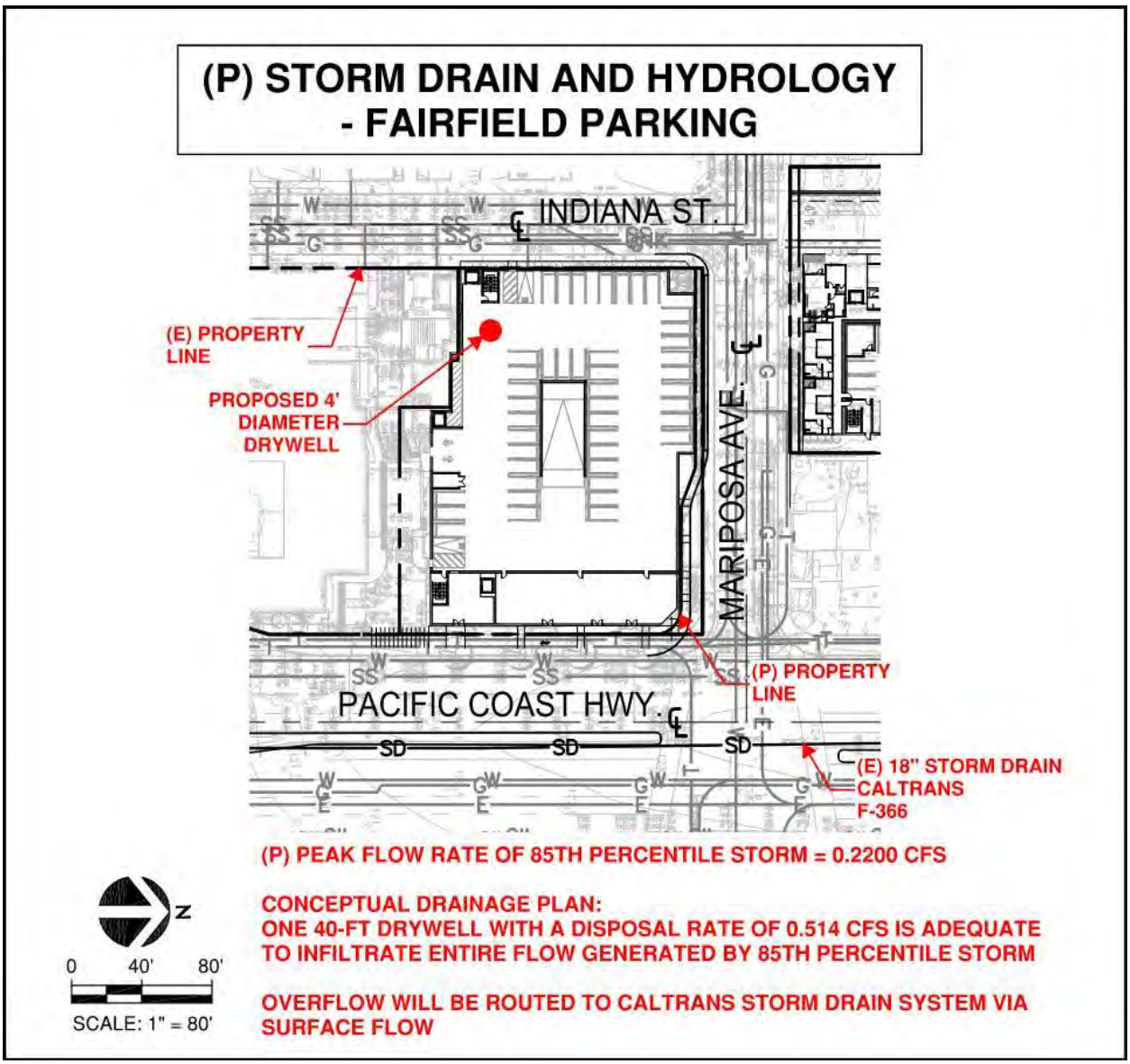


EXHIBIT 10D
CONCEPTUAL DRAINAGE PLAN
FAIRFIELD PARKING SITE IN THE PCC COM-3 DISTRICT

(Source: KPFF)

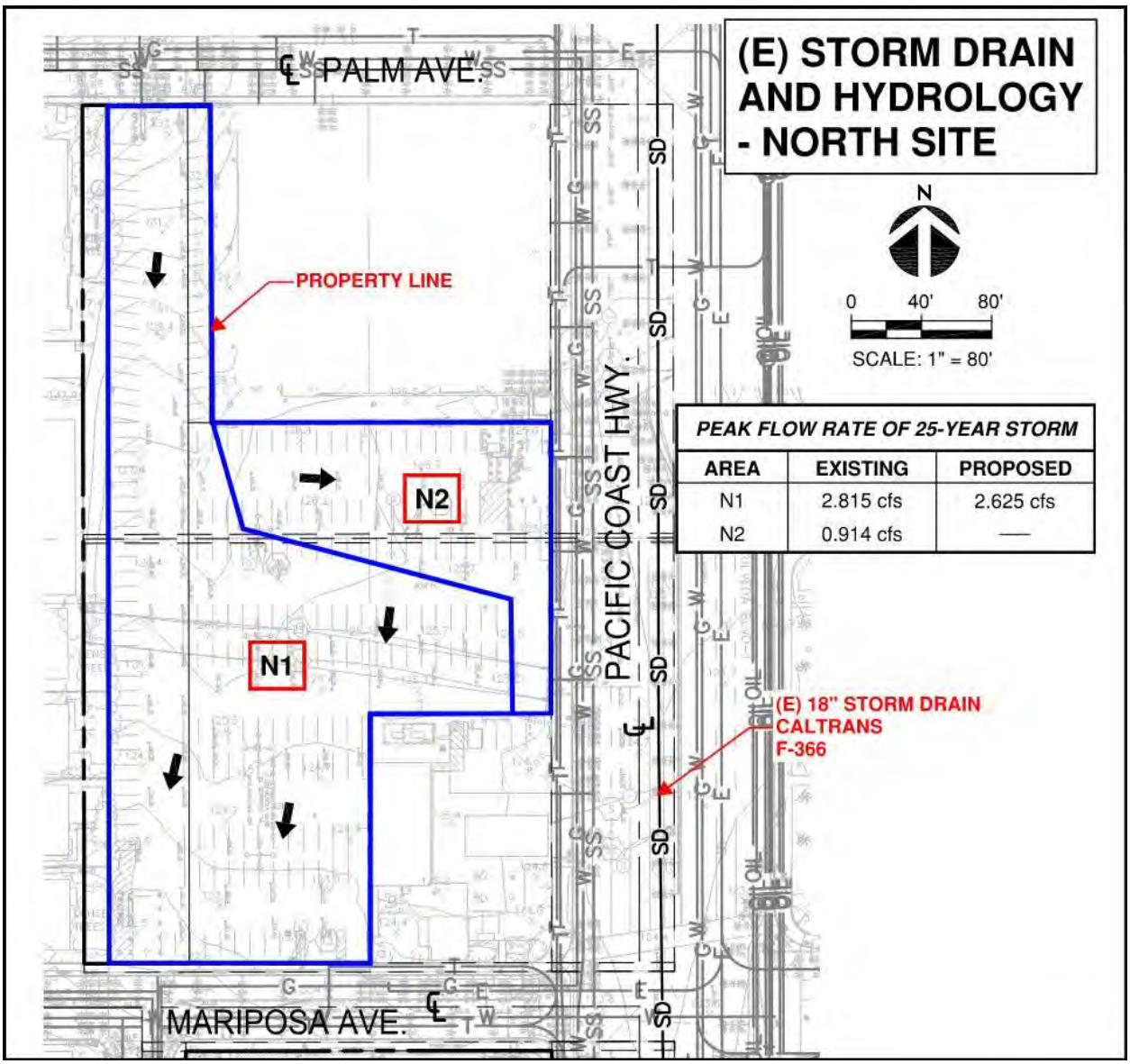


EXHIBIT 10E
EXISTING DRAINAGE PLAN
NORTH SITE IN THE PCC MU-2 DISTRICT

(Source: KPFF)

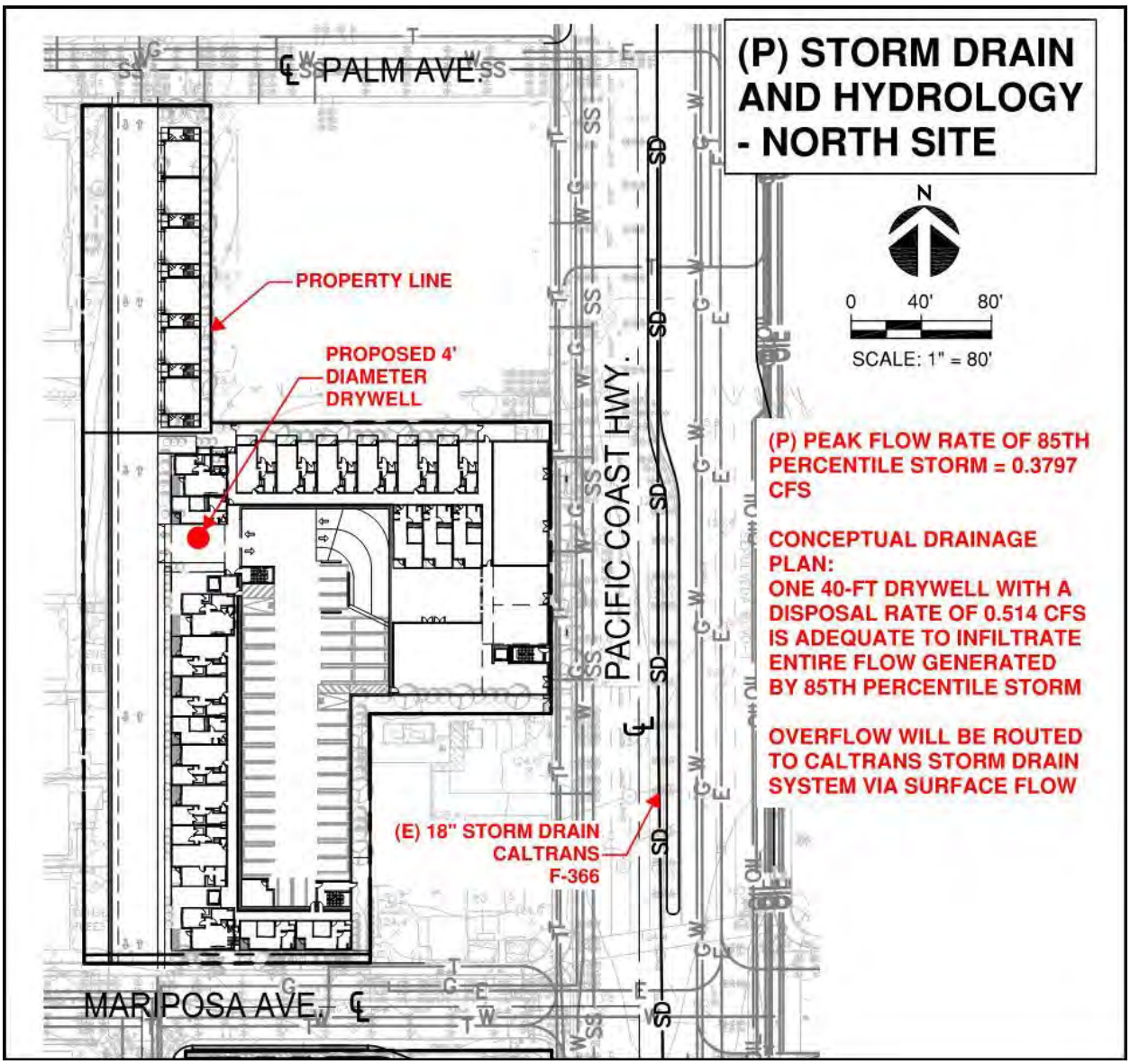


EXHIBIT 10F
CONCEPTUAL DRAINAGE PLAN
NORTH SITE IN THE PCC MU-2 DISTRICT

(Source: KPFF)

E. GAS

EXISTING CONDITION

Natural gas service is provided by Southern California Gas Company (SoCal Gas) and is currently available within the developed portions of the site and in streets surrounding the project site. Specifically, existing SoCal Gas utilities are located in the following streets adjacent to the project site: Pacific Coast Highway, Palm Avenue, Mariposa Avenue, Indiana Street, and Holly Avenue.

PROPOSED CONDITION

The existing gas service will be maintained and future gas service will be provided through private gas service line connections to the SoCal Gas utilities (public main line(s)) in the surrounding streets that include Pacific Coast Highway, Palm Avenue, Mariposa Avenue, Indiana Street, and Holly Avenue. The private gas service lines will be secured by easements with SoCal Gas.

A conceptual plan has been developed for the Specific Plan area (refer to Exhibits 11A, 11B, and 11C, *Conceptual Electric, Gas & Telecommunication Plan South Site, Conceptual Electric, Gas & Telecommunication Plan Fairfield Parking Site, and Conceptual Electric, Gas & Telecommunication Plan North Site respectively*).

F. ELECTRIC

EXISTING CONDITION

Electric power is provided by Southern California Edison (SoCal Edison) to the Specific Plan area through an underground utility conduit system in the streets adjacent to the project site including Pacific Coast Highway and Mariposa Avenue.

PROPOSED CONDITION

SoCal Edison has existing underground electrical utilities in the streets adjacent to the project site, including Pacific Coast Highway and Mariposa Avenue. New underground utility conduit systems will be needed to intercept the existing underground electric system and provide electrical power to the proposed improvements. An easement will be granted to SoCal Edison for access and maintenance. Final locations and points of connection for the electrical system will be based on a final approved SoCal Edison design. A conceptual plan has been developed for the Specific Plan area (refer to Exhibits 11A, 11B, and 11C, *Conceptual Electric, Gas & Telecommunication Plan South Site, Conceptual Electric, Gas & Telecommunication Plan Fairfield Parking Site, and Conceptual Electric, Gas & Telecommunication Plan North Site respectively*).

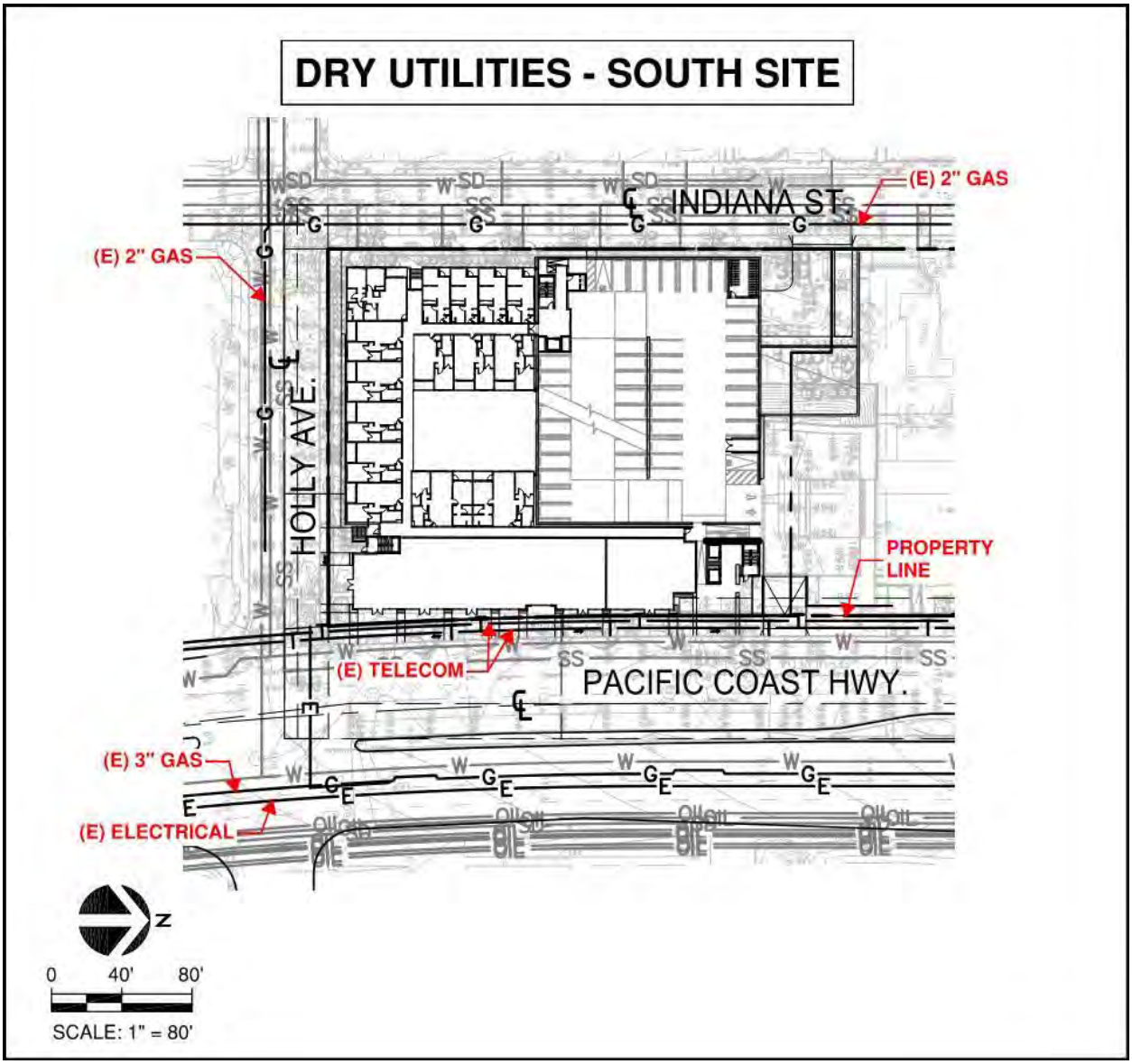


EXHIBIT 11A
CONCEPTUAL ELECTRIC, GAS AND TELECOMMUNICATIONS PLAN
SOUTH SITE IN THE PCC MU-1 DISTRICT

(Source: KPFF)

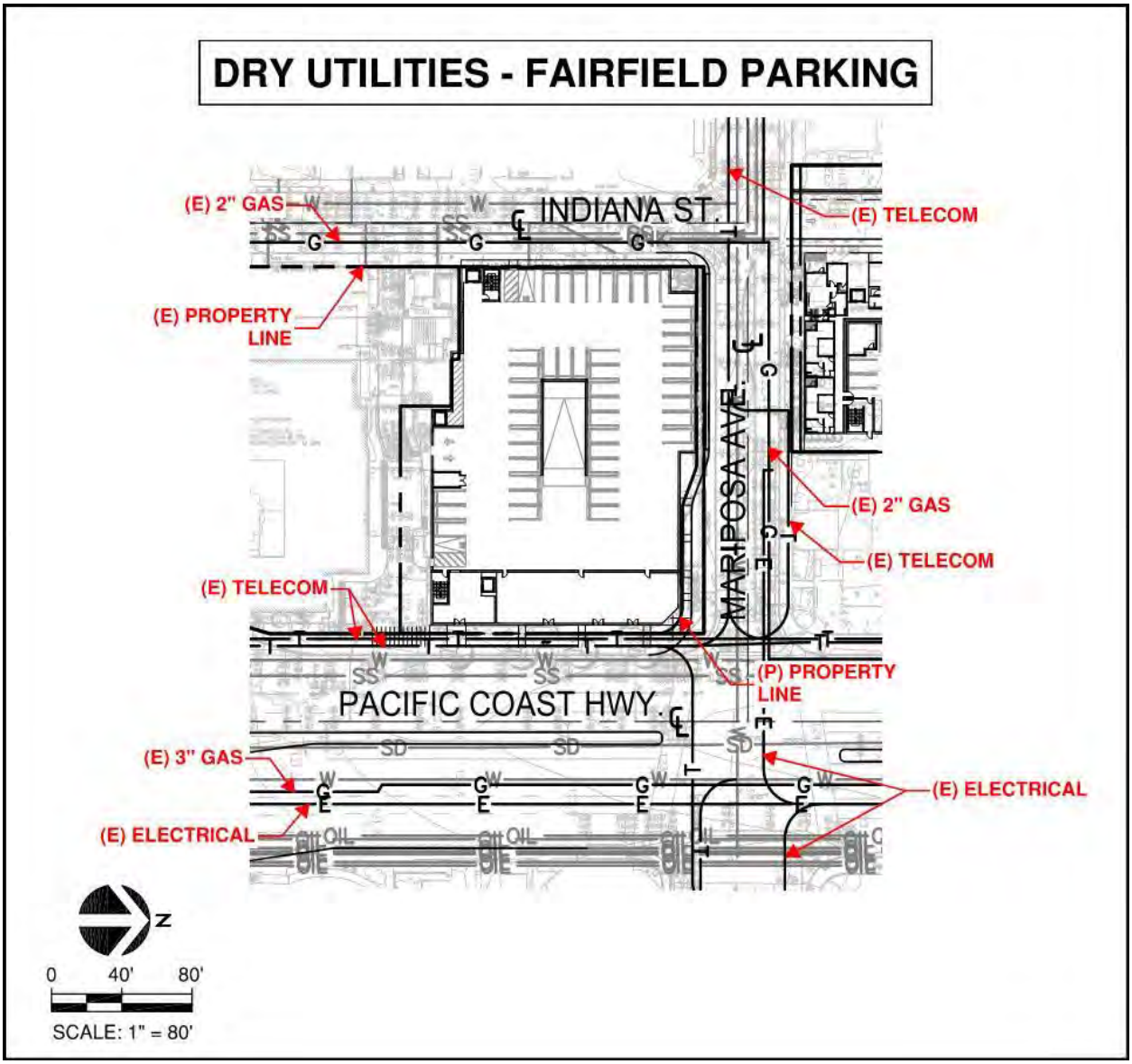


EXHIBIT 11B
CONCEPTUAL ELECTRIC, GAS AND TELECOMMUNICATIONS PLAN
FAIRFIELD PARKING SITE IN THE PCC COM-3 DISTRICT

(Source: KPFF)

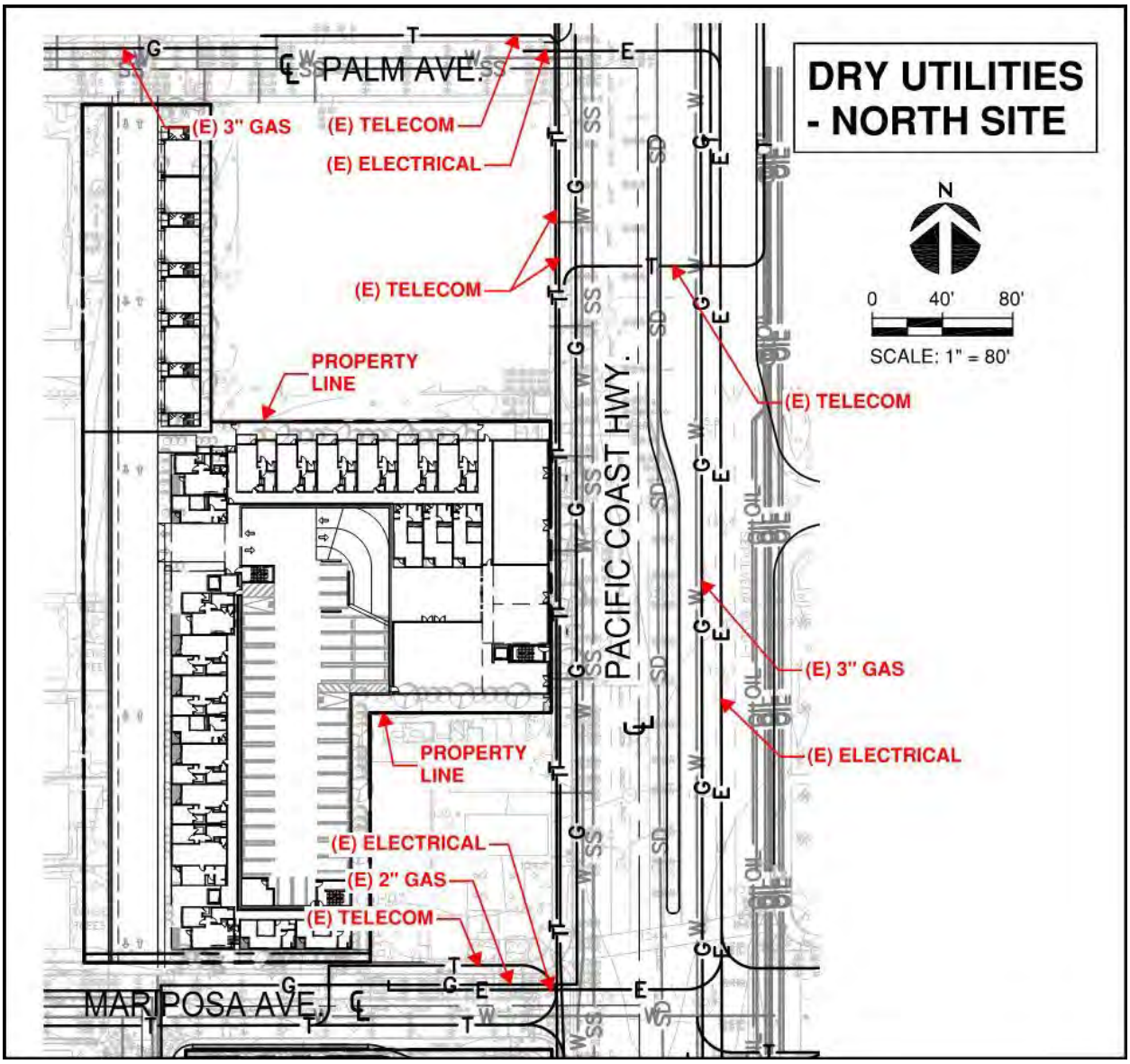


EXHIBIT 11C
CONCEPTUAL ELECTRIC, GAS AND TELECOMMUNICATIONS PLAN
NORTH SITE IN THE PCC MU-2 DISTRICT

(Source: KPFF)

G. TELECOMMUNICATIONS UTILITIES

EXISTING CONDITION

Cable and telecommunication service is provided by Sonify, Velocity, Verizon, CenturyLink, and Charter Communications in the vicinity of the Specific Plan area. Verizon and CenturyLink currently have underground facilities in Pacific Coast Highway. Charter Communications has a combination of aerial and underground facilities in Indian Street, Mariposa Avenue, Palm Avenue and Holly Avenue. Velocity provides phone and internet service to the Aloft and the Fairfield Inn and Suites hotels. Currently, Sonify provides television service to the Aloft and Fairfield Inn and Suites hotels.

PROPOSED CONDITION

It is anticipated that Velocity and Sonify would continue to provide service to the Aloft and the Fairfield Inn and Suites hotels. Charter Communications has indicated that it may provide service to the project, but will need to perform an investigation of the area to confirm that it is feasible. New underground utility conduit systems will intercept the existing underground telecommunications system and provide services to the proposed buildings. An easement will be granted to the telecommunication companies for access and maintenance. Final locations and points of connection for the telecommunications system will be based on a final approved design by the telecommunications providers. A conceptual plan has been developed for the Specific Plan area (refer to Exhibits 11A, 11B, and 11C, *Conceptual Electric, Gas & Telecommunication Plan South Site, Conceptual Electric, Gas & Telecommunication Plan Fairfield Parking Site, and Conceptual Electric, Gas & Telecommunication Plan North Site respectively*).

H. SOLID WASTE DISPOSAL

EXISTING CONDITION

Solid waste disposal is provided to multiple-family and commercial users by a variety of private haulers.

FUTURE CONDITION

Development within the Specific Plan would contract with a provider. Landfill capacity is adequate for assumed population and residential and commercial growth within Los Angeles County. Solid waste facilities within the Specific Plan area will comply with all ESMC requirements pertaining to building, fire, zoning codes (e.g., adequate trash enclosures and screening).

I. FIRE PROTECTION

EXISTING CONDITION

Fire protection services are provided by the El Segundo Fire Department which has two stations.

Fire Station 1 is located at 314 Main Street (next to City Hall) which is 1.1 miles from the Specific Plan area. Fire Station 2 is located at 2261 East Mariposa Avenue (at Mariposa Avenue and Douglas Street) which is 0.8 miles from the Specific Plan area. The provision of water for fire suppression is provided by on-site building sprinklers and from several off-site fire hydrants.

FUTURE CONDITION

Buildings will have sprinkler systems as required by the ESMC. Additional fire hydrants will be provided in addition to existing hydrants to provide coverage for portions of the proposed buildings that are in excess of 150 feet from a public hydrant. Spacing between fire hydrants for the South Site (in the PCC Mixed-Use 1 (PCC MU-1) land use district), Fairfield Parking Site (in the PCC Commercial-3 (PCC COM-3) land use district), and in the North Site (in the PCC Mixed-Use 2 (PCC MU-2) land use district) will be 300 feet for public fire hydrants. The North Site will have a minimum of 3 hydrants. The Fairfield Parking Site will have a minimum of 1 hydrant and the South Site will have a minimum of 3 hydrants. Fire hydrant requirements are discussed in greater detail above in "Section IV-A Water Service" of this Specific Plan. Development will be required to pay fire impact fees to off-set the additional demand for municipal fire protection services as a result of the new development.

J. POLICE SERVICES

EXISTING CONDITION

Police services are provided by the El Segundo Police Department which is located at 348 Main Street.

FUTURE CONDITION

Development will be required to pay police impact fees to off-set the additional demand for municipal police services as a result of the new development.

V. DESIGN GUIDELINES

These design guidelines are intended as "guidelines" instead of "development regulations." Consequently, strict compliance is not required. These design guidelines apply only to new construction (not applicable to existing buildings and site improvements in the PCC MU-1, PCC COM-1, PCC COM-2, and PCC COM-3 land use districts) and site areas that are modified as of the effective date of this Specific Plan. To promote the quality of design planned for this Project, the design guidelines given in this document establish criteria that enhance the coordination, organization, function and identity of the site, while maintaining a compatible relationship with the surrounding development of the Pacific Coast Commons Specific Plan.

A. DESIGN OBJECTIVES

Design Guidelines for the Pacific Coast Commons Specific Plan will promote and reinforce the City's commitment to high quality development. The objectives of these guidelines are to:

- Provide for high-quality residential and commercial development within the Specific Plan area.
- Promote orderly and predictable development.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian, bicycle and motor vehicle circulation within the Project and convenient pedestrian and bicycle linkages to and from adjacent residential and commercial areas and schools.

1. Site Planning

a. The arrangement of new buildings, parking and circulation areas should recognize the particular characteristics of the site and should create a cohesive identity.

b. Site development should utilize variations on building orientation and landscaping adjacent to the public streets so that a monolithic "wall" of building faces is not created.

c. The design and location of accessory buildings (e.g., maintenance and storage buildings, trash and recycling enclosures, and outdoor mechanical equipment enclosures) should be incorporated into and be compatible with the overall design of the Project and the main buildings on the site.

d. Appropriate linkages between internal Project components and buildings should be incorporated, including pedestrian walkways.

e. Buildings should be arranged to create opportunities for outdoor amenities (e.g., plazas, courtyards, outdoor eating areas, etc.) where appropriate and feasible.

2. Access and Parking

a. The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries should be avoided to minimize pedestrian and vehicular conflicts.

b. Entry driveway areas should be clearly marked by identifying features, (e.g., prominent landscape features and well-designed monument-type signs).

c. Access to each building should be clearly visible to pedestrians and motorists through the use of signage, color, and/or design elements.

d. Surface parking lots adjacent to and visible from public streets should incorporate landscaping to minimize undesirable visual impacts.

e. Surface parking areas should be enhanced and visually broken up through the use of canopy trees and landscape improvements and to reduce the effects of heat gain.

f. Parking lot and driveway design is encouraged to include water quality storm water facilities consistent with City standards.

3. Architecture/Orientation/Massing

a. The massing, scale and architectural style should consider compatibility with the surrounding character and existing buildings to reflect a cohesive character.

b. The orientation of the newly constructed buildings should facilitate and encourage pedestrian activities.

c. The mass and scale of new buildings should be compatible with the existing and adjacent structures and with each other. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new building, stepping back the upper portions of taller buildings, and incorporating human scale elements, such as pedestrian scaled doors, windows, and building materials on the ground floor.

d. Buildings should be divided into distinct massing elements and should be articulated with architectural elements and details. Changes in height, horizontal plane, materials, patterns and colors should be used to reduce building scale and mass.

e. Primary building entries should be easily identified through the use of prominent architectural elements, signage, landscaping, decorative hardscape, lighting, canopies, roof form, architectural projections, columns, vertical and/or horizontal elements, and other design features that help emphasize a building's entry.

f. Building elevations, whether front, side, or rear, that are visible from public rights-of-way should be architecturally detailed to incorporate quality materials and architectural features that reflect the theme of surrounding structures and facades. Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances is encouraged.

g. Facades should include vertical and horizontal variations in wall planes, building projections, door and window bays, and similar elements. Building articulation should be present on the side and rear walls of the buildings if visible from the adjacent streets (Pacific Coast Highway, Mariposa Avenue, Holly Avenue, Indiana Street, and Palm Avenue) and the western facing building facades in the PCC Mixed-Use 2 (PCC MU-2) land use district.

h. The exterior surfaces of buildings for the ground floor must be protected with anti-graffiti coating where not screened by shrubs, vines and trees.

4. Color and Materials

a. Colors and materials should be consistent and complementary throughout the Project area.

b. Exterior materials and architectural details should complement each other and should be stylistically consistent.

c. Building materials must be durable and resistant to damage, defacing, and general wear and tear. Acceptable building materials may include concrete, fiber cement siding, stone masonry, metal, stucco, glass and/or other contemporary composites.

d. Building materials that support sustainability through the use of environmentally sound building materials and local resources (e.g., locally available, contain high recycled-content, are reused, come from renewable sources, and that contain low volatile organic compound (VOC) levels) is highly encouraged.

5. Screening and Mechanical Equipment

a. All screening devices should be compatible with the architecture, materials and colors of the building.

b. Loading docks, bays and parking spaces, delivery service areas, outdoor storage areas, stand-alone mechanical equipment facilities, should be located and designed to minimize their visibility, circulation conflicts and adverse noise impacts. Sound attenuation walls should be used where appropriate to reduce noise where required by code or the Project's environmental analysis.

c. Utility and mechanical equipment should be screened from view of public streets and nearby buildings on all sides with landscaping and/or architectural elements.

d. Rooftop mounted equipment visible from the surrounding area, adjacent buildings, and any public rights-of-way should be screened from public view and equipment should be painted to match the roof color when equipment is visible.

e. Trash and recycling receptacles areas should be completely screened from public view from public rights-of-way with solid walls, wood, and/or landscaping.

f. Ground mounted enclosures should be protected with anti-graffiti coating where not screened by shrubs, vines and trees.



Trash enclosures with architectural screening elements

6. Parking Structures

a. Parking garages should be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.

b. Parking garages should be designed to minimize the view of vehicles in the garage through a combination of screen walls and plantings while providing adequate visibility for security purposes.

c. The exterior elevations of parking structures should be designed to avoid a monotonous, monolithic appearance. This can be accomplished through a menu of options as follows:

i. Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
ii. Design 'green screens' to provide visual relief.
iii. Use simple, clean geometric forms, and coordinated massing.
iv. Size openings in the parking garage to resemble large windows as in an office building.
v. Use masonry materials that are predominantly light in color but avoid unpainted concrete. Use of accent materials is encouraged.
vi. Avoid a sloping ramp appearance by providing level and uniform spandrels.
vii. Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing.

d. Stairs and elevators should be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view. Safe pedestrian street crossings should be taken into consideration.

e. Lighting levels should be equally distributed to provide uniform illumination over all parking areas.

f. Light sources should be shielded so that the source of the illumination is not seen from outside the structure.

g. The ground floor level of any parking structure must be protected with anti-graffiti coating.

7. Landscaping

A Landscape Plan must be provided to the City concurrently with each site plan review submittal.

General

a. All areas not covered by buildings, parking structures, walkways, driveways, drive aisles, fire lanes, parking spaces, and service areas should be landscaped (with drought tolerant plantings and sustainable hardscapes in accordance with the City's water conservation requirements).

b. Landscaping should enhance the quality of the Project by framing and softening the appearance of buildings, defining site functions, screening undesirable views and buffering incompatible uses.

c. Landscaping at the perimeter of buildings is encouraged to soften the transition between building and adjacent uses and between building and the public right-of-way where feasible. Parking lot landscaping must be distributed evenly to the extent feasible to provide for consistent design and

shading.

d. Landscaped areas should generally incorporate a combination of planting materials utilizing a three-tiered system consisting of: 1) trees, 2) shrubs or vines, 3) groundcover/ornamental grasses. Landscaping should be in scale with the adjacent buildings and be of appropriate size at maturity.

e. Placement of landscaping should not interfere with the lighting of the Project area or restrict access to utilities.

f. Landscaping should be utilized to define edges, buffer adjacent properties, screen parking areas and storage areas.

g. Trees must adequately shade parking lots and provide sufficient area for water quality requirements.

h. Paving materials should include pervious hardscape materials to facilitate water treatment and reduce runoff.

i. Bio-retention areas can be used to detain/percolate run-off in planted swales, raised open-bottomed planters, etc.



On-site storm water capture system

j. Site furnishings including, but not limited to, fixed and moveable seating, trash and recycling receptacles, bike racks, and pedestrian scaled lighting should be of durable and sustainable materials.

8. Walls and Fences

a. Wall and fence design should complement the Project's architecture. Landscaping may be used to soften the appearance of the wall surface.

b. Wall and fencing materials must be made of a durable material. Wall and fencing materials may consist of wrought iron, tubular steel, stone, stucco, or brick. Solid walls should incorporate pilasters with decorative caps and offsets, consistent with the overall architecture.

c. Landscaping should be used to soften the appearance of the wall surfaces and deter graffiti.

d. Walls and fences that are not screened by vines, shrubs and trees should be protected with anti-graffiti coating.

9. Lighting Design

a. The type and location of parking structure, parking area, building and drive aisle/fire lane lighting should prevent direct glare on to adjacent residential properties.

b. Pedestrian scale lighting should be present at all entries, plazas, courtyards, parking lots, parking structures, pedestrian ways, and other areas where nighttime pedestrian activity is expected.

c. Lighting design of fixtures and their structural support should be architecturally compatible with the architecture of the Project.

d. When appropriate, wall-mounted lighting may be incorporated. Wall-mounted lights should be compatible with the building's architectural style.

10. Signage

a. The character of signage, including the location, size, height, design and lighting should be in keeping with the architectural character and monument style of the overall Project.

b. Signs should make a positive contribution to the desired character of the Project and provide for clear identification and wayfinding.

c. Incorporate pedestrian level signage where appropriate throughout the commercial areas in the Specific Plan.

VI. DEVELOPMENT STANDARDS

The following standards are intended to supplement the existing General Plan and ESMC. Where this Specific Plan is inconsistent with the ESMC, the Specific Plan prevails. Where this Specific Plan does not specifically regulate, development must comply with the standards and requirements set forth in the ESMC.

A. PERMITTED USES

Uses within the Specific Plan area are governed by the following Table, by district: Wireless facilities are permitted subject to the requirements of ESMC Chapter 15-19.

Table VI-1
Allowable Uses

Use	PCC MU-1	PCC COM-1	PCC COM-2	PCC COM-3	PCC MU-2
Bars (in conjunction with a Hotel)	-	CUP	CUP	CUP	-
Cafes	P	P	P	P	P
Conference Facility/Conference Rooms (in conjunction with a Hotel)	-	P, A	P, A	P, A	-
Fitness Facility or Private Training Studio	P	A	A	P	P
General Offices	P, A	P, A	A	A	P, A
General Storage	A	A	A	A	A
Hotels	-	CUP	CUP	CUP	-
Maintenance Buildings/Facilities (in conjunction with a Hotel or in in conjunction with a multiple-family residential building)	A	A	A	A	A
Medical/Dental Offices	P	-	-	P	P
Multiple-family residential lease office	P	-	-	-	P
Multiple-family residential dwellings (apartments, townhomes)	P	-	-	-	P

Off-site sale of alcohol at retail establishments	AUP	AUP	AUP	AUP	AUP
On-site sale and consumption of alcohol at restaurants and cafes	AUP	AUP	AUP	AUP	AUP
On-site sale and consumption of alcohol at bars, other than wine bars	-	CUP	CUP	CUP	-
On-site sale and consumption of alcohol at wine bars	CUP	CUP	CUP	CUP	CUP
Outdoor Dining	A	A	A	A	A
Parking structures and surface parking lots	A	A	A	A	A
Recreational facilities or multipurpose recreational building or room accessory to multi-family residential uses or hotels	A	A	A	A	A
Restaurants, full service	P	A	A	P, A	P
Restaurants, fast food	P	A	P, A	P, A	P
Retails Sales - including convenience stores and General Retail Stores (excluding building material stores, warehouse retail showrooms, and off-site sale alcohol sales)	P, A	A	A	P, A	P, A
Retail Services (including Personal Services and Business and Consumer Support Services)	P, A	A	A	P, A	P, A
Wireless Communications Facilities (Pursuant to ESMC Chapter 15-19)	AUP, CUP	AUP, CUP	AUP, CUP	AUP, CUP	AUP, CUP
Any use customarily incidental to a permitted use	A	A	A	A	A
All uses that are not permitted, conditionally permitted or determined to be similar uses as specified above.	-	-	-	-	-

AUP	**Administrative Use Permit**
A	**Permitted Accessory Use**
CUP	**Conditional Use**
P	**Permitted Use**
--	**Not Permitted**

Note: Pursuant to the ESMC, uses of a similar nature which are unlisted in Table IV-1 may be considered by the Director of Planning and Building Safety, subject to appeal to the Planning Commission.

B. DEVELOPMENT STANDARDS

1. Lot Area

a. The minimum building lot area is 10,000 gross square feet in all land use districts.

2. Height

a. Buildings and structures within the PCC Mixed-Use 1 (PCC MU-1) land use district in the Specific Plan cannot exceed 90 feet in height including elevator/stairwell roof projections, measured from lowest finished grade to the highest point of measurement. Light standards on roof level parking areas and roof level recreational facilities/open space areas are permitted and they cannot exceed 14 feet in height. Exceptions to building height are permitted in accordance with ESMC §15-2-3.

b. Buildings and structures within the PCC Commercial-1 (PCC COM-1) land use district in the Specific Plan cannot exceed 105 feet in height, measured from lowest finished grade to the highest point of measurement. Exceptions to building height are permitted in accordance with ESMC §15-2-3.

c. Buildings and structures within the PCC Commercial-2 (PCC COM-2) land use district in the Specific Plan cannot exceed 115 feet in height, measured lowest finished grade to the highest point of measurement. Exceptions to building height are permitted in accordance with ESMC §15-2-3.

d. Buildings and structures within the PCC Commercial-3 (PCC COM-3) land use district in the Specific Plan cannot exceed 68 feet in height including elevator/stairwell roof projections, measured from lowest finished grade to the highest point of measurement. Light standards on roof level parking areas are permitted and they cannot exceed 14 feet in height. Exceptions to building height are permitted in accordance with ESMC §15-2-3.

e. Buildings and structures within the PCC Mixed-Use 2 (PCC MU-2) land use district in the Specific Plan cannot exceed 85 feet in height including

elevator/stairwell roof projections, measured from lowest finished grade to the highest point of measurement. Light standards on roof level parking areas and roof level recreational facilities/open space areas are permitted and they cannot exceed 14 additional feet in height. Exceptions to building height are permitted in accordance with ESMC §15-2-3.

3. Setbacks

a. Pacific Coast Highway: Building and structures within the PCC Mixed-Use 1 (PCC MU-1) land use district, the PCC Commercial-1 (PCC COM-1) land use district, the PCC Commercial-2 (PCC COM-2) land use district, the PCC Commercial-3 (PCC COM-3) land use district, and the PCC Mixed-Use 2 (PCC MU-2) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Pacific Coast Highway.

b. Mariposa Avenue (north and south sides): Buildings and structures within the PCC Commercial-3 (PCC COM-3) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Mariposa Avenue. Buildings and structures within the PCC Mixed-Use 2 (PCC MU-2) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Mariposa Avenue.

c. Holly Avenue: Buildings and structures within the PCC Mixed-Use 1 (PCC MU-1) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Holly Avenue.

d. Indiana Street: Building and structures within the PCC Mixed-Use 1 (PCC MU-1) land use district, the PCC Commercial-1 (PCC COM-1) land use district, the PCC Commercial-2 (PCC COM-2) land use district, and the PCC Commercial-3 (PCC COM-3) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Indiana Street.

e. Palm Avenue: Buildings and structures within the PCC Mixed-Use 2 (PCC MU-2) land use district in this Specific Plan must be setback a minimum of zero feet (0') from the adjoining public right-of-way of Palm Avenue.

f. Interior Setbacks: Minimum interior setbacks for buildings and structures in the PCC Commercial-1 (PCC COM-1), the PCC Commercial-2 (PCC COM-2) and the PCC Commercial-3 (PCC COM-3) land use districts within the Specific Plan must be setback a minimum of zero feet (0'). Parking and loading spaces must maintain a minimum of zero feet (0').

g. Interior Setbacks in the PCC Mixed-Use 1 (PCC MU-1) land use district:

Buildings and structures in the PCC Mixed-Use 1 (PCC MU-1) land use district within the Specific Plan must maintain a minimum of zero feet (0') from each interior lot line. Parking and loading spaces may maintain a minimum of zero feet (0').

h. Interior and Rear Setbacks in the PCC Mixed-Use 2 (PCC MU-2) land use district: The apartment building and townhomes in the PCC Mixed-Use 2 (PCC MU-2) must maintain a minimum of forty-one feet (41') from the western lot line. The apartment building and townhomes must maintain a minimum of ten feet (10') and balconies, decks and patios must maintain a minimum of five feet (5') from all other interior lot lines except that only a minimum of 3 feet (3') is required from the interior property line between the 2 parcels in the PCC Mixed-Use 2 (PCC MU-2) land use district. Accessory buildings in the PCC Mixed-Use 2 (PCC MU-2) land use district within the Specific Plan must maintain a minimum of ten feet (10') from each interior or rear lot line. Structures in the PCC Mixed-Use 2 (PCC MU-2) land use district within the Specific Plan must maintain a minimum of three feet (3') from each interior or rear lot line. Fences and walls may be located at zero feet (0'). Parking and loading spaces may maintain a minimum of 0 feet (0') from the interior property line between the 2 parcels in the PCC Mixed-Use 2(PCC MU-2) land use district.

i. Exceptions to setback requirements are permitted subject to the requirements of ESMC § 15-2-7 Open Space Areas and Encroachments, and as permitted in Sections VI(D) and VI(E) of this Specific Plan.

4. Lot Frontage

a. A minimum of 100 feet of frontage must be provided for all lots on a dedicated public street, except that only a minimum of 50 feet of frontage must be provided for a lot with frontage on Palm Avenue. Lot frontage only applies to ground parcels and not to airspace parcels.

5. Residential Density

a. A maximum of 120 dwelling units is permitted in the PCC Mixed-Use 1 (PCC MU-1) land use district.

b. A maximum of 143 dwelling units is permitted in the PCC Mixed-Use 2 (PCC MU-2) land use district.

6. Floor Area

Floor area shall be based upon the net floor area definition established in this Section VI(B)(6)(f) below.

a. The maximum floor area permitted in the PCC Mixed-Use 1 (PCC MU-1) land use district is 2.70:1.

b. The maximum floor area permitted in the PCC Commercial-1 (PCC COM-1) land use district is 2.51:1.

c. The maximum floor area permitted in the PCC Commercial-2 (PCC COM-2) land use district is 2.28:1.

d. The maximum floor area permitted in the PCC Commercial-3 (PCC COM-3) land use district is 0.16:1.

e. The maximum floor area permitted in the PCC Mixed-Use 2 (PCC MU-2) is 2.29:1.

f. Net floor area consists of the area of all floors, stories or levels, as measured to the interior of a building's perimeter walls. Space devoted to the following is not included when determining the total net floor area within a building or structure:

1. Balconies, decks, patios, porches and verandas that are covered up to a cumulative total of 100 square feet per unit for multiple-family residential dwellings in the in the PCC MU-1 and PCC MU-2 land use districts;
2. Balconies, decks, patios, porches and verandas that are covered up to a cumulative total of 300 square feet per townhome unit in the PCC MU-2 land use district;
3. Elevator shafts;
4. Stairwells and stairway enclosures;
5. Courts, courtyards or atriums;
6. Rooms exclusively holding building operating equipment;
7. Parking spaces at or above grade and access thereto;
8. Structures or portions of buildings or structures devoted exclusively for parking;
9. Restrooms in common areas of nonresidential buildings; and
10. Up to 500 square feet of interior floor area of an attached garage per townhome unit in the PCC MU-2 land use district.

g. Gross floor area consists of the area included within the surrounding exterior walls of a building or portion thereof, exclusive of garages, vent shafts, and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls is the usable area under the horizontal projection of the roof or floor above. Covered balconies, decks, patios, porches and verandas for residential uses up to a cumulative total of 100 square feet for multiple-family residential dwellings per unit and 300 square feet per townhome unit are excluded.

6. Walls and Fences

a. All walls and fences must comply with ESMC § 15-2-4 except as specified in Section VI(B)(2) of this Specific Plan and except that the maximum height of retaining walls in the PCC Mixed-Use 1 (PCC MU-1) land use district cannot exceed 15 feet.

b. Razor wire is not permitted.

c. Chain link fencing is not permitted that is visible from any public rights-of-way.

8. **Accessory Structures**

a. Trash and recycling areas, outdoor storage areas, utility and mechanical equipment, rooftop and ground mounted equipment, transformers and similar structures are permitted subject to screening requirements in ESMC § 15-2-8 and the Design Guidelines in Section V.A(5) of this Specific Plan.

b. Other permitted accessory structures include architectural landscape features per Section VI(E) Landscaping of this Specific Plan and playground equipment.

C. CIRCULATION

1. Public streets must be designed and constructed in accordance with the General Plan and in the overall right-of-way size identified in the Street Classification and Standards (Exhibit C-8) in the Circulation Element of the General Plan or as exempted or a waiver granted subject to the regulations in ESMC Chapter 15-24A Right of Way Dedications and Improvements. No private streets are located within the Specific Plan area. A portion of one public street, Mariposa Avenue (a commercial collector), bisects the northern and southern portions of the Specific Plan area. Streets that adjoin the boundaries of the Specific Plan area include Pacific Coast Highway (a major arterial street that is a Caltrans owned State Highway Facility), Holly Avenue, Indiana Street and Palm Avenue. Holly Avenue, Indiana Street and Palm Avenue are classified as local streets. A portion of Mariposa Avenue between Indiana Street and Pacific Coast Highway is proposed to be expanded on the south side of the street to include a dedicated right turn lane (eastbound on Mariposa Avenue to southbound on Pacific Coast Highway.

D. PARKING AND LOADING

1. Parking and loading must be provided in accordance with the requirements of ESMC Chapter 15-15, except as provided below:

a. Multiple-family Residential Parking: A minimum of 1 parking space will

be provided for each studio unit. A minimum of 1.5 parking spaces will be provided for each one-bedroom unit. A minimum of 2 parking spaces will be provided for each two-bedroom unit. A minimum of 1/3 of a parking space per residential unit will be provided for guest parking. Guest parking for multiple-family residential uses may be co-located and shared with parking for commercial uses. Required non-guest multiple-family residential parking is permitted to be shared with parking that is required for commercial uses up to a maximum of five percent (5%) of the total required parking. The maximum five percent (5%) of shared multiple-family residential parking is based upon the total parking provided within the entire Specific Plan area and is not calculated for individual lots.

b. Multiple-family Residential Parking for Affordable Units: A minimum of 0.5 parking spaces will be provided for each studio unit. A minimum of 1 parking space will be provided for each one-bedroom unit. A minimum of 1.5 parking spaces will be provided for each two-bedroom unit. No guest parking spaces will be required for affordable units.

c. Multiple-family Residential Parking for Townhomes (Condominiums): Townhomes will be provided a two-car garage. A minimum of 1/3 of a parking space per residential unit will be provided for guest parking.

d. The number of parking spaces required for uses other than multiple-family uses specified above will be determined based upon review and approval of a parking demand study which may include shared use analysis.

e. Compact Parking: Compact parking is permitted for a maximum of twenty percent (20%) of spaces for residential and commercial uses.

f. Tandem Parking: Tandem parking is permitted for a maximum of twenty percent (20%) of spaces for residential uses.

g. Vehicle Lifts: Vehicle lifts are permitted for a maximum of ten percent (10%) of parking spaces for multiple-family residential and hotel uses. Vehicle lifts are not permitted for other commercial and retail uses. Vehicle lifts would be permitted in parking structures. A vehicle lift may only be used to store two (2) vehicles vertically where a minimum vertical height clearance in the parking structure is a minimum of fourteen feet (14') clear of obstructions. Both the upper and lower space where a lift is used count toward the maximum percentage. A vehicle lift may be permitted only with a key locking mechanism and an automatic shutoff safety device which is installed in accordance with manufacturer specifications. Maintenance of vehicle lifts is required in accordance with manufacturer specifications. Lifts shall be maintained in good working condition. Lifts shall be maintained through either a maintenance contract or self-performance and they may be inspected by the City of El Segundo.

h. Loading Spaces: Two small truck loading spaces (as defined in ESMC Section 15-15-7 are required in the PCC Mixed-Use 1 (PCC MU-1) land use district to serve the multiple-family residential and commercial uses. Two small truck loading spaces are required in the PCC Mixed-Use 2 (PCC MU-2) land use district to serve the multiple-family residential and commercial uses. One small truck loading space is required for the commercial uses in the PCC Commercial-3 (PCC COM-3) land use district.

i. Parking Space Dimensions (for All Residential and Commercial Uses): All standard parking spaces must be a minimum of 8'-6" in width by 18'-0" in length. All compact parking spaces must be a minimum of 8'-6" in width by 15'-0" in length.

j. Off-site parking and off-site loading is permitted. The parking and loading spaces must be located on private property within the boundary of the Specific Plan area it serves unless otherwise approved by the Planning Commission. A written agreement must be executed by all parties concerned, and recorded to the satisfaction of the Director of Development Services and the City Attorney assuring the continued availability of the number of parking spaces and loading spaces located off-site. Reciprocal access easements or covenants must be recorded for contiguous lots before issuance of a building permit and must be shown or noted on the applicable site plans.

k. Parking lots and driveways may straddle lot lines subject to provisions in a reciprocal parking and access easement or covenant. Driveways that connect parking lots with a right-of-way may encroach into a required landscape setback. Such documents must provide provisions for shared maintenance.

2. Preferential parking must be provided for carpools and vanpools.

3. Bicycle parking and EV Charging must comply with the stricter of ESMC Chapters 15-15 and 15-16 or Cal Green Code.

E. LANDSCAPING

This section will ensure that adequate landscaping area and permanent maintenance is provided for the development.

Landscaped areas must be provided and permanent irrigation systems installed in the landscaped areas at: 1) around the perimeter of the buildings in the setbacks, 2) within the required setbacks along the property perimeter and, 3) in the Vehicular Use Areas (VUAs) as defined in ESMC §15-1-6.

A Landscape Master Plan must be prepared for each sub-district of the Specific Plan area to ensure a unified appearance implementing the intent of the Design Guidelines and objectives of this Specific Plan. The Landscape Master Plan must be prepared by a licensed landscape architect and it must be submitted to the City concurrently with the first site plan review within the Specific Plan area.

ALL LANDSCAPING

1. Landscaping must conform to the City's Water Conservation in Landscaping requirements as set forth in ESMC Chapter 15-15A.

BUILDING PERIMETER LANDSCAPING

1. Except as otherwise allowed by this Plan, a minimum horizontal depth of five feet of landscape materials, excluding curbs, must be provided around each building except for entrances to buildings and any other required paved areas. In instances where two buildings are separated by ten feet, the landscape requirement may be reduced to allow for pedestrian walkways/access.

PROPERTY PERIMETER LANDSCAPING

1. Landscaping must be provided in all property perimeter areas except where buildings, driveways, pedestrian walkways, driveway visibility and corner clearance areas are located. One shade tree must be provided for every 25 feet of street frontage where landscaping is provided. One shade tree must be provided for every 25 feet along interior property lines where landscaping is provided in the PCC Mixed-Use 2 (PCC MU-2) land use district. Trees are not required to be evenly spaced.

2. The following encroachments are permitted into the landscaped setback areas:

    a. "Architectural landscape features" including fountains, water features and waterfalls, free-standing arbors/pergolas, and similar features, may encroach into the landscaped setback area subject to site plan review, provided a minimum landscaped setback of three feet is maintained. The features may cover a maximum of twenty-five percent of the total area of the setback and be a maximum of twenty feet in height.

VEHICULAR USE AREAS

1. Vehicular Use Areas (VUA) include surface parking lots. Landscaping in the VUAs must cover a minimum of five percent of the VUA and be distributed throughout the VUA for any new surface parking lots. Such landscaping is in addition to the required property perimeter and building perimeter landscaping.

    a. Planting areas containing trees must have a minimum width of 5 feet except

for existing planting areas. Trees are required to provide shade.

MINIMUM SIZES FOR PLANT MATERIAL

1. The minimum tree container size for all trees on site shall be provided as follows:

a. At least twenty percent (20%) of the trees must be thirty-six inch (36") box size or larger.

b. At least thirty percent (30%) of the trees must be twenty-four inch (24") box size or larger.

c. The remaining fifty percent (50%) must be fifteen (15) gallon size or larger.

d. The Director of Development Services may approve smaller tree container sizes than required based on site conditions, however no tree may be smaller than a fifteen (15) gallon size.

2. Shrubs must be planted from a minimum five (5) gallon size container. One (1) gallon size containers may be allowed for shrubs that are not commonly available in five (5) gallon size containers, subject to approval by the Director of Development Services.

F. COMMON RECREATION FACILITIES/OPEN SPACE AND PRIVATE OPEN SPACE

Common recreation facilities/open space and private open space are required for multiple-family residential uses in the PCC Mixed-Use 1 and PCC Mixed-Use 2 districts. Common recreation facilities/open space are not required for the townhomes.

Common recreation facilities/open space are facilities that are accessible to all multiple-family residential unit occupants. Common recreation facilities may include indoor and/or outdoor areas. Indoor areas may include, but are not limited to, gyms or fitness areas, indoor pools, indoor spas and saunas, multi-purpose recreation and community rooms and similar facilities.

Private open space includes decks, patios and balconies that are accessible from the multi-family residential unit or townhome unit and exclusively devoted to that unit. There is no requirement to provide private open space for each multiple-family residential unit, however, any private open space that is provided must meet minimum dimensions. In order to count towards these requirements, the minimum dimensions for any private open space shall be 5 feet in width by 5 feet in length.

Multiple-family residential units must provide an average of 100 square feet per unit in combined common recreation facilities/open space and private open space. Townhomes must provide a minimum of 100 square feet of total private open space. In order to count towards these requirements, the minimum dimensions of private open space for townhome units shall be 5 feet in width by 5 feet in length.

G. PUBLIC SAFETY

In an effort to ensure the safety of residents, employees and visitors to the Pacific Coast Commons Specific Plan area, the following strategies must be incorporated into site development:

1. Lighting must be adequate throughout the Specific Plan area and shielded to minimize off-site illumination. Submittal of photometric studies is required as part of any site plan review submittal which includes parking lots, and parking structures in the Specific Plan area.

2. The site design and operation must comply with fire and police safety regulations with regard to site layout, building configurations, landscape design, and infrastructure requirements.

3. Street lighting must be provided in accordance with ESMC requirements.

H. SIGNAGE

1. Signage within the Specific Plan area must conform to the signage regulations of ESMC Chapter 15-18 except as established and approved in a Master Sign Program for each land use district in the Specific Plan. The existing Master Sign Program for the existing buildings in the Specific Plan area (for the Aloft and the Fairfield Inn and Suites hotels) remains in effect and is excluded from the Master Sign Program requirements for the new development.

2. Section 15-18-3 shall apply relating to exempt signs.

3. Neon signage is not permitted on any building façades facing west in the PCC Mixed-Use 1 land use district or on any building façade facing west in the PCC Commercial-3 land use district. Neon signage is not permitted on the Palm Avenue street frontage or on any building facades facing west in the PCC Mixed-Use 2 land use district between Mariposa and Palm Avenues or along the Palm Avenue.

4. The following signs are not permitted within the Specific Plan:

    - Balloons or other inflated devices or signs used in conjunction with commercial premises for commercial purposes; unless allowed by a temporary sign permit
    - Beacon signs
    - Billboards, as defined in the ESMC
    - Pole signs
    - Signs incorporating flashing or blinking lights
    - Signs that flash, rotate, pulsate or otherwise move in a way to create a traffic hazard
    - Signs that emit sounds, odor or visible matter such as smoke or steam
    - Strobe lights used in signs; and

- Trailer or portable signs except for sandwich board signs for restaurants.

5. A Master Sign Program for each land use district in the Specific Plan area must be developed and submitted for review and approval by the Director of Development Services concurrent with the first site plan review in that land use district within the Specific Plan. The Master Sign Program must include the following elements:

   - Master signage (entryways, common sign design throughout the Specific Plan area);
   - Sign standards developed for the mixed-use multiple-family residential and commercial development;
   - Provisions for wayfinding and decorative elements such as banners;
   - General features that all signs are required to comply with; and
   - Regulations for temporary signs (including construction signs).

I. SUSTAINABILITY

1. All new development must have buildings designed to be energy efficient to meet or exceed Title 24 requirements.
2. The Project parking lot areas must include storm water management practices that treat storm water runoff in compliance with the ESMC and all applicable law.
3. Bicycle parking must comply with the ESMC and Cal Green Code.
4. Exterior lighting must be energy efficient and designed to minimize light pollution.
5. Low-emitting building materials must be utilized.
6. Roof structures of new buildings must be designed to support solar panels.
7. Reclaimed water must be utilized for all landscaped areas if available and feasible.

J. ENCLOSED AND UNENCLOSED USES

All uses must be conducted wholly within an enclosed building or structure except for the following:

1. Mechanical equipment provided they comply with the requirements of ESMC § 15-2-8.
2. Outdoor restaurants and cafes incidental to the permitted use, provided they comply with the provisions of ESMC § 15-2-16.

3. Recreation facilities customarily conducted in the open (including but not limited to pools and play equipment).

4. Outdoor private common area for residential developments.

5. Wireless communications facilities (including antennas, and dishes) provided they comply with the requirements of ESMC Chapter 15-19 subject to applicable law.

K. NON-CONFORMING USES AND BUILDINGS

Any existing uses, buildings, structures, parking areas, landscaping and signage located in the PCC Commercial-1 (PCC COM-1), PCC Commercial-2 (PCC COM-2), and PCC Commercial-3 (PCC COM-3) that become non-conforming at the time of adoption of this Specific Plan will be permitted to remain.

Until such time as building permits are issued for development of the Specific Plan, the existing food and beverage building may continue to be used for commercial, restaurant and meeting spaces.

VII. ADMINISTRATION

A. INTRODUCTION

Unless regulated by this Specific Plan, development will be administered and enforced by the City in accordance with the ESMC. This Specific Plan supersedes any conflicts with ESMC zoning regulations.

1. The Director of Development Services may grant administrative use permits in accordance with ESMC Chapter 15-22.

2. The Director of Development Services may make other administrative determinations using the same procedures set forth in ESMC Chapter 15-22.

3. The Director of Development Services may grant adjustments and administrative adjustments in accordance with ESMC Chapter 15-24.

4. The Planning Commission may grant conditional use permits in accordance with ESMC Chapter 15-23.

5. The Director of Development Services may grant off-site parking covenants between parcels within the Specific Plan area in accordance with ESMC Chapter 15-15.

6. The Director of Development Services may grant modifications to the number of parking spaces as determined in a parking demand study in accordance with Section VID of this Plan and ESMC Chapter 15-15.

B. MUNICIPAL CODE REFERENCES

All section references in the Specific Plan refer to the El Segundo Municipal Code (ESMC) as adopted at the time of Specific Plan approval.

C. MODIFICATIONS

1. Major Modifications

The following modifications constitute a Major Modification and require an amendment to this Specific Plan:

a. Any decrease in the required building setbacks as set forth in Section VI.B.3 above;

b. Any increase in the total developable square footage of the entire Specific Plan in excess of the maximum allowable development intensity allowed under the Specific Plan;

c. Any increase in height of buildings or structures on the Property above 5 feet;

d. Any change in use to a use which is not permitted under the Specific Plan, except as approved by the Director in accordance with Chapter 15-22 of the ESMC;

e. Any change in the land use plan categories identified in Exhibit 5 of this plan;

f. Any decrease in the minimum required lot area;

g. Any decrease in the minimum required lot frontage;

h. Any material modification that requires modification to the EIR other than an Addendum; and

i. Any modification deemed by the Director of Development Services as a major modification and requiring amendment to this Specific Plan.

2. Minor Modifications

Any modification to this Specific Plan not listed above as a "major modification," including a use approved subject to an Administrative Use Permit, is a Minor Modification. The Developer may make Minor Modifications without amending this Specific Plan upon the administrative approval of the Director of Development Services or designee, provided that such modifications are consistent with the Development and Design Standards, Applicable Rules, and Project Approvals. Such Minor Modifications may include:

- Modifications to infrastructure sizing based upon final engineering plans approved by the City.

- Adjustments, Administrative Adjustments, Administrative Determinations subject to the requirements in Section VII.A, above.

D. SITE PLAN REVIEW

1. Overview

In order to develop a Project that is in conformance with the uses, density, approved FAR, and Design Guidelines of this Specific Plan, a Site Plan Review ("SPR") application shall be filed with the Development Services Department in accordance with ESMC Chapter 15-

30 except as specified below.

2. Site Plan Review - Procedure

a. The Director of Development Services may extend the Site Plan approval for up to two additional years for good cause upon written request of the applicant received prior to expiration of the site plan approval.

b. After the Site Plan is approved, the Director of Development Services may approve minor changes in the Site Plan or its conditions if the Director finds that there are practical reasons for such changes, that such changes do not substantially vary from the previously approved site plan and applicable law and that such changes do not involve deviations from the design's intent.

3. Exempt Activities

The following is a list of activities which are exempt from the site plan review process. This list is not all-inclusive; the Director of Development Services may exempt other activities not listed:

a. All interior changes and alterations

b. Exterior mechanical equipment (heating, air conditioning, water heater, transformers) designed with mechanical equipment screening compatible with the architecture of the building to which it is adjacent or affixed.

c. Minor exterior repairs with the same or similar types of building materials as determined by the Director of Development Services.

d. Minor surface parking area changes and restriping of parking stalls.

e. Re-glazing new mullions.

f. Re-landscaping consistent with the landscape palette.

g. Repainting.

h. Reroofing with similar style roofing materials.

E. AMENDMENT

In accordance with the Government Code §§ 65450-65457, Specific Plans must be prepared, adopted and amended in the same manner as General Plans except that Specific Plans may be adopted by resolution or by ordinance.

This Specific Plan may be amended as necessary by ordinance. Said amendment or amendments do not require a concurrent General Plan amendment unless the Director of Development Services

determines that the proposed amendment would substantially affect General Plan goals, policies, objectives or programs.

F. INFRASTRUCTURE IMPROVEMENTS/COORDINATION

The developer and/or property owner shall be responsible for making transportation and infrastructure utility improvements required by the Pacific Coast Commons Specific Plan. All improvements shall be to the specifications of the City of El Segundo Development Services Department, Public Works Department, and/or other applicable departments.

G. FINANCING MEASURES

Implementation and financing of improvements of the Pacific Coast Commons Specific Plan depend exclusively on private investment and development. The developer and/or property owner shall be responsible for financing the project, including all improvements and mitigation measures.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

The Pacific Coast Commons Specific Plan and related entitlements were approved in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines (Guidelines), and City policies adopted to implement the CEQA and the Guidelines.

An Environmental Impact Report was prepared and certified by the City Council which establishes the development thresholds shown in Table VII-1 below.

Table VII-1
California Environmental Quality Act Compliance

EIR Project	Floor Area
The Specific Plan, including the Conceptual Site Plan and Application Materials evaluated within the EIR document.	340,000 gross square feet (new development in Specific Plan)

The existing development located in the Pacific Coast Commons Specific Plan area totals 324,058 gross square feet (Fairfield Inn and Suites hotel is 217,311 gross square feet and the Aloft hotel is 106,747 gross square feet). A portion of the Fairfield Inn and Suites hotel will be demolished. More specifically, the 41,660 square-foot 2-story "food and beverage" building (that contains banquet room facilities, a restaurant and storage uses located at the southwest corner of Pacific Coast Highway and Mariposa Avenue) will be demolished leaving 282,398 square feet of existing development to remain within the Pacific Coast Commons Specific Plan area. The CEQA clearance indicated above analyzes the effects of a maximum of 340,000 gross square feet of new incremental development per the Specific Plan. Based upon the maximum allowable floor area in each land use district, the 340,000 square feet will be comprised of 150,000 gross square feet in the "PCC South" development site (PCC Mixed-Use 1 District), 5,000 gross square feet in the "Fairfield Parking" site (PCC COM-3 District), and 185,000 gross square feet in the "PCC North"

site (PCC Mixed-Use 2 District). The Development Project depicted in the Conceptual Site Plan includes 327,068 gross square feet of new development that will occur after the demolition of the existing 41,660 gross square-foot 2-story "food and beverage" building. The demolition of the 41,660 gross square-foot "food and beverage" building will reduce the existing Fairfield Inn and Suites Hotel to 175,651 gross square feet in size.

APPENDIX A

PACIFIC COAST COMMONS SPECIFIC PLAN LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF EL SEGUNDO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1: (APN: 4139-025-075)

LOT 428 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 2: (APN: 4139-025-073, 074, 076, 081)

LOTS 385, 386, 387, 429 AND 430 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 3: (APN: 4139-025-091)

LOTS 382, 383, 384, 431, 432 AND 433 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM PARCELS 1 AND 2, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM, GAS, ASPHALTUM, OTHER HYDROCARBONS AND OTHER MINERALS AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OPERATIONS AND THE EXCLUSIVE RIGHT TO USE THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN, OR WITHDRAWING THEREFROM GAS, OIL, OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING, OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL

COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 AS INSTRUMENT NO. 480 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 4: (portion of APN: 4139-024-057)

THE WESTERLY 60 FEET OF LOTS 2 AND 9 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 5: (APN: 4139-024-058)

LOTS 1, 2, 9 AND 10 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 60 FEET OF SAID LOTS 2 AND 9.

ALSO EXCEPT THEREFROM THE NORTHERLY 181.00 FEET OF SAID LOTS 1 AND 2.

ALSO EXCEPT THE SOUTH 147.03 FEET OF LOT 10.

ALSO EXCEPT THEREFROM ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM SAID LAND, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM AND OTHER HYDROCARBONS, AND OTHER MINERALS IN AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN OR WITHDRAWING THEREFROM GAS, OIL OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 6: (portion of APN: 4139-024-057)

A PARCEL OF LAND SITUATED IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, BEING A PORTION OF BLOCK 113 OF EL SEGUNDO, AS PER MAP RECORDED IN BOOK 20, PAGES 114 THROUGH 115, INCLUSIVE, IN THE OFFICE OF THE RECORDER OF SAID COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF LOT 1 OF TRACT NO. 48436, AS PER

MAP RECORDED IN BOOK 1180, PAGES 68 THROUGH 69, INCLUSIVE, OF MAPS, IN THE OFFICE OF THE RECORDER OF SAID COUNTY; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58’ 36” EAST 60.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58’ 36” EAST 13.19 FEET; THENCE SOUTH 00° 03’ 15” WEST 181.00 FEET; THENCE NORTH 89° 58’ 36” WEST 13.11 FEET; THENCE NORTH 00° 01’ 50” EAST 181.00 FEET TO THE TRUE POINT OF BEGINNING.

APN: 4139-025-057 thru 4139-025-058, 4139-025-073 thru 4139-025-076, 4139-025-081, 4139-025-091

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:
CITY CLERK
CITY OF EL SEGUNDO
350 Main Street
El Segundo, California 90245

EXEMPT FROM RECORDER'S FEES
Pursuant to Government Code § 6103

DEVELOPMENT AGREEMENT
BY AND AMONG
THE CITY OF EL SEGUNDO
AND
BRE EL SEGUNDO PROPERTY OWNER A LLC,
BRE EL SEGUNDO PROPERTY OWNER B LLC,
AND
BRE EL SEGUNDO PARKING LLC

THIS AGREEMENT SHALL BE RECORDED WITHIN TEN DAYS OF EXECUTION BY ALL PARTIES HERETO PURSUANT TO THE REQUIREMENTS OF GOVERNMENT CODE §65868.5

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DEVELOPMENT AGREEMENT

This Development Agreement (the "Agreement") is made and entered into by and among the CITY OF EL SEGUNDO, a municipal corporation (referred to hereinafter as "City") and BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC, all Delaware limited liability companies (hereinafter collectively referred to as "BRE" or "Developer") as of this ____ day of_____, 2022. City and Developer are referred to hereinafter individually as "Party" and collectively as "Parties". In consideration of the mutual covenants and agreements contained in this Agreement, City and Developer agree as follows:

1. Definitions. Unless the contrary is stated or clearly appears from the context, the following definitions govern the construction of the words and phrases used in this Agreement. Words and phrases not defined in this Section will have the meaning set forth in this Agreement, the El Segundo Municipal Code, or in common usage.

"Applicable Rules" means:

- The El Segundo General Plan, as it existed on the Approval Date, as modified by the Project Approvals;
- The El Segundo Municipal Code, as it existed on the Approval Date, as modified by the Project Approvals;
- Such other laws, ordinances, rules, regulations, and official policies governing permitted uses of the property, density, design, improvement, development fees, and construction standards and specifications applicable to the development of the Property in force at the time of the Effective Date, which are not in conflict with this Agreement.

"Approval Date" means _____, 2022, the date on which the last of the Project Approval applications was approved by the City.

"Approved Plans" means a plan for any aspect of the Project, including, without limitation, the Site Plan, signage plans, and landscaping and irrigation plans, which are approved by the City in accordance with the Applicable Rules, and Project Approvals.

"Building Regulations" means those regulations set forth in Title 13 of the ESMC.

"CEQA" means the California Environmental Quality Act, Public Resources Code § 21000 *et seq.*

"CEQA Guidelines" means the regulations implementing CEQA which have been adopted by the State and found at Title 14 of the California Code of Regulations, § 150000 *et seq.*

"City Council" means the City Council of the City of El Segundo.

"Developer" means BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC, and their transferees, assigns and successors in interest.

"Development Standards" means the design and development standards that are applicable to the Project as set forth in the Specific Plan.

"Director" means the Director of Development Services, or his designee.

"Effective Date" means the date on which the Enabling Ordinance becomes effective in accordance with Government Code § 36937.

"ESMC" means the El Segundo Municipal Code.

"Enabling Ordinance" means Ordinance No. XXX, approving this Development Agreement.

"Future Approvals" means such subsequent discretionary and ministerial entitlements, including permits, which are required to develop the Project in addition to the Project Approvals, and which are applied for by the Developer and approved by the City. Once approved, a Future Approval becomes part of the Project Approvals.

"Party" means the City or the Developer. "Parties" shall mean both the City and the Developer.

"Person" means a natural person or any entity.

"Project" means the development of the Property in accordance with the Project Approvals.

"Project Approvals" means:

- Final Environmental Impact Report (FEIR) No. EA–1248, as certified by Resolution No. _____ on ___ ;
- Mitigation Monitoring Program for FEIR No. EA-1248, as adopted by Resolution No. _____ on ____;
- General Plan Amendment No. GPA 19-01, as approved by Resolution No. _____ on ____, including a change in the Land Use Map;
- Pacific Coast Commons Specific Plan No. SP 19-01, as adopted by Ordinance No. XXX on _____.
- Zone Change No. ZC 19-01, as approved by Ordinance No. _____ on _____, including a change in the Zoning Map;
- Zone Text Amendment No. ZTA 19-08, as approved by Ordinance No. XXX on _____;
- Vesting Map No. 82806, as approved by Resolution No. ___ on _____;

- Site Plan Review No. SPR 19-01, as approved by Resolution No. ___ on _____;

- This Development Agreement (DA No. 19-02) as approved by Ordinance No. _____ on _____.

- Modification of Resolution Nos. 2759 and 2760 to rescind the previous approvals SUB NO. 14-05, Lot Tie Covenant No. 14-03, Off-Site Parking Covenant Nos. MISC 14-03 and 14-06, leaving in place CUP No. 14-01 for the Fairfield Inn and Suites Hotel and CUP NO. 14-02 for the Aloft Hotel, along with alcohol service at both hotels with modification to the conditions of approval accordingly.

- Parking Demand Study and Shared Parking Analysis to establish the parking requirements for the proposed commercial and residential development combined with the existing hotel development.

- Shared Parking Agreement in conjunction with the Parking Demand Study and Shared Parking Analysis, to replace the previous approval of Off-Site Parking Covenant Nos. MISC 14-03 and MISC 14-06.

- Reciprocal Access Agreements for driveways and drive aisles accessing multiple parcels.

"Property" refers to that approximate 9 acres which is described in Exhibit A, attached hereto and incorporated herein by reference.

"Specific Plan" or "PCCSP" means the Pacific Coast Commons Specific Plan.

"Subsequent Rules" means any changes to the Applicable Rules, including, without limitation, any change by means of an ordinance, initiative, resolution, policy, order or moratorium, initiated or instituted for any reason whatsoever and adopted by the City Council, the Planning Commission or any other board, agency, commission or department of the City, or any officer or employee thereof, or by the electorate, which would, absent this Agreement, otherwise apply to the Property.

"Transferee" means a Person which assumes in whole or in part the rights and obligations under this Agreement with respect to all or a portion of the Property.

2. Recitals. This Agreement is made with respect to the following facts and for the following purposes, each of which is acknowledged as true and correct by the Parties:

2.1 Pursuant to Government Code § 65865 *et seq.*, the City is authorized to enter into a binding contractual agreement with any person having a legal or equitable interest in real property for the development of such property.

2.2 Developer warrants that it is the owner of the Property.

2.3 Developer desires to redevelop the Property in accordance with the Project Approvals.

2.4 By this Agreement, each Party desires to obtain the binding agreement of the other Party to develop the Property in accordance with the Project Approvals, Applicable Rules and this Agreement. In consideration thereof, the City agrees to limit the future exercise of certain of its governmental and proprietary powers to the extent specified in this Agreement.

2.5 City and Developer have acknowledged and agreed that the consideration that is to be exchanged pursuant to this Agreement is fair, just and reasonable.

2.6 The Project is consistent with the City's General Plan, as amended, (the "General Plan").

2.7 Development of the Project has, and will continue to, further the comprehensive planning objectives contained within the General Plan, and will result in public benefits, including, among others, the following:

2.7.1 Providing needed housing, including thirty-two units of affordable housing;

2.7.2 Providing both short-term construction employment and long-term permanent employment within City; and

2.7.3 Providing a dedicated right-turn only lane on east bound Mariposa Avenue to southbound Pacific Coast Highway.

2.8 On _____, 2021, the Planning Commission of the City commenced a duly noticed public hearing on the Project Approvals. At the conclusion of the hearing the Planning Commission recommended that the City Council approve the Project Approvals.

2.9 On _____, 2021, the City Council commenced a duly noticed public hearing on the Project Approvals. Prior to approving this Agreement by the Enabling Ordinance, the City Council adopted Resolution No. ___ approving the FEIR.

2.10 All of the Property is subject to this Agreement.

3. Binding Effect. The burdens of this Agreement are binding upon, and the benefits of the Agreement inure to the City and the Developer and each successive transferee, assign and successor in interest thereto and constitute covenants that run with the land. Any and all rights and obligations that are attributed to the Developer under this Agreement shall run with the land. For purposes of this Agreement, until such time as any portion of the Property may be transferred, BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC, shall be jointly and severally liable for all obligations set forth in this Agreement. In the case of a partial transfer, Developer may identify which of the three BRE entity or entities remain liable for any obligations remaining with Developer.

3.1 Constructive Notice and Acceptance. Every person who acquires any right, title or interest in or to any portion of the Property in which the Developer has a legal interest is, and shall be, conclusively deemed to have consented and agreed to be bound by this Agreement, whether or

not any reference to this Agreement is contained in the instrument by which such person acquired such right, title or interest.

3.2 Rights to Assign and Transfer. Developer may assign or transfer its rights and obligations under this Agreement with respect to the Property, or any portion thereof, to any person at any time during the term of this Agreement without approval of the City. For purpose of this Agreement, the Transferee must be considered the "owner" of that portion of the Property which is covered by such transfer.

3.3 Liabilities Upon Transfer. Upon the delegation of the duties and obligations under this Agreement and the sale, transfer or assignment of all or any portion of the Property, Developer will be released from its obligations under this Agreement with respect to the Property, or portion thereof, so transferred arising subsequent to the effective date of such transfer, if: (i) Developer has provided to the City prior or subsequent written notice of such transfer; and (ii) the Transferee has agreed in writing to be subject to all of the provisions hereof applicable to the portion of the Property so transferred by executing an Assignment and Assumption Agreement in the form of Exhibit B attached hereto and incorporated herein by reference. Upon any transfer of any portion of the Property and the express assumption of Developer's obligations under this Agreement by such Transferee, the City agrees to look solely to the Transferee for compliance by such Transferee with the provisions of this Agreement as such provisions relate to the portion of the Property acquired by such Transferee. Any such Transferee shall be entitled to the benefits of this Agreement as "Developer" hereunder and shall be subject to the obligations of this Agreement applicable to the parcel(s) transferred. A default by any Transferee shall only affect that portion of the Property owned by such Transferee and shall not cancel or diminish in any way Developer's rights hereunder with respect to any portion of the Property not owned by such Transferee. The Transferee shall be responsible for satisfying the good faith compliance requirements set forth in Section 8 below relating to the portion of the Property owned by such Transferee, and any amendment to this Agreement between the City and a Transferee shall only affect the portion of the Property owned by such Transferee.

3.4 Resumption of Rights. If Transferee defaults with respect to any provision of this Agreement, Developer may, but is not obligated to, resume Transferee's obligations upon written notification to City.

4. Development of the Property. The following provisions, in addition to the Applicable Rules, shall govern the development of the Project.

4.1 Permitted Uses, Design and Development Standards, and Dedication of Land for Public Purposes. The permitted, administratively permitted, and conditionally permitted uses of the Property as well as the Development Standards and provisions for reservation or dedication of land for public purposes are set forth in the Project Approvals and Applicable Rules.

4.2 Entitlement to Develop. The Developer is granted the vested right to develop the Project subject to the Applicable Rules, the Project Approvals, and any Future Approvals.

4.3 Building Regulations. Notwithstanding Section 4.4 below, all construction on the Property shall adhere to the Building Regulations in effect at the time an application for a building

permit is submitted and to any federal or state building requirements that are then in effect at such time. Additionally, nothing in this Agreement prevents the City from applying "standard specifications" for public improvements (e.g., streets, storm drainage, parking lot standards, driveway widths), as the same may be adopted or amended from time to time by the City, provided that the provisions of any such standards and specifications apply only to the extent they are in effect on a Citywide basis and do not conflict with the provisions of the Specific Plan.

4.4 Subsequent Rules. Subsequent Rules cannot be applied by the City to the Project unless the Developer gives the City written notice of its election to have such Subsequent Rule applied to the Project, in which case such Subsequent Rule is deemed to be an Applicable Rule.

4.5 Fees, Exactions, Mitigation Measures, Conditions, Reservations and Dedications.

4.5.1 Subject to sections 4.5.2, 4.5.3, and 5.2, all fees, exactions, mitigation measures, conditions, reservations and dedications of land for public purposes that are applicable to the Project are set forth in the Applicable Rules, the Project Approvals, and this Agreement.

4.5.2 Except as otherwise provided in this Agreement, and specifically excluding fees set by entities not controlled by the City that are collected by the City, the City can only charge and impose those fees and exactions, including, without limitation, dedication and any other fee relating to development or the privilege of development, which are in effect on a City-wide basis as of the Effective Date.

4.5.3 The Developer must pay the amount of the impact fees that are in effect at the time of application for the building permit pursuant to City Council Resolution Nos. 4443 and 4687, or such subsequent resolutions as may be adopted by the City Council in accordance with applicable procedures, but shall not be required to pay any new impact fees that are not in effect at the time of Project Approvals.

4.5.4 This Section shall not be construed to limit the authority of the City to charge normal and customary application, processing, and permit fees, including legal and environmental processing costs, for land use approvals, building permits and other similar permits, for Future Approvals, which fees are designed to reimburse City's actual expenses attributable to such application, processing and permitting and are in force and effect on a City-wide basis at such time as applications for such approvals are filed with the City.

4.6 Use of Easements. Notwithstanding the provisions of the Applicable Rules, easements dedicated for vehicular and pedestrian use shall be permitted to include easements for underground drainage, water, sewer, gas, electricity, telephone, cable, and environmental remediation and other utilities and facilities so long as they do not unreasonably interfere with pedestrian and/or vehicular use.

4.7 Timing of Development. In *Pardee Construction Co. v. City of Camarillo* (*Pardee*), 37 Cal.3d 465 (1984), the California Supreme Court held that the failure of the parties therein to provide for the timing or rate of development resulted in a later-adopted initiative restricting the rate of development to prevail against the parties' agreement. City and Developer intend to avoid the result in *Pardee* by acknowledging and providing that Developer shall have the right, without

obligation, to develop the Property in such order and at such rate and times as Developer deems appropriate within the exercise of its subjective business judgment subject to the terms of this Agreement.

In furtherance of the Parties' intent, as set forth in this Section, no future amendment of any existing City ordinance or resolution, or future adoption of any ordinance, resolution or other action, that purports to limit the rate or timing of development over time or alter the sequencing of development phases, whether adopted or imposed by the City Council or through the initiative or referendum process, shall apply to the Property. However, nothing in this Section shall be construed to limit City's right to enforce Developer's obligation pursuant to this Agreement to provide all infrastructure required by the Project Approvals and this Agreement.

4.8 Moratorium.

4.8.1 The City shall not impose a moratorium on the Property that restricts development of the Project unless such is necessary to protect against a significant threat to the health, safety and welfare of the City.

4.8.2 Except as provided in Section 4.8.1 above, no City-imposed moratorium or other limitation (whether relating to the rate, timing or sequencing of the development or construction of all or any part of the Project, whether imposed by ordinance, initiative, resolution, policy, order or otherwise, and whether enacted by the City Council, an agency of the City, the electorate or otherwise) affecting parcel or subdivision maps (whether tentative, vesting tentative, or final), building permits, occupancy certificates, or other entitlements to use or service (including, without limitation, water and sewer), approved, issued or granted within the City, or portions of the City, applies to the Project to the extent such moratorium or other limitation is in conflict with this Agreement. However, the provisions of this Section do not affect the City's compliance with moratoria or other limitations mandated by other governmental agencies or court-imposed moratoria or other limitations.

4.9 Term. This Agreement shall be in effect for a period of 15 years from the Effective Date of the Enabling Ordinance. However, the Developer or the City shall be entitled to, by written notice to the other Party prior to the Agreement's expiration, one (1) five (5)-year extension, provided that the requesting Party is not in material default of this Agreement at such time beyond any applicable period to cure provided for by Section 8.5 below. Before the expiration of the five (5) year extension, the Parties may mutually agree to further extensions. In the event of litigation challenging this Agreement, the Term is automatically suspended for the duration of such litigation and resumes upon final disposition of such challenge and any appeal thereof upholding the validity of this Agreement. In the event that a referendum petition concerning this Agreement is duly filed in such a manner that the ordinance approving this Agreement is suspended, then the Term is deemed to commence upon City Council certification of the results of the referendum election approving this Agreement.

4.10 Term of Map(s) and Other Project Approvals. Pursuant to California Government Code Sections 66452.6(a) and 65863.9, the term of any subdivision or parcel map that has been or in the future may be processed on all or any portion of the Property and the term of each of the Project Approvals shall be extended for a period of time through the scheduled termination date of this Agreement as set forth in Section 4.9 above, including any extensions thereto.

4.11 Future Approvals.

4.11.1 Minor Modifications to Project. The Developer may make minor changes to the Project and Project Approvals ("Minor Modifications") without the need to amend this Agreement upon the administrative approval of the Director.

(a) Minor Modifications include:

(i) A modification to the Site Plan approved by the Director in accordance with section VII.D.2 of the Specific Plan;

(ii) A modification to the Site Plan approved by the Planning Commission through the Site Plan Review procedure contained in ESMC Chapter 15-30, provided the change does not include any change which would qualify as a Major Modification under section 4.11.2 below;

(iii) A Minor Modification to the Specific Plan as identified in Section VII.C.2 thereof; and

(iv) any other change that does not qualify as a Major Modification as defined below.

(b) The City shall not unreasonably withhold or delay approval of any Minor Modification. The City shall have the right to impose reasonable conditions in connection with Minor Modifications, provided, however, such conditions shall not be inconsistent with the Applicable Rules, the Project Approvals or with the development of the Project as contemplated by this Agreement.

(c) A Minor Amendment approved by the City shall continue to constitute a Project Approval as referenced herein.

4.11.2 Modifications Requiring Amendment to this Agreement. Any proposed modification to the Project which results in any of the following shall constitute a Major Modification and shall require an amendment to this Agreement pursuant to Section 14 below:

(a) Any change which constitutes a Major Modification to the Specific Plan as identified in Section VII.C.1 thereof; or

(b) Any change which creates a new environmental impact which cannot be mitigated to a level of insignificance.

4.12 Site Plan Review. Site Plan Review approval shall be required in accordance with Chapter 15-30 of the El Segundo Municipal Code. Nothing in this Agreement is intended to limit the applicability of the Site Plan Review requirement in Chapter 15-30 of the ESMC.

4.13 Issuance of Building Permits. No building permit, final inspection or Certificate of

Occupancy will be unreasonably withheld, conditioned, or delayed from the Developer if all infrastructure required to serve the portion of the Property covered by the building permit, final inspection or Certificate of Occupancy is in place or is suitably guaranteed to be completed (by covenant, bond, letter of credit or otherwise) to the reasonable satisfaction of the City prior to completion of construction and all of the other relevant provisions of the Project Approvals, Future Approvals and this Agreement have been satisfied.

5. Developer Agreements.

The Property is divided up into the following five land use districts from south to north as shown on Exhibit C: PCC Mixed-Use 1(PCC South); PCC Commercial-1 (Aloft Hotel); PCC Commercial-2 (Fairfield Hotel); PCC Commercial-3 (Fairfield Parking); and PCC Mixed-Use 2 (PCC North).

5.1 General. The Developer shall comply with: (i) this Agreement; (ii) the Project Approvals, including without limitation all mitigation measures required by the determination made pursuant to the California Environmental Quality Act; and (iii) all Future Approvals for which it is the applicant or a successor in interest to the applicant.

5.1.1 In the event that any of the mitigation measures or conditions required of Developer hereunder have been implemented by others, Developer shall be conclusively deemed to have satisfied such mitigation measures or conditions, consistent with CEQA. If any such mitigation measures or conditions are rejected by a governmental agency with jurisdiction, the Developer may implement reasonably equivalent substitute mitigation, consistent with CEQA, to the City's satisfaction, in lieu of the rejected mitigation measures or conditions. Such substitution shall be deemed to be a Minor Modification pursuant to Section 4.11.1 above.

5.1.2 Except for dedications made with the recordation of Vesting Map No. 82806, all other dedications and improvements required as part of the Project Approvals shall be required concurrent with the development of the adjacent district, except as may otherwise be specified herein.

5.2 Affordable Housing. Developer shall provide a total of 15 affordable housing units in PCC South and 17 affordable units in PCC North to persons who qualify as low or very-low income households for 55 years as further detailed in accordance with the housing covenants to be recorded against the property as set forth in Exhibits D1 and D2 (Agreements Creating Affordable Housing Covenants [Including Rental Restrictions]), attached hereto. The recordation of the affordable housing covenants shall occur before the issuance of the first certificate of occupancy for each building.

Developer shall pay for actual costs of an independent third-party affordable housing consultant, chosen by the City, to provide income limit verification that meets the affordable housing requirements of this Section 5.2. The independent third-party consultant shall charge Developer rates that are competitive to the market area. Developer shall provide the necessary tenant documentation to the selected third-party affordable housing consultant.

5.3 Undergrounding of Overhead Wires. All new utilities to and on the property shall be provided underground for each phase of the project. Existing utilities in the public rights-of-way

surrounding each development phase are not required to be relocated underground.

5.4 Preferential Parking Zone. Developer shall provide $25,000 to the City for the costs to implement a preferential parking zone adjacent to the Project site. Formation of the preferential parking zone will be dependent upon a petition of residents pursuant to ESMC § 8-5A-5. If no preferential parking zone is established within 3 years of the first occupancy for PCC North or PCC South, whichever is the latter to be developed, the City may use any portion of the funds for improvements in the geographical vicinity of the Project site at its discretion. Such payment shall be made prior to the issuance of any building or grading permit, whichever is first, for any improvement in the Specific Plan area.

5.5 Landscaping.

5.5.1 Landscaping Requirements.

5.5.1.1 No certificate of occupancy shall be issued for the development to which the requirement is tied until the improvements are made or Developer has provided appropriate bonds in a form satisfactory to the City Attorney.

5.5.1.2 All landscape and other improvements shall be substantially in conformance with the Landscape Plan approved with the Site Plan Review approval as to the number and location of trees and improvements.

5.5.1.3 All landscaping/improvement work identified in this section 5.5 shall occur with the development of the adjacent PCC area as identified below.

5.5.2 Indiana Street. Developer shall provide, in accordance with City standards and requirements, additional landscaping and trees on the west side of Indiana Street between Mariposa Avenue and Holly Avenue in existing landscaped areas with existing irrigation systems in place. Developer has no obligation to create new parkway areas or to install, operate, or maintain any required irrigation. The installation of this landscaping shall occur with the development of PCC South. Developer has no obligation to maintain the additional landscaping and trees after installation.

5.5.3 Pacific Coast Highways/Hotels. Developer shall provide single occupancy pedestrian seating and enhanced landscaping in the existing landscape areas in front of the Aloft Hotel and the Fairfield Hotel. Six single-occupant chairs shall be located in front of the Fairfield Hotel in the existing landscaped area and four single-occupant chairs shall be located in front of the Aloft Hotel in the existing landscaped area. This installation of the seating and landscaping will take place with the development of PCC South.

5.5.4 PCC North. Developer shall provide the following improvements with the development of PCC North.

5.5.4.1 Developer shall provide enhanced landscaping along the existing block wall on the western side of PCC North in the form of “climbing fig ivy”.

5.5.5 PCC South. Developer will replace the existing street trees along the Pacific Coast Highway frontage of PCC south with six new street trees along the same frontage. In the event that Caltrans does not permit trees to be planted in the right-of-way, Developer will provide six additional trees on the PCC South site in a location to be approved by Community Services Director or his designee that is outside of the Caltrans right-of-way and the building footprint.

5.6 Enhanced Paving. Developer shall provide enhanced paving such as stamped or colored concrete, at the following locations: (i) PCC South entrances/exits on Indiana and Pacific Coast Highway; (ii) Fairfield Parking Structure entrance/exits on Pacific Coast Highway; and (iii) PCC North entrances/exists on Mariposa Avenue and Palm Avenue.

5.7 EV Charging Stations. Developer shall provide a total of 200 EV capable spaces, including a total of 50 installed EV chargers across the entire PCC Specific Plan area. A minimum of 50 EV capable spaces, including 20 EV chargers, shall be installed in each parking structure in PCC North and PCC South. A minimum of 20 EV capable spaces, including 8 EV chargers, shall be installed in the Fairfield Parking structure. The remaining 80 EV capable spaces, including 2 EV chargers may be distributed between the three structures without restriction.

5.8 Solar Panels and Battery Storage.

5.8.1 Developer shall install solar panels on the roofs of both PCC North and PCC South to generate sufficient power for their respective Common Area Power needs or generate the maximum power available from rooftop installed solar panels, whichever is less. "Common Area Power" shall be defined as all project power that does not serve a residential or commercial unit. City may, at Developer's expense, retain a third-party consultant to verify that the solar infrastructure proposed is consistent with this paragraph.

5.8.2 Developer shall comply with the battery storage system requirements consistent with the 2022 Building Energy Efficiency Standards (Title 24 Energy Code) for both PCC North and PCC South as adopted by the California Building Standards Commission prior to the effective date of the 2022 Code. If the City makes any amendments to this provision of the Building Code in accordance with law, Developer shall comply with any such amendments for building permits filed after the effective date of the amendments.

5.9 Fencing. Developer shall remove and replace all chain link fencing visible from the public right of way at the existing Aloft and Fairfield Hotel properties. The fencing will be replaced with decorative fencing and/or landscaping approved by the Development Services Department. The fencing shall be replaced at the time of development of PCC South or the Fairfield Parking, whichever occurs first.

5.10 Community Non-Profit Space.

5.10.1 Developer shall provide a minimum space of 1,000 square feet of community space to be located on the ground floor of the Fairfield parking structure.

5.10.2 For the first 10 years after issuance of the certificate of occupancy, non-profit groups registered located in the City of El Segundo shall have priority of using this space.

5.10.3 Non-profit groups shall be able to use this room without payment of any rental rate for the room, but may be required to pay set-up fees, clean-up fees, and any fees for additional services such as food and beverage service.

5.11 Development Fees. Subject to the provisions of Section 4.5 above, Developer shall pay the development fees in effect at the time of building permit application. The Developer shall be entitled to credits against the City's traffic mitigation fees to the extent off-site traffic improvements that are required by the Project Approvals are included in any subsequent traffic fee mitigation program adopted by the City pursuant to Government Code Section 66000, *et seq*. Such credits shall be based upon the actual audited costs and shall only be granted to the extent such improvements are constructed in accordance with all applicable state and local laws. The Developer waives any and all rights it may have to challenge development fees that are in effect at the time of the Effective Date and the City's right to amend its current development fees. However, the Developer retains the legal right to challenge the amount of any such amended or increased development fees to the extent such are not in compliance with the requirements of Government Code Section 66000, *et seq*. as well as its right to receive credits against such amended or increased fees.

5.12 Maintenance Obligations. Developer shall maintain all portions of the Property in its possession or control, and any improvements thereon, in a clean, neat and orderly manner. Except as specified herein, Developer shall also maintain any landscaping and bike racks placed in the public right of way. The Parties' respective maintenance obligations shall survive any termination or expiration of this Agreement.

5.13 Sales and Use Tax.

5.13.1 In the event the contract price for any work on the Project is valued at five million dollars ($5,000,000.00) or more, Developer agrees to report, on a State Board of Equalization Tax Return, any purchases of tangible personal property made in connection with the finishing of and/or installation of materials, or fixtures for the Project, when such purchases were made without sales or use tax due. Developer shall indicate the City as a registered job site location on the State Board of Equalization Tax Return. In such event, Developer shall also obtain a permit or a sub-permit from the State Board of Equalization indicating the City as the registered job site location, in accordance with Revenue and Taxation Code § 7051.3 or State Board of Equalization Compliance Policy and Procedure Manual § 295.060.

5.13.2 Developer further agrees that if Developer retains contractors or subcontractors to perform a portion of work in the Project, and said contracts or subcontracts are valued at five million dollars ($5,000,000) or more, said contracts or subcontracts shall contain the provisions set forth in Subsection (a) above.

5.13.3 The Director of Finance of the City is authorized to relieve Developer, and Developer's contractors and subcontractors, from the requirements set forth in this Section 5.7 upon proof to the reasonable satisfaction of the Director of Finance that Developer and/or its contractors or subcontractors have made good faith efforts to obtain said permit or sub-permits, but were denied the same by the State Board of Equalization.

6. City Agreements.

6.1 Expedited Processing. The City shall process, at Developer's expense, in an expedited manner all plan checking, excavation, grading, building, encroachment and street improvement permits, Certificates of Occupancy, utility connection authorizations, and other ministerial permits or approvals necessary, convenient or appropriate for the grading, excavation, construction, development, improvement, use and occupancy of the Project in accordance with the City's accelerated plan check process under the Applicable Rules. Without limiting the foregoing, if requested by Developer, the City agrees to utilize private planners and plan checkers (upon Developer's request and at Developer's cost) and any other available means to expedite the processing of Project applications, including concurrent processing of such applications by various City departments.

6.2 Processing Cooperation and Assistance. To the extent permitted by law, the City shall reasonably cooperate with the Developer in securing any and all entitlements, authorizations, permits or approvals which may be required by any other governmental or quasi-governmental entity in connection with the development of the Project or the Property. Without limiting the foregoing, the City shall reasonably cooperate with the Developer in any dealings with federal, state and other local governmental and quasi-governmental entities concerning issues affecting the Property. The City shall keep the Developer fully informed with respect to its communications with such agencies which could impact the development of the Property. The City must not take any actions to encourage any other governmental or quasi-governmental entities from withholding any necessary approvals and any such contrary actions on the part of the City must be considered a breach of this Agreement by City.

6.3 Processing During Third Party Litigation. The filing of any third party lawsuit(s) against the City or the Developer relating to this Agreement, the Project Approvals, any Future Approvals or to other development issues affecting any portion of the Property or the Project shall not hinder, delay or stop the development, processing or construction of the Project, approval of the Future Approvals, or issuance of ministerial permits or approvals should the Developer wish to proceed, unless the third party obtains a court order restraining the activity. The City must not stipulate to or cooperate in the issuance of any such order.

6.4 Performance of Director Duties. The City shall ensure that a person or persons are designated at all times to carry out the duties of the Director set forth in this Agreement.

7. Modification/Suspension.

7.1 Pursuant to Government Code Section 65869.5, in the event that any state or federal law or regulation, enacted after the Effective Date, precludes compliance with any provision of this Agreement, such provision shall be deemed modified or suspended to the extent practicable to comply with such state or federal law or regulation, as reasonably determined necessary by City. Upon repeal of said law or regulation or the occurrence of any other event removing the effect thereof upon the Agreement, the provisions hereof shall be restored to their full original effect.

7.2 In the event any state or federal resources agency (i.e., California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Regional Water Quality Control Board/State Water Resources Control Board), in connection with its final issuance of a permit or certification for all or a portion of the Project, imposes requirements ("Permitting Requirements") that require modifications to the Project, then the parties will work together in good faith to incorporate such changes into the Project; provided, however, that if Developer appeals or challenges any such Permit Requirements, then the Parties may defer such changes until the completion of such appeal or challenge.

8. Demonstration of Good Faith Compliance.

8.1 Review of Compliance. In accordance with Government Code Section 65865.1, this Section 8 and the Applicable Rules, once each year, on or before each anniversary of the Effective Date ("Periodic Review"), the Development Services Director shall review the extent of the Developer's good faith substantial compliance with the terms and provisions of this Agreement as well as the performance by the City of its obligations under this Agreement.

8.2 Good Faith Compliance. During each Periodic Review, the Developer shall demonstrate by written status report that, during the preceding twelve month period, that it has been in good faith compliance with this Agreement. For purposes of this Agreement, the phrase "good faith compliance" shall mean that the Developer has demonstrated that it has acted in a commercially reasonable manner (taking into account the circumstances which then exist) and in good faith in and has substantially complied with the Developer's material obligations under this Agreement.

8.3 City Report - Information to be Provided to Developer. At least 14 days before the annual anniversary of the Effective Date, the City must deliver to the Developer a copy of all staff reports prepared in connection with a Periodic Review, any prior staff reports generated during the review period, written comments from the public, and, to the extent practical, all related exhibits concerning such Periodic Review. This information shall be known as the "City Report."

8.4 Developer's Report. No later than the annual anniversary of the Effective Date, Developer must submit a written status report to the Director addressing the good faith compliance issue and any issues raised by the City Report provided to the Developer in accordance with section 8.3 above.

8.5 Notice of Non-Compliance; Cure Rights. If, after reviewing the Developer's Report, the Director reasonably concludes on the basis of substantial evidence that as to any parcel or parcels comprising the Property, Developer has not demonstrated that it is in good faith compliance with this Agreement, the Director may issue and deliver to the Developer a written Notice of Violation as set forth in Section 10 below.

8.6 Public Notice of Finding. Any appeal of the Director's determination (including any appeal by the Developer) must be filed within 20 days following such decision. Filing such an appeal tolls the cure period specified in the Notice of Violation. Notwithstanding Section 13.1, an appeal regarding the Notice of Violation shall be heard directly by the City Council at a duly-noticed public hearing and the City Council must issue a final decision. Developer retains the right to challenge the City's issuance of any final decision pursuant to Code of Civil Procedure § 1094.5 without complying

with the procedures set forth in Section 10.4 below.

8.7 Failure of Periodic Review. The City's failure to review, at least annually, compliance by the Developer with the terms and conditions of this Agreement shall not constitute or be asserted by any Party as a breach by any other Party of this Agreement. If the City fails to provide the City Report by the Effective Date, Developer will be deemed to be in good faith compliance with this Agreement.

9. Excusable Delays. Performance by any Party of its obligations hereunder shall be excused during any period of "Excusable Delay," as hereinafter defined, provided that the Party claiming the delay gives notice of the delay to the other Party as soon as reasonably possible after the same has been ascertained. For purposes hereof, Excusable Delay shall mean delay that directly affects, and is beyond the reasonable control of, the Party claiming the delay, including without limitation: (i) act of God; (ii) civil commotion: (iii) riot: (iv) strike, picketing or other labor dispute; (v) shortage of materials or supplies; (vi) damage to work in progress by reason of fire, flood, earthquake or other casualty; (vii) reasonably unforeseeable delay caused by a reasonably unforeseeable restriction imposed or mandated by a governmental entity other than City; (viii) litigation brought by a third party attacking the validity of this Agreement, a Project Approval, a Future Approval or any other action necessary for development of the Property; (ix) delays caused by any default by City or the Developer hereunder; or (x) delays due to the presence or remediation of hazardous materials. The term of this Agreement, including any extensions, shall be extended by any period of Excusable Delay.

10. Default Provisions.

10.1 Default. Either Party to this Agreement shall be deemed to have breached this Agreement if it materially breaches any of the provisions of this Agreement and the same is not cured within the time set forth in a written notice of violation (the "Notice of Violation") from the non-breaching Party to the breaching Party, which period of time shall not be less than 10 days for monetary defaults, and not less than 60 days for non-monetary defaults from the date that the notice is deemed received, provided if the breaching Party cannot reasonably cure a non-monetary default within the time set forth in the notice, then the breaching Party shall not be in default if it commences to cure the default within such time limit and diligently effects such cure thereafter. If the City determines that a default may have occurred, the City shall give written notice to the Developer of its intention to terminate this Agreement and comply with the notice and public hearing requirements of Government Code Sections 65867 and 65868. At the time and place set for the hearing on termination, the Developer shall be given an opportunity to be heard. If the City Council finds based upon the evidence that the Developer is in breach of this Agreement, the City Council may modify this Agreement with the consent of the Developer or unilaterally terminate this Agreement. If Developer initiates a resolution of dispute in accordance with the provisions of Section 10.4 below within 60 days following the City Council's determination that Developer is in breach of this Agreement, the City Council's decision to modify or terminate this Agreement is stayed until the issue has been resolved through informal procedures, mediation, or court proceedings.

10.2 Content of Notice of Violation. Every Notice of Violation shall state with specificity that it is given pursuant to this Section of the Agreement, the nature of the alleged breach, (including references to the pertinent provisions of this Agreement), the portion of the Property involved, and

the manner in which the breach may be satisfactorily cured. The notice shall be deemed given in accordance with Section 19 hereof.

10.3 Remedies for Breach. The Parties agree that the remedies for breach of this Agreement shall be limited to the remedies expressly set forth in this section. Developer's remedies for any breach of this Agreement by City shall be limited to injunctive relief and/or specific performance.

10.4 Resolution of Disputes. The City and the Developer agree to attempt to settle any claim, dispute or controversy arising from this Agreement through consultation and negotiation in good faith and in spirit of mutual cooperation. If those attempts fail, the dispute may be mediated by a mediator chosen jointly by the City and the Developer within 30 days after notice by one of the parties demanding non-binding mediation. Neither Party may unreasonably withhold consent to the selection of a mediator. The City and the Developer will share the cost of the mediation equally. The Parties may agree to engage in some other form of non-binding alternate dispute resolution ("ADR") procedure in lieu of mediation. Any dispute that cannot be resolved between the Parties through negotiation or mediation within two months after the date of the initial demand for non-binding mediation may then be submitted to a court of competent jurisdiction in the County of Los Angeles, California.

10.5 Attorney's Fees and Costs. Each Party to this Agreement agrees to waive any entitlement of attorney's fees and costs incurred with respect to any dispute arising from this Agreement. The parties will each bear their own attorney's fees and costs in the event of any dispute.

11. Mortgagee Protection. This Agreement shall not prevent or limit the Developer, in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvements thereon by any mortgage, deed of trust or other security device. The City acknowledges that the lender(s) providing such financing ("Mortgagee") may require certain Agreement interpretations and agrees, upon request, from time to time, to meet with the Developer and representatives of such lender(s) to provide within a reasonable time period the City's response to such requested interpretations. The City will not unreasonably withhold its consent to any such requested interpretation, provided that such interpretation is consistent with the intent and purposes of this Agreement. Any Mortgagee of a mortgage or a beneficiary of a deed of trust or any successor or assign thereof, including without limitation the purchaser at a judicial or non-judicial foreclosure sale or a person or entity who obtains title by deed-in-lieu of foreclosure on the Property shall be entitled to the following rights and privileges:

11.1 Mortgage Not Rendered Invalid. Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish, or impair the priority of the lien of any mortgage or deed of trust on the Property made in good faith and for value. No Mortgagee shall have an obligation or duty under this Agreement to perform the Developer's obligations, or to guarantee such performance, prior to taking title to all or a portion of the Property.

11.2 Request for Notice to Mortgagee. The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, who has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive a copy of any Notice of Violation delivered to the Developer.

11.3 Mortgagee's Time to Cure. The City shall provide a copy of any Notice of Violation to the Mortgagee that has requested such copy within ten days of sending the Notice of Violation to the Developer. The Mortgagee shall have the right, but not the obligation, to cure the default for period of 60 days after receipt of such Notice of Violation, or such longer period of time as may be specified in the Notice. Notwithstanding the foregoing, if such default shall be a default which can only be remedied by such Mortgagee obtaining possession of the Property, or any portion thereof, and such Mortgagee seeks to obtain possession, such Mortgagee shall have until 60 days after the date of obtaining such possession to cure or, if such default cannot reasonably be cured within such period, to commence to cure such default, provided that such default is cured no later than one year after Mortgagee obtains such possession.

11.4 Cure Rights. Any Mortgagee who takes title to all of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or a deed in lieu of foreclosure, shall succeed to the rights and obligations of the Developer under this Agreement as to the Property or portion thereof so acquired; provided, however, in no event shall such Mortgagee be liable for any defaults or monetary obligations of the Developer arising prior to acquisition of title to the Property by such Mortgagee, except that any such Mortgagee shall not be entitled to a building permit or occupancy certificate until all delinquent and current fees and other monetary or non-monetary obligations due under this Agreement for the Property, or portion thereof acquired by such Mortgagee, have been satisfied.

11.5 Bankruptcy. If any Mortgagee is prohibited from commencing or prosecuting foreclosure or other appropriate proceedings in the nature of foreclosure by any process or injunction issued by any court or by reason of any action by any court having jurisdiction of any bankruptcy or insolvency proceedings involving the Developer, the times specified in Section 10 above shall be extended for the period of the prohibition, except that any such extension shall not extend the term of this Agreement.

11.6 Disaffirmation. If this Agreement is terminated as to any portion of the Property by reason of (i) any default or (ii) as a result of a bankruptcy proceeding, and this Agreement is disaffirmed by a receiver, liquidator, or trustee for the Developer or its property, the City, if requested by any Mortgagee, shall negotiate in good faith with such Mortgagee for a new development agreement for the Project as to such portion of the Property with the most senior Mortgagee requesting such new agreement. This Agreement does not require any Mortgagee or the City to enter into a new development agreement pursuant to this Section.

12. Estoppel Certificate. At any time and from time to time, the Developer may deliver written notice to City and City may deliver written notice to the Developer requesting that such Party certify in writing that, to the knowledge of the certifying Party: (i) this Agreement is in full force and effect and a binding obligation of the Parties; (ii) this Agreement has not been amended, or if amended, the identity of each amendment; and (iii) the requesting Party is not in breach of this Agreement, or if in breach, a description of each such breach. The Party receiving such a request shall execute and return the certificate within thirty (30) days following receipt of the notice. The failure of the City to deliver such a written notice within such time shall constitute a conclusive presumption against the City that, except as may be represented by the Developer, this Agreement is in full force and effect without modification, and that there are no uncured defaults in the performance of the Developer. The

Development Services Director shall be authorized to execute, on behalf of the City, any Estoppel Certificate requested by the Developer. City acknowledges that a certificate may be relied upon by successors in interest to the Developer who requested the certificate and by holders of record of deeds of trust on the portion of the Property in which that Developer has a legal interest.

13. Administration of Agreement.

13.1 Appeal of Staff Determinations. Any decision by City staff concerning the interpretation or administration of this Agreement or development of the Property in accordance herewith may be appealed by the Developer to the Planning Commission, and thereafter, if necessary, to the City Council pursuant to the El Segundo Municipal Code. The Developer shall not seek judicial review of any staff decision without first having exhausted its remedies pursuant to this Section. Final determinations by the City Council are subject to judicial review subject to the restrictions and limitations of California law.

13.2 Operating Memoranda. The provisions of this Agreement require a close degree of cooperation between City and Developer. During the Term of this Agreement, clarifications to this Agreement and the Applicable Rules may be appropriate with respect to the details of performance of City and Developer. If and when, from time to time, during the term of this Agreement, City and Developer agree that such clarifications are necessary or appropriate, they shall effectuate such clarification through a memoranda approved in writing by City and Developer (the "Operating Memoranda"), which, after execution, shall be attached hereto and become part of this Agreement and the same may be further clarified from time to time as necessary with future written approval by City and the Developer. Operating Memoranda are not intended to and shall not constitute an amendment to this Agreement but are mere ministerial clarifications, therefore public notices and hearings are not required. The City Attorney shall be authorized, upon consultation with, and approval of, the Developer, to determine whether a requested clarification may be effectuated pursuant to this Section or whether the requested clarification is of such character to constitute an amendment hereof which requires compliance with the provisions of Section 14 below. The authority to enter into such Operating Memoranda is hereby delegated to the Director, and the Director is hereby authorized to execute any Operating Memoranda hereunder without further City Council action.

13.3 Certificate of Performance. Upon the completion of the Project, or the completion of development of any parcel within the Project, or upon completion of performance of this Agreement or its earlier revocation and termination, the City shall provide the Developer, upon the Developer's request, with a statement ("Certificate of Performance") evidencing said completion or revocation and the release of the Developer from further obligations hereunder, except for any ongoing obligations hereunder. The Certificate of Performance shall be signed by the appropriate agents of the Developer and the City and shall be recorded in the official records of Los Angeles County, California. Such Certificate of Performance is not a notice of completion as referred to in California Civil Code § 3093.

14. Amendment or Termination by Mutual Consent. Except as otherwise set forth herein, this Agreement may only be amended or terminated, in whole or in part, by mutual consent of City and the Developer, and upon compliance with the provisions of Government Code § 65867.

15. Indemnification/Defense.

15.1 Indemnification. The Developer agrees to indemnify and hold the City harmless from and against any claim, action, damages, costs (including, without limitation, attorney's fees), injuries, or liability, arising from the City's approval of the Project, this Agreement, Developer's performance of this Agreement, and all procedures with approving this Agreement (collectively, "Discretionary Approvals"), except to the extent such is a result of the City's sole negligence or intentional misconduct. Should the City be named in any suit, or should any claim be brought against it by suit or otherwise, whether the same be groundless or not, arising out of the Discretionary Approvals, Developer agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise, except to the extent such action is a result of the City's sole negligence or intentional misconduct. For purposes of this Section, "the City" includes the City of El Segundo's elected officials, appointed officials, officers, consultants, and employees.

15.2 Defense of Agreement. If the City accepts Developer's indemnification and defense as provided in Section 15.1 above, the City agrees to and shall timely take all actions which are necessary or required to uphold the validity and enforceability of this Agreement, the Discretionary Approvals, Project Approvals, Development Standards, and the Applicable Rules. This Section 15 shall survive the termination of this Agreement.

16. Cooperation in the Event of Legal Challenge.

16.1 Third Party Challenges. In the event of any administrative, legal or equitable action or other proceeding instituted by any person or entity not a party to the Agreement challenging the validity of any provision of this Agreement, challenging any Approval, or challenging the sufficiency of any environmental review of either this Agreement or any Approval under CEQA (each a "Third Party Challenge"), each party must cooperate in the defense of such Third Party Challenge, in accordance with this Section. Developer agrees to pay City's costs of defending a Third Party Challenge, including all court costs and reasonable attorney's fees expended by City (including the time and cost of the City Attorney) in defense of any Third Party Challenge, as well as the time of City's staff spent in connection with such defense. Developer may select its own legal counsel to represent Developer's interests in any Third Party Challenge at Developer's sole cost and expense. City agrees that it will not enter into a settlement agreement to any Third Party Challenge without Developer's written consent. Developer's obligation to pay City's costs in the defense of a Third Party Challenge shall not extend to those costs incurred on appeal if Developer notifies the City is writing that it does not wish to pursue the appeal.

16.2 Third Party Challenges Related to the Applicability of City Laws. The provisions of this Section will apply only in the event of a legal or equitable action or other proceeding, before a court of competent jurisdiction, instituted by any person or entity not a party to the Agreement challenging the applicability to the Project or Project Site of a conflicting City Law (a "Third Party Enforcement Action"):

16.2.1 In the event of a Third Party Enforcement Action, City must: (i) promptly notify Developer of such action or proceeding; and (ii) stipulate to Developer's intervention as a party to such action or proceeding unless Developer has already been named as a respondent or real

party in interest to such action or proceeding. In no event will City take any action that would frustrate, hinder, or otherwise complicate Developer's efforts to intervene, join or otherwise participate as a party to any Third Party Enforcement Action. As requested by Developer, City must use its best efforts to ensure that Developer is permitted to intervene, join or otherwise participate as a party to any Third Party Enforcement Action. If, for any reason, Developer is not permitted to intervene, join or otherwise participate as a party to any Third Party Enforcement Action, the parties to this Agreement agree to cooperate, to the maximum extent permitted by law, in the defense of such action or proceeding. For purposes of this Section, the required cooperation between the parties includes, without limitation, developing litigation strategies, preparing litigation briefs and other related documents, conferring on all aspects of the litigation, developing settlement strategies, and, to the extent permitted by law, jointly making significant decisions related to the relevant litigation, throughout the course thereof.

16.2.2 City's costs of defending any Third Party Enforcement Action, including all court costs, and reasonable attorney's fees expended by City (including the time and cost of the City Attorney) in defense of any Third Party Enforcement Action, as well as the time of City's staff spent in connection with such defense (the "Enforcement Action Defense Costs), will be paid in accordance with this Agreement. The Enforcement Action Defense Costs shall extend to, and Developer will be obligated to pay, any costs incurred on appeal unless Developer notifies the City in writing that it does not wish to pursue the appeal.

16.2.3 City must not enter into a settlement agreement or take any other action to resolve any Third Party Enforcement Action without Developer's written consent. City cannot, without Developer's written consent, take any action that would frustrate, hinder or otherwise prevent Developer's efforts to settle or otherwise resolve any Third Party Enforcement Action.

16.2.4 Provided that City complies with this Section and provided that Developer is a party to the relevant Third Party Enforcement Action, Developer agrees to be bound by any final judgment (i.e., following all available appeals) arising out of a Third Party Enforcement Action and further agrees that no default under this Agreement will arise if such final judgment requires City to apply to the Project or Project Site a City Law that conflicts with Applicable Law or this Agreement.

17. Time of Essence. Time is of the essence for each provision of this Agreement of which time is an element.

18. Effective Date. This Agreement shall become operative on the date the Enabling Ordinance approving this Development Agreement becomes effective (the "Effective Date") pursuant to Government Code Section 36937.

19. Notices. Any notice that a party is required or may desire to give the other must be in writing and may be sent by: i) personal delivery; or ii) by deposit in the United States mail, postage paid, registered or certified mail, return receipt requested; or iii) by overnight delivery using a nationally recognized overnight courier, providing proof of delivery; or iv) by facsimile, evidenced by confirmed receipt; or v) by electronic delivery, evidenced by confirmed receipt, addressed as follows:

If to City: City of El Segundo
350 Main Street

El Segundo, CA 90245
Attention: City Manager
Phone: 310/524-2301
Fax: 310/322-7137
E-mail: smitnick@elsegundo.org

With a Copy to:

City of El Segundo
350 Main Street
El Segundo, CA 90245
Attention: Director of Development Services
Phone: 310/524-2346
Fax: 310/322-4167
E-mail: mallen@elsegundo.org

With a Copy to:

Hensley Law Group
2600 W. Olive Avenue
Suite 500
Burbank, California 91505
Attention: Mark D. Hensley, Esq.
Phone: (818) 333-5120
Fax: (818) 333-5121
E-mail: mhensley@hensleylawgroup.com

If to Developer:

Nick Browne, VP – Product and Development
6080 Center Drive, Suite 120
Los Angeles, CA 90045
Phone: 310/664-3886
E-mail: nbrowne@eqoffice.com

Either City or Developer may change its mailing address at any time by giving written notice of such change to the other in the manner provided herein at least ten days prior to the date such change is affected. Any notice given by mail is deemed to have been given as of the date of delivery (whether accepted or refused) established by the United State Post Office, return receipt, or the overnight carrier's proof of delivery as the case may be. Notices given in any other manner are effective only if and when received by the party to be notified between the hours of 8:00 a.m. and 5:00 p.m., local time of the recipient, of any business day with delivery made after such hours deemed received the following business day.

20. Entire Agreement. This Agreement contains the entire agreement between the Parties regarding the subject matter hereof, and supersedes in its entirety all prior agreements or understandings, oral or written. This Agreement shall not be amended, except as expressly provided herein.

21. Waiver. No waiver of any provision of this Agreement shall constitute a waiver of any other provision, whether or not similar; nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. No waiver shall be binding, unless it is executed in writing by a duly authorized representative of the Party against whom enforcement of the waiver is sought.

22. Supersession of Subsequent Laws of Judicial Action. The provisions of this Agreement must, to the extent feasible, be modified or suspended as may be necessary to comply with any new law or decision issued by a court of competent jurisdiction, enacted or made after the effective date which prevents or precludes compliance with one or more provisions of this Agreement. Immediately after enactment of any such new law, or issuance of such decision, the parties must meet and confer in good faith to determine the feasibility of any such modification or suspension based on the effect such modification or suspension would have on the purposes and intent of this Agreement.

23. Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall be effective to the extent the remaining provisions are not rendered impractical to perform, taking into consideration the purposes of this Agreement.

24. Relationship of the Parties. Each Party acknowledges that, in entering into and performing under this Agreement, it is acting as an independent entity and not as an agent of any other Party in any respect. Nothing contained herein or in any document executed in connection herewith shall be construed as creating the relationship of partners, joint ventures or any other association of any king or nature between City and Developer, jointly or severally.

25. No Third-Party Beneficiaries. This Agreement is made and entered into for the sole benefit of the Parties and their successors in interest. No other person or party shall have any right of action based upon any provision of this Agreement.

26. Recordation of Agreement and Amendments. This Agreement and any amendment thereof shall be recorded with the County Recorder of the County of Los Angeles by the City Clerk of City.

27. Cooperation Between City and Developer. City and Developer shall execute and deliver to the other all such other and further instruments and documents as may be reasonably necessary to carry out the purposes of this Agreement. Upon satisfactory performance by Developer, and subject to the continuing cooperation of the Developer, City will commence and in a timely manner proceed to complete all steps necessary for the implementation of this Agreement and development of the Project or Property in accordance with the terms of this Agreement.

28. Rules of Construction. The captions and headings of the various sections and subsections of this Agreement are for convenience of reference only, and they shall not constitute a part of this Agreement for any other purpose or affect interpretation of the Agreement. Should any provision of this Agreement be found to be in conflict with any provision of the Applicable Rules or the Project Approvals or the Future Approvals, the provisions of this Agreement shall control.

29. Joint Preparation. This Agreement shall be deemed to have been prepared jointly and equally by the Parties, and it shall not be construed against any Party on the ground that the Party prepared the Agreement or caused it to be prepared.

30. Governing Law and Venue. This Agreement is made, entered into, and executed in the County of Los Angeles, California, and the laws of the State of California shall govern its interpretation and enforcement. Any action, suit or proceeding related to, or arising from, this Agreement shall be filed in the appropriate court having jurisdiction in the County of Los Angeles.

31. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which constitute one and the same instrument.

32. Weekend/Holiday Dates. Whenever any determination is to be made or action to be taken on a date specified in this Agreement, if such date shall fall upon a Saturday, Sunday or holiday specified in Government Code § 6700, the date for such determination or action shall be extended to the first business day immediately thereafter.

33. Not a Public Dedication. Except as otherwise expressly provided herein, nothing herein contained shall be deemed to be a gift or dedication of the Property, or of the Project, or any portion thereof, to the general public, for the general public, or for any public use or purpose whatsoever, it being the intention and understanding of the Parties that this Agreement be strictly limited to and for the purposes herein expressed for the development of the Project as private property. The Developer shall have the right to prevent or prohibit the use of the Property, or the Project, or any portion thereof, including common areas and buildings and improvements located thereon, by any person for any purpose which is not consistent with the development of the Project. Any portion of the Property conveyed to the City by the Developer as provided herein shall be held and used by the City only for the purposes contemplated herein or otherwise provided in such conveyance, and the City shall not take or permit to be taken (if within the power or authority of the City) any action or activity with respect to such portion of the Property that would deprive the Developer of the material benefits of this Agreement, or would in any manner interfere with the development of the Project as contemplated by this Agreement.

34. Releases. City agrees that upon written request of Developer and payment of all fees and performance of the requirements and conditions required by Developer by this Agreement, the City must execute and deliver to Developer appropriate release(s) of further obligations imposed by this Agreement in form and substance acceptable to the Los Angeles County Recorder's Office or as otherwise may be necessary to effect the release.

35. Consent. Where the consent or approval of City or Developer is required or necessary under this Agreement, the consent or approval will not be unreasonably withheld, delayed or conditioned.

IN WITNESS WHEREOF, the Developer and the City of El Segundo have executed this Development Agreement on the date first above written.

CITY:

City of El Segundo, a municipal corporation

By: _____
Mayor

ATTEST:

_____
Tracy Weaver
City Clerk

APPROVED AS TO FORM:

By:_____
Mark D. Hensley, City Attorney

DEVELOPER:

BRE EL SEGUNDO PROPERTY OWNER A LLC

By: _____
Patrick Volz, Vice President

BRE EL SEGUNDO PROPERTY OWNER B LLC

By: _____
Patrick Volz, Vice President

BRE EL SEGUNDO PARKING LLC

By: _____
Patrick Volz, Vice President

EXHIBIT A

LEGAL DESCRIPTION

Real property in the City of El Segundo, County of Los Angeles, State of California, described as follows:

PARCEL 1: (APN: 4139-025-075)

LOT 428 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 2: (APN: 4139-025-073, 074, 076, 081)

LOTS 385, 386, 387, 429 AND 430 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 3: (APN: 4139-025-091)

LOTS 382, 383, 384, 431, 432 AND 433 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM PARCELS 1 AND 2, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM, GAS, ASPHALTUM, OTHER HYDROCARBONS AND OTHER MINERALS AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OPERATIONS AND THE EXCLUSIVE RIGHT TO USE THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN, OR WITHDRAWING THEREFROM GAS, OIL, OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING, OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 AS INSTRUMENT NO. 480 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 4: (portion of APN: 4139-024-057)

THE WESTERLY 60 FEET OF LOTS 2 AND 9 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 5: (APN: 4139-024-058)

LOTS 1, 2, 9 AND 10 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 60 FEET OF SAID LOTS 2 AND 9.

ALSO EXCEPT THEREFROM THE NORTHERLY 181.00 FEET OF SAID LOTS 1 AND 2.

ALSO EXCEPT THE SOUTH 147.03 FEET OF LOT 10.

ALSO EXCEPT THEREFROM ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM SAID LAND, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM AND OTHER HYDROCARBONS, AND OTHER MINERALS IN AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN OR WITHDRAWING THEREFROM GAS, OIL OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 6: (portion of APN: 4139-024-057)

A PARCEL OF LAND SITUATE IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, BEING A PORTION OF BLOCK 113 OF EL SEGUNDO, AS PER MAP RECORDED IN BOOK 20, PAGES 114 THROUGH 115, INCLUSIVE, IN THE OFFICE OF THE RECORDER OF SAID COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF LOT 1 OF TRACT NO. 48436, AS PER MAP RECORDED IN BOOK 1180, PAGES 68 THROUGH 69, INCLUSIVE, OF MAPS, IN THE OFFICE OF THE RECORDER OF SAID COUNTY; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58’ 36” EAST 60.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58’ 36” EAST 13.19 FEET; THENCE SOUTH 00° 03’ 15” WEST 181.00 FEET; THENCE NORTH 89° 58’ 36” WEST 13.11 FEET; THENCE NORTH 00° 01’ 50” EAST 181.00 FEET TO THE TRUE POINT OF BEGINNING.

EXHIBIT B

ASSIGNMENT AND ASSUMPTION AGREEMENT

Recording Requested By and
When Recorded Mail To:
BRE

ASSIGNMENT AND ASSUMPTION AGREEMENT

This ASSIGNMENT AND ASSUMPTION AGREEMENT ("Agreement") is made and entered into by and among BRE ("Assignors"), and, _____, a _____ ("Assignee").

R E C I T A L S

A. The City of El Segundo ("City") and Assignor entered into that certain Development Agreement dated _____, 20___ (the "Development Agreement"), with respect to the real property located in the City of El Segundo, State of California more particularly described in Exhibit "A" attached hereto (the "Project Site"), and

B. Assignor has obtained from the City certain development approvals and permits with respect to the development of the Project Site, including without limitation, approval of _____ for the Project Site (collectively, the "Project Approvals").

C. Assignor intends to sell, and Assignee intends to purchase that portion, of the Project Site more particularly described in Exhibit "B" attached hereto (the "Transferred Property").

D. In connection with such purchase and sale, Assignor desires to transfer all of the Assignor's right, title, and interest in and to the Development Agreement and the Project Approvals with respect to the Transferred Property. Assignee desires to accept such assignment from Assignor and assume the obligations of Assignor under the Development Agreement and the Project Approvals with respect to the Transferred Property. [or modify if not all interest sold]

THEREFORE, the parties agree as follows:

1. Assignment. Assignor hereby assigns and transfers to Assignee all of Assignor's right, title, and interest in and to the Development Agreement and the Project Approvals with respect to the Transferred Property. Assignee hereby accepts such assignment from Assignor.

2. Assumption. Assignee expressly assumes and agrees to keep, perform, and fulfill all the terms, conditions, covenants, and obligations required to be kept, performed, and fulfilled by Assignor under the Development Agreement and the Project Approvals with respect to the Transferred Property, including but not limited to those obligations specifically allocated to the

Transferred Parcel as set forth on Exhibit "C" attached hereto.

3. Effective Date. The execution by City of the attached receipt for this Agreement shall be considered as conclusive proof of delivery of this Agreement and of the assignment and assumption contained herein. This Agreement shall be effective upon its recordation in the Official Records of Los Angeles County, California, provided that Assignee has closed the purchase and sale transaction and acquired legal title to the Transferred Property.

4. Remainder of Project. Any and all rights or obligations pertaining to such portion of the Project Site other than the Transferred Property are expressly excluded from the assignment and assumption provided in sections 1 and 2 above.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the dates set forth next to their signatures below.

"ASSIGNOR"

BRE

_____

RECEIPT BY CITY

The attached ASSIGNMENT AND ASSUMPTION AGREEMENT is received by the City of El Segundo on this ___ day of _____, _____.

CITY OF EL SEGUNDO

_____

By: _____
Development Services Director or
Designee

EXHIBIT C

PACIFIC COAST COMMONS SPECIFIC PLAN
LAND USE DISTRICTS

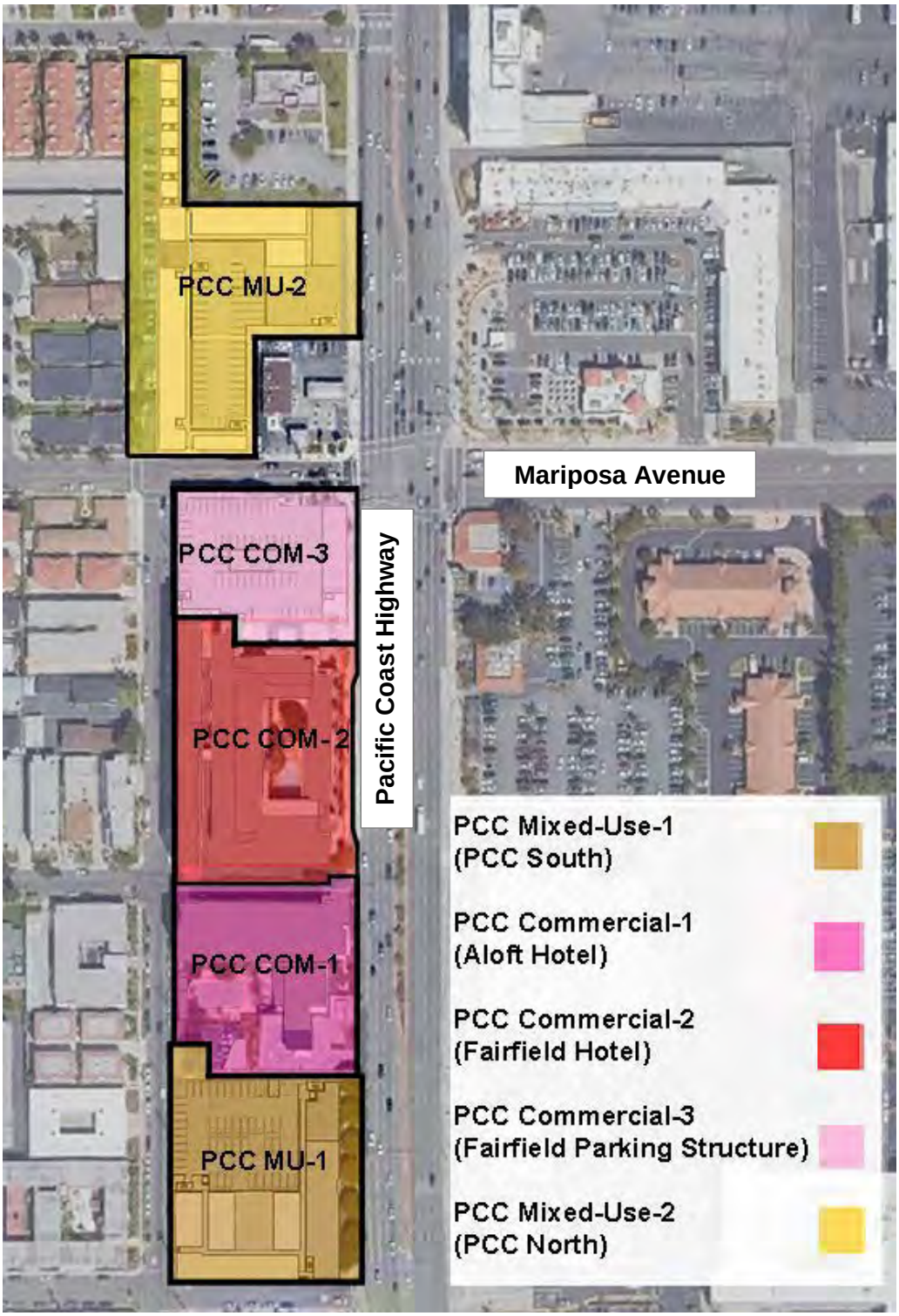


EXHIBIT D-1

PCC SOUTH AFFORDABLE HOUSING AGREEMENT

Recording Requested by and When
Recorded Return to:

CITY OF EL SEGUNDO
350 Main Street
El Segundo, California 90245

OFFICIAL BUSINESS
Document entitled to free
recording per Government Code
Section 6103

Space above this line for Recorder's use only

AGREEMENT CREATING AFFORDABLE HOUSING COVENANTS
(INCLUDING RENTAL RESTRICTIONS)

THIS AGREEMENT is entered into as of _____, 202_, by and between the CITY OF EL SEGUNDO, a municipal corporation (herein referred to as "City") and BRE EL SEGUNDO PROPERTY A LLC, a Delaware limited liability company (herein referred to as "Owner").

A. Owner owns fee title to that certain real property (the "Property") located in the City of El Segundo, County of Los Angeles, State of California, legally described on Exhibit A attached hereto and incorporated herein.

B. Owner has entered into a development agreement with City (the "Development Agreement") entitling Owner to develop a mixed-use project containing 120 multi-family apartment units on the Property (the "Project").

C. In accordance with the requirements of Section 5.2 of the Development Agreement, a minimum of fifteen (15) units, shall be reserved for occupancy at an Affordable Rent to persons or families that qualify as a Low-Income Household or Very Low-Income Household, as follows:

	PCC South	Affordable Housing Units (Sub-Set of Total)	Affordability Levels
Studios	44	9	1 Very Low/8 Low
One Bedrooms	52	5	5 Low
Two Bedrooms	24	1	1 Low
Totals	**120**	**15**	**1 Very Low/14 Low**

D. City desires to enter this Agreement in order to ensure that the required number of Restricted Units will be made available to and occupied by Qualified Households in accordance with the terms and conditions of the Development Agreement.

NOW, THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, CITY AND OWNER AGREE AS FOLLOWS:

1. Definitions

"Adult" means a person 18 years of age or older.

"Affordable Rent" means the maximum gross rent that can be borne by tenants in the Restricted Units, as published by CTCAC annually, minus Housing Related Expenses. The gross rent for the Low Income Rental Units is based on 80% of the Los Angeles County median income for the applicable unit type, and the gross rent for Very Low Income Rental Units is based on 50% of the Los Angeles County median income for the applicable unit type. Affordable Rent amounts will be adjusted annually to reflect increases in maximum gross rent published by CTCAC.

"CTCAC" means the California Tax Credit Allocation Committee.

"Gross Household Income: means all income from whatever source from all Adult Household members, which is anticipated to be received during the 12-month period following the date of the determination of Gross Household Income. The applicable sources of income are defined in California Code of Regulations Title 25 Housing and Community Development Section 6914.

"Household" means all the persons who will occupy the Restricted Unit as their principal residence. A child who is subject to a legally binding shared-custody agreement, in which the child resides with the Household at least 50% of the time, is counted as a member of the Household. Excluded from the definition of Household are live-in caregivers/caretakers, foster children, unborn children and children being pursued for legal custody or adoption that are not currently living with the Household.

"Housing Related Expenses" means any costs other than rent that are required to be borne by a tenant in a Restricted Unit in the Project. These costs include, but are not limited to, a Utility Allowance, any cost that are imposed by the Owner on a mandatory basis, and any mandatory costs that are charged by the Owner for amenities included in the Project. Owner may charge tenants in a Restricted Unit optional costs that are not Housing Related Expenses related to elective amenities requiring an optional service fee such as classes, room rentals, food service, or special events, but is prohibited from charging a tenant in a restricted unit any fee for equal access to common areas or project amenities such as pools, gyms, community rooms and outdoor areas. In addition, Owner is prohibited from charging any optional amenity fees to a tenant in a Restricted Unit that is higher than optional amenity fees charged to tenants in non-restricted units.

"HUD" means the United States Department of Housing and Urban Development.

"Low-Income Household" means a Household whose Gross Household Income does not exceed eighty percent (80%) of area median income adjusted for family size and published by HUD, under the parameters established by Section 3 of the U.S. Housing Act of 1937, as amended, for the Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area.

"Low-Income Rental Unit" means a rental unit in the Project reserved for and rented to Low-Income Households at a maximum monthly rent as set forth in Exhibit B.

"Qualified Household" means a Household that qualifies as a Very Low-Income Household or Low-Income Household.

"Restricted Units" means the Very Low-Income Rental Units and Low-Income Rental Units.

"Utility Allowance" means the allowance for utilities not furnished by the Owner, which shall be calculated based on the most current version of the allowances for Tenant Furnished Utilities and Other Services worksheet prepared by the Los Angeles Community Development Authority or its successor agency using the form prepared by HUD.

"Very Low-Income Household" means a Household whose Gross Household Income does not exceed fifty percent (50.0%) of area median income, adjusted for family size published by the United States Department of Housing and Urban Development (HUD), under the parameters established by Section 3 of the U.S. Housing Act of 1937, as amended, for the Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area.

"Very Low-Income Rental Unit" means a rental unit in the Project reserved for and rented to Very Low-Income Households at a maximum monthly rent as set forth in Exhibit B.

2. Use of the Property. Owner, on behalf of itself and its successors, assigns, and each successor in interest to Owner's interest in the Property or any part thereof, hereby covenants and agrees as follows:

A. The portion of the Property comprising the Project shall be used for residential use. Owner shall rent: (i) Nine (9) of the studio units to be developed at Affordable Rents to Low-Income Households and Very Low-Income Households in the proportions shown in Recital "C;" (ii) 5 of the one-bedroom units to be developed at Affordable Rents to Low-Income Households, and (iii) 1 of the two-bedroom units to be developed at Affordable Rents to Low-Income Households.

B. The designated Restricted Units are shown on the floor plan attached hereto as Exhibit "C." These will be fixed locations *(Note prior to execution of this Agreement the Owner and City shall identify the Restricted Units on the floor plan. Those units shall not be segregated from the market rate units. The Restricted Units, by type and affordability, should be equitably distributed throughout the Project. They shall not be distinguishable, nor located in inferior locations nor clustered).* For the full term, the number, size, type, and

amenity level of Restricted Units shall not be fewer than the number nor different from the size, type and amenity level described in this Agreement. However, the location of the Restricted Units can be changed with prior written approval from the City.

C. The formula for determining the current applicable (for the year 2021) Affordable Rents is set forth in the Schedule of Affordable Rents attached to this Agreement as Exhibit "B".

D. Occupancy Requirements: For a studio Restricted Unit, a maximum of two people can occupy the unit. For a one-bedroom Restricted Unit , a maximum of three people can occupy the unit. For a two-bedroom Restricted Unit, a maximum of five people can occupy the unit.

E. The Owner must forward a copy of its initial standard form of lease agreement to the City for final review as to compliance with this Agreement and thereafter upon request by City. In addition to other requirements imposed under this Agreement, Owner's form of lease agreement must include the following: (1) restrictions prohibiting tenants from subleasing the Restricted Unit and that the Qualified Household must have continued residence in the Restricted Unit; (2) a provision to the effect that Owner has relied on the income certification and supporting information supplied by the tenant in determining qualification for occupancy of the Restricted Unit and that any material misstatement in such certification (whether or not intentional) will be cause for termination of the lease in the soonest time period permitted by applicable law; (3) A rider in the lease that a Household must move out within sixty (60) days if they become over-income at their annual income recertification. An over-income Household will be given a right of first refusal to move into any unit for which they qualify and that is or becomes vacant prior to moving out of their Restricted Unit; And (4) A rider in the lease that a Household must move to the next available qualifying Restricted unit if they are in excess of the maximum occupancy standards at their annual income recertification.

F. Fair Housing Covenants: Owner covenants that it will comply with all applicable state and federal fair housing laws in the marketing and rental of the Restricted Units. Owner agrees to accept as tenants, on the same basis as all other prospective tenants, persons who are recipients of federal certificates or vouchers for rent subsidies under the Section 8 program or any successor program, provided that the total rent to be paid for the subject unit is equal to the then full market rent. The total amount of rent that may be charged and received by Owner for a Restricted Unit is limited to the Affordable Rent.

G. Non-Discrimination Covenants: Owner may not restrict the rental, use, occupancy, or enjoyment of the Restricted Units, the Property, or any portion thereof, on the basis of the race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry,

familial status, source of income, disability, or genetic information of any person. Owner covenants for itself and all persons claiming under or through it, and this Agreement is made and accepted upon and subject to the condition that there may be no discrimination against or segregation of any person or group of persons on account of any basis listed in subdivision (a) or (d) of Section 12955 of the Government Code, as those bases are defined in Sections 12926, 12926.1, subdivision (m) and paragraph (1) of subdivision (p) of Section 12955, and Section 12955.2 of the Government Code, in the lease, use, occupancy, tenure or enjoyment of the Restricted Units. Nor may Owner or any person claiming under or through Owner establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants.

H. Marketing of Units. Owner must offer each Restricted Unit for rental only to Qualified Households. Owner must continuously maintain an interest list of prospective tenants for Restricted Units that may become available in the future. Owner may not charge more than the then current industry standard per Adult Household member for application fees including credit check and screening and background checks.

3. Enforcement of Covenants.

A. The City shall have the right, but not the obligation, to monitor and enforce the covenants contained in this Agreement.

B. Owner shall comply with any monitoring program set up by City to enforce the affordability covenants. Owner shall pay for actual costs of an independent third-party affordable housing consultant chosen by the City to provide, at rates that are competitive in the market area income limit verification that meets the affordable housing requirements of this agreement.

C. Annual Reports. By no later than July 15th of each year following the Commencement of the Term, Owner must submit an annual report ("**Annual Report**") to the Director in a form reasonably satisfactory to the City Manager. The Annual Report must include the following information for each Restricted Unit:

1. The number of bedrooms;

2. The number of people residing in the Restricted Unit;

3. The current rent and other charges;

4. The dates of any vacancies during the previous year; and

5. The total Gross Household Income of the residents upon commencing occupancy of their Restricted Unit and the source of such information.

D. Additional Report Information. In addition to the information in Section 3.C, the information in the Annual Report must include the following:

1. Information on the status of waiting lists for the Restricted Units.

E. In the event that a Household, on annual recertification, is determined to have Gross Household Income in excess of the amounts set forth in Section 2(C) and 2(D) of this Agreement Owner must cause the Household to vacate the Restricted Unit and must re-rent the unit to a Qualified Household. However, Owner shall allow the Household to remain in the Restricted Unit at the Affordable Rent for up to sixty days. If, after sixty days, the Household has not voluntarily vacated, an eviction notice must be served and pursued with due diligence to conclusion. Owner shall offer any such Household that is above 80% area median income an opportunity to rent any then available comparably sized unit at market rent and shall offer any such Household that is at or below 80% area median rent an opportunity to rent any then available comparably sized Low-Income Rental Unit at Affordable Rent.

F. Maintenance of Records. Owner must maintain complete and accurate records pertaining to the Restricted Units for a period of five years after the final date of occupancy by a tenant and must permit any duly authorized representative of City to inspect the books and records of Owner pertaining to the Project including, but not limited to, those records pertaining to the occupancy of each Restricted Unit.

4. Covenant is in Lieu of Affordable Housing Fees. City agrees that Owner's provision of affordable rental housing in accordance with this agreement totally absolves the Project from being charged inclusionary housing fees or any other fees intended to subsidize or contribute to affordable housing in the City.

5. Covenants Running with the Land. All conditions, covenants and restrictions contained in this Agreement shall be covenants running with the land, and shall, in any event, and without regard to technical classification or designation, legal or otherwise, be, to the fullest extent permitted by law and equity, binding for the benefit and in favor of, and enforceable by City, its successors and assigns, against Owner, its successors and assigns, to or of the Property or any portion thereof or any interest therein, and any party in possession or occupancy of said Property or portion thereof. City shall be deemed the beneficiary of the covenants, conditions and restrictions of this Agreement both in its own right and for the purposes of protecting the interests of the community. The covenants, conditions, and restrictions shall run in favor of the City without regard to whether the City has been, remains, or is an owner of any land or interest therein in the Project area. The covenants, conditions and restrictions contained in this Agreement shall not benefit nor be enforceable by any person or entity except the City.

6. Subordination to Permitted Mortgages. The use restrictions contained in Section 1 of this Agreement, and City's rights hereunder, are subordinate to (i) any deed of trust or mortgage encumbering the property provided that all of the proceeds of the loan secured by the deed of trust or mortgage are used to acquire the Property and/or construct the Project, and (ii) any deed of trust or

mortgage securing the first permanent refinancing of the loan described in subsection (i) (said encumbrances are referred to individually and collectively as "Permitted Mortgages"). The use restrictions contained in Section 1 of this Agreement, and the City's rights thereunder, will not be subordinated to any encumbrance existing as of the date of this Agreement other than Permitted Mortgages.

7. Recordation. Prior to issuance of a certificate of occupancy, but not sooner than issuance of building permits for the Project, this Agreement shall be recorded in the office of the County Recorder of Los Angeles County.

8. Term. Every covenant and condition and restriction contained in this Agreement shall remain in effect for fifty-five (55) years from the date on which the Project obtains a certificate of occupancy.

9. Notice and Opportunity to Cure. Prior to exercising any remedies hereunder, City shall give Owner notice of such default. If the default is reasonably capable of being cured within thirty (30) days, Owner shall have such period to effect a cure prior to exercise of remedies by City. If the default is such that it is not reasonably capable of being cured within thirty (30) days, and Owner (a) initiates corrective action within said period, and (b) diligently, continually, and in good faith works to effect a cure as soon as possible, then Owner shall have such additional time as is reasonably necessary to cure the default prior to exercise of any remedies by City.

10. Enforcement. If a violation of any of the covenants or provisions of this Agreement remains uncured after the respective time period set forth in Paragraph 9, above, City and its successors and assigns, without regard to whether City or its successors and assigns is an owner of any land or interest therein to which these covenants relate, may institute and prosecute any proceedings at law or in equity to abate, prevent or enjoin any such violation or attempted violation or to compel specific performance by Owner of its obligations hereunder. No delay in enforcing the provisions hereof as to any breach or violation shall impair, damage or waive the right of the City to enforce the provisions hereof or to obtain relief against or recover for the continuation or repetition of such breach or violations or any similar breach or violation hereof at any later time.

11. Liens. Nothing herein contained shall be deemed to prohibit Owner from contesting the validity or amounts of any encumbrance, lien, levy or attachment, or to limit the remedies available to Owner in respect thereto.

IN WITNESS WHEREOF, the City and the Owner have signed this Agreement as of the dates set opposite their signatures.

CITY OF EL SEGUNDO

By: _____

APPROVED AS TO FORM AND LEGALITY
City Attorney

By:_____

BRE EL SEGUNDO PROPERTY OWNER A LLC

By: _____
Patrick Volz, Vice President

STATE OF CALIFORNIA
COUNTY OF _____

On _____- before me, _____, a Notary Public, personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

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Witness my hand and official seal.

Signature

EXHIBIT A

LEGAL DESCRIPTION

All the certain real property located in the City of El Segundo, County of Los Angeles, State of California, described as follows:

Lot 1 of Vesting Map No. 82806 recorded on _____, 20___, in the County Recorder's Office of Los Angeles County.

EXHIBIT "B"

AFFORDABLE RENTS

a. The gross rents for the Restricted Units shall be based on the rent schedule published annually for Los Angeles County by CTCAC in accordance with IRC Section 42. This schedule currently provides:

Per HUD Notice
Effective: April 1, 2021

CALIFORNIA TAX CREDIT ALLOCATION COMMITTEE 2021

Maximum Rents for Projects From Ceilings Post-1989 and Those from the Pre-1990 Ceilings That Elected with the Secretary of the Treasury* to use the Post-1989 Rents

**(See IRC Section 42 - Section 13142(c) of the Omnibus Budget Reconciliation Act of 1993)*

For Projects Placed in Service on or after 4/1/21+

County	Efficiency	1 BR	2 BR	3 BR
LOS ANGELES				
100% Income Level	$2,070	$2,216	$2,660	$3,072
80% Income Level	$1,656	$1,774	$2,128	$2,459
50% Income Level	$1,035	$1,108	$1,330	$1,536

b. The Housing Related Expenses, as applicable, must be deducted from the gross rent as adjusted for unit size and described above to determine the Affordable Rent.

In the event this schedule ceases to be published, the gross monthly rents shall be calculated using the following methodology. The gross monthly rents must be reduced by the Housing Related Expenses to determine the Affordable Rent,

i. For the sole purpose of calculating the Affordable Rents, the following benchmark household sizes will be applied: Studio/ Efficiency Unit = 1 Person, 1 Bedroom Unit = 1.5 Persons and 2 Bedroom Unit = 3 Persons.

ii. Low Income Rental Units: Gross monthly rent is calculated by taking the most recent HUD Low-Income Limit for benchmark household sizes equal to 1.5 persons multiplied times the number of bedrooms in the unit. The benchmark household size is then multiplied times thirty percent (30%) then divided by twelve (12) to determine the gross monthly rent. By way of example: The FY2021 HUD Low-Income Limit for a 1 person household is $66,250 thus the gross monthly rent for a Studio/Efficiency Unit is ($66,250 x 30%) / 12 = **$1,656**. The FY2021 HUD Low-Income Limit for a 1.5 person household is the 1 person Low-Income Limit plus the 2 person Low-Income Limit, divided by two, thus the gross monthly rent for a 1 Bedroom Unit is (($66,250 + $75,700) /2) x 30%) / 12 = **$1,774**. The FY2021 HUD Low-Income Limit for a 3 person household is $85,150 thus the gross monthly rent for a 2 Bedroom Unit is ($85,150 times 30%) / 12 = **$2,128**.

iii. "Very Low-Income" units: Gross monthly rent is calculated by taking the most recent HUD Very Low-Income Limit for benchmark household sizes equal to 1.5 persons multiplied times the number of bedrooms in the unit.

The benchmark household size is then multiplied times thirty percent (30%) then divided by twelve (12) to determine the gross monthly rent. By way of example: The FY2021 HUD Very Low-Income Limit for a 1 person household is $41,400 thus the gross monthly rent for a Studio/Efficiency Unit is ($41,400 x 30%) / 12 = **$1,035**. The FY2021 HUD Very Low-Income Limit for a 1.5 person household is the 1 person Low- Income Limit plus the 2 person Very Low-Income Limit, divided by two thus the gross monthly rent for a 1 Bedroom Unit is (($41,400 + $47,300) /2) x 30%) / 12 = **$1,108**. The FY2021 HUD Very Low-Income Limit for a 3 person household is $53,200 thus the gross monthly rent for a 2 Bedroom Unit is ($53,200 x 30%) / 12 = **$1,330**.

EXHIBIT C
DESIGNATED RESTRICTED UNITS

EXHIBIT D-2

PCC NORTH AFFORDABLE HOUSING AGREEMENT

Recording Requested by and
When Recorded Return to:

CITY OF EL SEGUNDO
350 Main Street
El Segundo, California 90245

OFFICIAL BUSINESS
Document entitled to free
recording per Government
Code Section 6103

Space above this line for Recorder's use only

AGREEMENT CREATING AFFORDABLE HOUSING COVENANTS (INCLUDING RENTAL RESTRICTIONS)

THIS AGREEMENT is entered into as of _____, 202_, by and between the CITY OF EL SEGUNDO, a municipal corporation (herein referred to as "City") and BRE EL SEGUNDO PARKING LLC, a Delaware limited liability company (herein referred to as "Owner").

A. Owner owns fee title to that certain real property (the "Property") located in the City of El Segundo, County of Los Angeles, State of California, legally described on Exhibit A attached hereto and incorporated herein.

B. Owner has entered into a development agreement with City (the "Development Agreement") entitling Owner to develop a mixed-use project containing 137 multi-family apartment units on the Property (the "Project").

C. In accordance with the requirements of Section 5.2 of the Development Agreement, a minimum of seventeen (17) units, shall be reserved for occupancy at an Affordable Rent to persons or families that qualify as a Low-Income Household or Very Low-Income Household, as follows:

	PCC North	Affordable Housing Units (Sub-Set of Total)	Affordability Levels
Studios	47	9	2 Very Low/7 Low
One Bedrooms	67	6	6 Low
Two Bedrooms	23	2	2 Low
Totals	**137**	**17**	**2 Very Low/15 Low**

D. City desires to enter this Agreement in order to ensure that the required number of Restricted Units will be made available to and occupied by Qualified Households in accordance with the terms and conditions of the Development Agreement.

NOW, THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, CITY AND OWNER AGREE AS FOLLOWS:

1. Definitions

"Adult" means a person 18 years of age or older.

"Affordable Rent" means the maximum gross rent that can be borne by tenants in the Restricted Units, as published by CTCAC annually, minus Housing Related Expenses. The gross rent for the Low Income Rental Units is based on 80% of the Los Angeles County median income for the applicable unit type, and the gross rent for Very Low Income Rental Units is based on 50% of the Los Angeles County median income for the applicable unit type. Affordable Rent amounts will be adjusted annually to reflect increases in maximum gross rent published by CTCAC.

"CTCAC" means the California Tax Credit Allocation Committee.

"Gross Household Income: means all income from whatever source from all Adult Household members, which is anticipated to be received during the 12-month period following the date of the determination of Gross Household Income. The applicable sources of income are defined in California Code of Regulations Title 25 Housing and Community Development Section 6914.

"Household" means all the persons who will occupy the Restricted Unit as their principal residence. A child who is subject to a legally binding shared-custody agreement, in which the child resides with the Household at least 50% of the time, is counted as a member of the Household. Excluded from the definition of Household are live-in caregivers/caretakers, foster children, unborn children and children being pursued for legal custody or adoption that are not currently living with the Household.

"Housing Related Expenses" means any costs other than rent that are required to be borne by a tenant in a Restricted Unit in the Project. These costs include, but are not limited to, a Utility Allowance, any cost that are imposed by the Owner on a mandatory basis, and any mandatory costs that are charged by the Owner for amenities included in the Project. Owner may charge tenants in a Restricted Unit optional costs that are not Housing Related Expenses related to elective amenities requiring an optional service fee such as classes, room rentals, food service, or special events, but is prohibited from charging a tenant in a restricted unit any fee for equal access to common areas or project amenities such as pools, gyms, community rooms and outdoor areas. In addition, Owner is prohibited from charging any optional amenity fees to a tenant in a Restricted Unit that is higher than optional amenity fees charged to tenants in non-restricted units.

"HUD" means the United States Department of Housing and Urban Development.

"Low-Income Household" means a Household whose Gross Household Income does not exceed eighty percent (80%) of area median income adjusted for family size and published by HUD, under the parameters established by Section 3 of the U.S. Housing Act of 1937, as amended, for the Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area.

"Low-Income Rental Unit" means a rental unit in the Project reserved for and rented to Low-Income Households at a maximum monthly rent as set forth in Exhibit B.

"Qualified Household" means a Household that qualifies as a Very Low-Income Household or Low-Income Household.

"Restricted Units" means the Very Low-Income Rental Units and Low-Income Rental Units.

"Utility Allowance" means the allowance for utilities not furnished by the Owner, which shall be calculated based on the most current version of the allowances for Tenant Furnished Utilities and Other Services worksheet prepared by the Los Angeles Community Development Authority or its successor agency using the form prepared by HUD.

"Very Low-Income Household" means a Household whose Gross Household Income does not exceed fifty percent (50.0%) of area median income, adjusted for family size published by the United States Department of Housing and Urban Development (HUD), under the parameters established by Section 3 of the U.S. Housing Act of 1937, as amended, for the Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area.

"Very Low-Income Rental Unit" means a rental unit in the Project reserved for and rented to Very Low-Income Households at a maximum monthly rent as set forth in Exhibit B.

2. Use of the Property. Owner, on behalf of itself and its successors, assigns, and each successor in interest to Owner's interest in the Property or any part thereof, hereby covenants and agrees as follows:

A. The portion of the Property comprising the Project shall be used for residential use. Owner shall rent: (i) Nine (9) of the studio units to be developed at Affordable Rents to Low-Income Households and Very Low-Income Households in the proportions shown in Recital "C;" (ii) 6 of the one-bedroom units to be developed at Affordable Rents to Low-Income Households, and (iii) 2 of the two-bedroom units to be developed at Affordable Rents to Low-Income Households.

B. The designated Restricted Units are shown on the floor plan attached hereto as Exhibit "C." These will be fixed locations *(Note prior to execution of this Agreement the Owner and City shall identify the Restricted Units on the floor plan. Those units shall not be segregated from the market rate units. The Restricted Units, by type and affordability, should be equitably distributed throughout the Project. They shall not be distinguishable, nor located in inferior locations nor clustered).* For the full term, the number, size, type, and

amenity level of Restricted Units shall not be fewer than the number nor different from the size, type and amenity level described in this Agreement. However, the location of the Restricted Units can be changed with prior written approval from the City.

C. The formula for determining the current applicable (for the year 2021) Affordable Rents is set forth in the Schedule of Affordable Rents attached to this Agreement as Exhibit "B".

D. Occupancy Requirements: For a studio Restricted Unit, a maximum of two people can occupy the unit. For a one-bedroom Restricted Unit , a maximum of three people can occupy the unit. For a two-bedroom Restricted Unit, a maximum of five people can occupy the unit.

E. The Owner must forward a copy of its initial standard form of lease agreement to the City for final review as to compliance with this Agreement and thereafter upon request by City. In addition to other requirements imposed under this Agreement, Owner's form of lease agreement must include the following: (1) restrictions prohibiting tenants from subleasing the Restricted Unit and that the Qualified Household must have continued residence in the Restricted Unit; (2) a provision to the effect that Owner has relied on the income certification and supporting information supplied by the tenant in determining qualification for occupancy of the Restricted Unit and that any material misstatement in such certification (whether or not intentional) will be cause for termination of the lease in the soonest time period permitted by applicable law; (3) A rider in the lease that a Household must move out within sixty (60) days if they become over-income at their annual income recertification. An over-income Household will be given a right of first refusal to move into any unit for which they qualify and that is or becomes vacant prior to moving out of their Restricted Unit; and (4) A rider in the lease that a Household must move to the next available qualifying Restricted unit if they are in excess of the maximum occupancy standards at their annual income recertification.

F. Fair Housing Covenants: Owner covenants that it will comply with all applicable state and federal fair housing laws in the marketing and rental of the Restricted Units. Owner agrees to accept as tenants, on the same basis as all other prospective tenants, persons who are recipients of federal certificates or vouchers for rent subsidies under the Section 8 program or any successor program, provided that the total rent to be paid for the subject unit is equal to the then full market rent. The total amount of rent that may be charged and received by Owner for a Restricted Unit is limited to the Affordable Rent.

G. Non-Discrimination Covenants: Owner may not restrict the rental, use, occupancy, or enjoyment of the Restricted Units, the Property, or any portion thereof, on the basis of the race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry,

familial status, source of income, disability, or genetic information of any person. Owner covenants for itself and all persons claiming under or through it, and this Agreement is made and accepted upon and subject to the condition that there may be no discrimination against or segregation of any person or group of persons on account of any basis listed in subdivision (a) or (d) of Section 12955 of the Government Code, as those bases are defined in Sections 12926, 12926.1, subdivision (m) and paragraph (1) of subdivision (p) of Section 12955, and Section 12955.2 of the Government Code, in the lease, use, occupancy, tenure or enjoyment of the Restricted Units. Nor may Owner or any person claiming under or through Owner establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants.

H. Marketing of Units. Owner must offer each Restricted Unit for rental only to Qualified Households. Owner must continuously maintain an interest list of prospective tenants for Restricted Units that may become available in the future. Owner may not charge more than the then current industry standard per Adult Household member for application fees including credit check and screening and background checks.

3. Enforcement of Covenants.

A. The City shall have the right, but not the obligation, to monitor and enforce the covenants contained in this Agreement.

B. Owner shall comply with any monitoring program set up by City to enforce the affordability covenants. Owner shall pay for actual costs of an independent third-party affordable housing consultant chosen by the City to provide, at rates that are competitive in the market area income limit verification that meets the affordable housing requirements of this agreement.

C. Annual Reports. By no later than July 15th of each year following the Commencement of the Term, Owner must submit an annual report ("**Annual Report**") to the Director in a form reasonably satisfactory to the City Manager. The Annual Report must include the following information for each Restricted Unit:

6. The number of bedrooms;

7. The number of people residing in the Restricted Unit;

8. The current rent and other charges;

9. The dates of any vacancies during the previous year; and

10. The total Gross Household Income of the residents upon commencing occupancy of their Restricted Unit and the source of such information.

D. Additional Report Information. In addition to the information in Section 3(C), the information in the Annual Report must include the following:

2. Information on the status of waiting lists for the Restricted Units.

E. In the event that a Household, on annual recertification, is determined to have Gross Household Income in excess of the amounts set forth in Section 2(C) and 2(D) of this Agreement Owner must cause the Household to vacate the Restricted Unit and must re-rent the unit to a Qualified Household. However, Owner shall allow the Household to remain in the Restricted Unit at the Affordable Rent for up to sixty days. If, after sixty days, the Household has not voluntarily vacated, an eviction notice must be served and pursued with due diligence to conclusion. Owner shall offer any such Household that is above 80% area median income an opportunity to rent any then available comparably sized unit at market rent and shall offer any such Household that is at or below 80% area median rent an opportunity to rent any then available comparably sized Low-Income Rental Unit at Affordable Rent.

F. Maintenance of Records. Owner must maintain complete and accurate records pertaining to the Restricted Units for a period of five years after the final date of occupancy by a tenant and must permit any duly authorized representative of City to inspect the books and records of Owner pertaining to the Project including, but not limited to, those records pertaining to the occupancy of each Restricted Unit.

4. Covenant is in Lieu of Affordable Housing Fees. City agrees that Owner's provision of affordable rental housing in accordance with this agreement totally absolves the Project from being charged inclusionary housing fees or any other fees intended to subsidize or contribute to affordable housing in the City.

5. Covenants Running with the Land. All conditions, covenants and restrictions contained in this Agreement shall be covenants running with the land, and shall, in any event, and without regard to technical classification or designation, legal or otherwise, be, to the fullest extent permitted by law and equity, binding for the benefit and in favor of, and enforceable by City, its successors and assigns, against Owner, its successors and assigns, to or of the Property or any portion thereof or any interest therein, and any party in possession or occupancy of said Property or portion thereof. City shall be deemed the beneficiary of the covenants, conditions and restrictions of this Agreement both in its own right and for the purposes of protecting the interests of the community. The covenants, conditions, and restrictions shall run in favor of the City without regard to whether the City has been, remains, or is an owner of any land or interest therein in the Project area. The covenants, conditions and restrictions contained in this Agreement shall not benefit nor be enforceable by any person or entity except the City.

6. Subordination to Permitted Mortgages. The use restrictions contained in Section 1 of this Agreement, and City's rights hereunder, are subordinate to (i) any deed of trust or mortgage encumbering the property provided that all of the proceeds of the loan secured by the deed of trust or mortgage are used to acquire the Property and/or construct the Project, and (ii) any deed of trust or

mortgage securing the first permanent refinancing of the loan described in subsection (i) (said encumbrances are referred to individually and collectively as "Permitted Mortgages"). The use restrictions contained in Section 1 of this Agreement, and the City's rights thereunder, will not be subordinated to any encumbrance existing as of the date of this Agreement other than Permitted Mortgages.

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11. Liens. Nothing herein contained shall be deemed to prohibit Owner from contesting the validity or amounts of any encumbrance, lien, levy or attachment, or to limit the remedies available to Owner in respect thereto.

IN WITNESS WHEREOF, the City and the Owner have signed this Agreement as of the dates set opposite their signatures.

CITY OF EL SEGUNDO

By: _____

APPROVED AS TO FORM AND LEGALITY
City Attorney

By:_____

BRE EL SEGUNDO PARKING LLC

By: _____
Patrick Volz, Vice President

STATE OF CALIFORNIA
COUNTY OF
_____

On _____- before me, _____, a Notary Public,
personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

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Maximum Rents for Projects From Ceilings Post-1989 and Those from the Pre-1990 Ceilings That Elected with the Secretary of the Treasury* to use the Post-1989 Rents

**(See IRC Section 42 - Section 13142(c) of the Omnibus Budget Reconciliation Act of 1993)*

For Projects Placed in Service on or after 4/1/21+

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i. For the sole purpose of calculating the Affordable Rents, the following benchmark household sizes will be applied: Studio/ Efficiency Unit = 1 Person, 1 Bedroom Unit = 1.5 Persons and 2 Bedroom Unit = 3 Persons.

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iii. "Very Low-Income" units: Gross monthly rent is calculated by taking the most recent HUD Very Low-Income Limit for benchmark household sizes equal to 1.5 persons multiplied times the number of bedrooms in the unit. The benchmark household size is then multiplied times thirty percent (30%) then divided by twelve (12) to determine the gross monthly rent. By way of example: The FY2021 HUD Very Low-Income Limit for a 1 person household is $41,400 thus the gross monthly rent for a Studio/Efficiency Unit is ($41,400 x 30%) / 12 = **$1,035**. The FY2021 HUD Very Low-Income Limit for a 1.5 person household is the 1 person Low- Income Limit plus the 2 person Very Low-Income Limit, divided by two thus the gross monthly rent for a 1 Bedroom Unit is (($41,400 + $47,300) /2) x 30%) / 12 = **$1,108**. The FY2021 HUD Very Low-Income Limit for a 3 person household is $53,200 thus the gross monthly rent for a 2 Bedroom Unit is ($53,200 x 30%) / 12 = **$1,330**.

EXHIBIT C
DESIGNATED RESTRICTED UNITS

RESOLUTION NO. 2905
EXHIBIT "C"

El Segundo General Plan Land Use Element Excerpt - Pages 3-5 and 3-6

Modify the following text on pages 3-5 and 3-6

Land Use Designations

Following is a discussion of each type of land use designation found in the City. Each contains a short description and an indication of the maximum land use density or intensity allowed. Land use density refers to the number of dwelling units per acre of land (du/ac). This distinction is generally used only for residential designations. Land use intensity refers to the quantity of building on a specific lot size. For example, a 3,000 square foot single-family home would be considered a more intense use than a 1,600 square foot home on the same size lot. An example of non-residential intensity would be a multi-story building, which is considered a more intense use than a single-story building on the same sized lot. For non-residential uses, intensity is expressed in terms of Floor Area Ratio (FAR) which describes the ratio of the lot size to the building size or as otherwise defined in the Zoning Code from time to time. For example, typically a lot with a land area of 10,000 square feet and a FAR of 1.0, would allow a building area of 10,000 square feet. The allowed FAR may be exceeded for properties east of ~~Sepulveda Boulevard~~Pacific Coast Highway only, with approval of a Transfer of Development Rights (TDR) Plan.

Residential Designations

Single-Family Residential

Permits one single-family home on one legal lot at a maximum density of eight dwelling units per acre. The minimum lot size for new lots is 5,000 square feet.

Two-Family Residential

Permits two residences on one legal lot, either attached or detached, at a maximum density of 12 dwelling units per acre. The minimum lot size for new lots is 7,000 square feet.

Multi-Family Residential

Permits multiple dwelling units in either a condominium or apartment configuration. A condominium or apartment is a structure or group of structures containing three or more dwelling units, as defined by the Zoning Code. The maximum permitted density for multi-family residential is 27 dwelling units per acre on properties equal to or less than 15,000 square feet and 18 du/ac on properties greater than

15,000 square feet.

540 East Imperial Avenue Specific Plan
Permits a mix of residential uses with two possible development options. Option 1 would allow up to a maximum of 304 units in a Senior Housing Community with a Multi- Family Residential (R- 3) component, or Option 2 would allow up to a maximum of 58 units in a Mixed Residential Development (single-family and multi-family units). This designation is intended to encourage design flexibility and provide transitional densities and uses that are compatible with surrounding land uses. This designation is not intended to be used elsewhere within the City.

Pacific Coast Commons Specific Plan
Permits a mix of hotel, commercial, and residential uses. The existing Fairfield Inn & Suites by Marriott and Aloft Hotels, which have 350 and 246 rooms respectively remain and are considered conforming uses. The maximum allowed gross floor area for the commercial uses is 11,252 square feet. The maximum number of residential units is 263.

RESOLUTION NO. 2905
EXHIBIT "D"

General Plan Land Use Plan Excerpt Pages 3-10 thru 3-12

Modify the following text on pages 3-10 and 3-12:

Proposed Land Use Plan

"The following is a discussion of the 1992 Land Use Plan, which indicates future land uses for the entire City. For ease of discussion, the City is divided into four quadrants and the proposedland use designations within that quadrant are discussed. To knowwhat is allowed under each designation, please reference the land use definitions listed above.

Northwest Quadrant

The northwest quadrant of the City has the most varied mix of uses within the City. All of the City's residential units, the Downtown area, the Civic Center, and the older industrial area of SmokyHollow, are located in this quadrant. The 1992 Plan retains the three residential designations found on the old Plan: single-family, two-family, and multi-family, plus ~~a new designation~~two new designations of 540 East Imperial Avenue Specific Plan and Pacific Coast Commons Specific Plan, which is a mixed-use, high-density residential and commercial designation. The Plan shows 357.2 acres of single-family, 57.4 acres of two-family, 126.74 acres of multi- family, ~~and~~ 5.65 acres of 540 East Imperial Avenue Specific Plan and 6.38 acres of Pacific Coast Commons Specific Plan. The total number of dwelling units projected by the Plan is 8,089ok[1]. One of the major goals of the 1992 Plan is to preserve the residential neighborhoods.

The Smoky Hollow area, which houses many of the City's older industrial uses, has been designated Smoky Hollow Specific Plan. The Specific Plan allows a combination of office, industrial, research and development, public facilities, parking facilities, and limited retail and restaurant uses. The Smoky Hollow area is approximately 94.3 acres.

The 222 Kansas Street Specific Plan (222 KSSP) consists of 4.83 acres, which were previously a part of the Smoky Hollow area. The 222 Kansas Street Specific Plan permits primarily office, light industrial, manufacturing, and research and development uses. The southerly portion may be used for governmental purposessubject to a development agreement. Commercial retail and restaurant uses are prohibited.

The Downtown area is designated as Downtown Commercial

(8.4acres) and Downtown Specific Plan (26.3 acres), where existing uses are already of a community-serving nature. There are also 7.0 acres designated for Neighborhood Commercial uses along Grand and Imperial Avenues and at Mariposa and Center Streets. These have been designated only where there are existing neighborhood-serving commercial uses.

The public schools, private schools, Library, and other public uses are all shown as Public Facilities. The Civic Center is included in the Downtown Specific Plan area. In addition, each of the existing public parks are designated as such. The open space areas under utility transmission corridors and the preserve for the Blue Butterfly are designated as Open Space.

The areas designated for parking on the Plan include public- and privately-owned lots which are necessary to serve existing businesses and the Downtown area.

The southwest corner of ~~Sepulveda Boulevard~~Pacific Coast Highway and Imperial Avenue is designated Corporate Office (17.8 ac) allowing a mix of office uses, similar to what exists there now, with retail in the lobby.

There are General Commercial uses indicated along ~~Sepulveda Boulevard~~Pacific Coast Highway, where there are existing commercial uses ~~including the Hacienda Hotel~~. There is also one General Commercial area along Imperial Avenue, where the Crown Sterling Suites Hotel now exists."

[1] The new total of 8,089 represents the maximum number of units developed under Option 1 of the 540 East Imperial Avenue Specific Plan. This number will be lower (7,843 units) if Option 2 is developed with a maximum of 58 units.

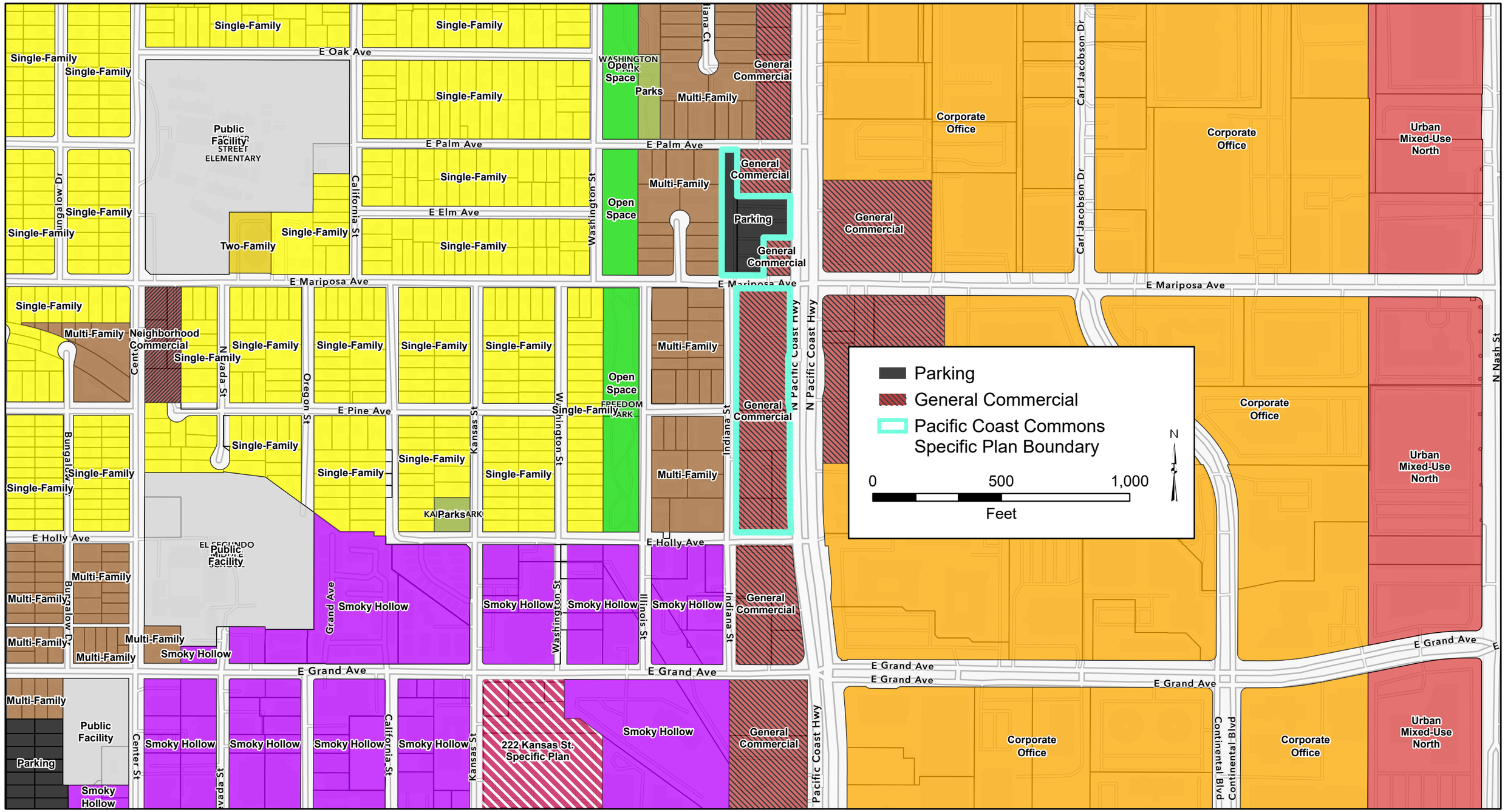
RESOLUTION NO. 2905
EXHIBIT "E"
GENERAL PLAN LAND USE PLAN EXISTING TRENDS BUILDOUT

1992 General Plan Summary of Existing Trends Buildout			
Land Use Category	Acres	Dwelling Units	Square Footage
Single-Family Residential	357.2	2,858	-
Two-Family Residential	57.4	934	-
540 East Imperial Avenue Specific Plan	-	-	-
	5.65	304[3]	-
Multi-Family Residential	119.7	3,531	-
Pacific Coast Commons Specific Plan	**6.38**	**263**	**293,650**
Neighborhood Commercial	6.6	85[1]	89,110
Downtown Commercial	8.8	18[1]	383,328
General Commercial	~~37.1~~**32.62**	-	~~1,618,508~~**1,421,093**
Corporate Office	213.62	-	12,461,324
Commercial Center	85.8	-	850,000
Smoky Hollow Specific Plan	94.3	126	2,973,010
Urban Mixed-Use North	232.5	-	13,166,010
Urban Mixed-Use South	70.6	-	3,997,936
124th Street Specific Plan	3.9	1	73,530
Aviation Specific Plan	5.4	-	66,000
Downtown Specific Plan	26.3	232[1]	1,145,628
Corporate Campus Specific Plan	46.5	-	2,550,000
199 North Continental Boulevard	-	-	-
Specific Plan	1.75	-	70,132
222 Kansas Street Specific Plan	4.65	-	121,532
888 No. Sepulveda Boulevard		-	
Specific Plan	2.98	-	206,710
El Segundo South Campus	-	-	-
Specific Plan	142.28	-	4,231,547
Parking	~~11.8~~**9.95**	-	-
Light Industrial	213.82	-	16,190,266
Heavy Industrial	1001	-	-[2]
Public Facilities	87.9	-	-
Federal Government	90.6	-	-
Open Space	77.0	-	-
Parks	50		-
Street and Railroad R.O.W	442.6	-	-
Totals	3,497	~~8,089~~**8,352**	~~58,301,758~~**60,290,806**
Population Projection	17,287		

1 Existing construction and recently constructed, renovated commercial centers and legal non-conforming residential uses at densities that are currently higher than allowed by the land use designations in this plan will not realistically be converted to mixed commercial/residential uses and these buildings are expected to remain for the life of the Plan.

2 The heavy industrial shown on this plan includes the Chevron Refinery and former Southern California Edison Generation Station. These facilities have processing equipment and tanks rather than buildings and are expected to remain for the life of the Plan. Therefore, no estimated building square footage is shown.

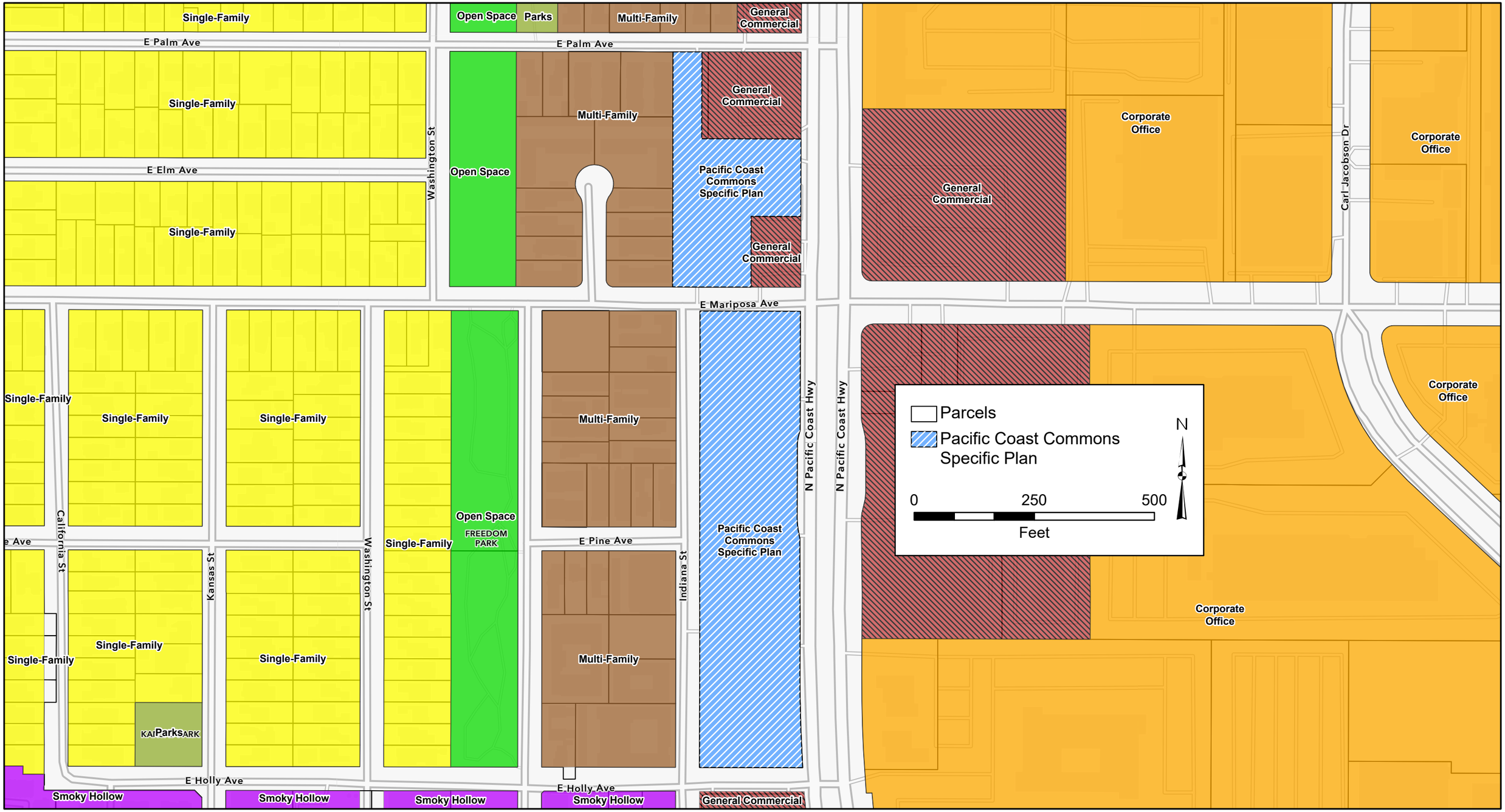
3 This number represents the maximum number of dwelling units that can be developed in Option 1 of the 540 East Imperial Avenue Specific Plan. If Option 1 is not built, the maximum number of units that can be developed in Option 2 of the 540 East Imperial Avenue Specific Plan is 58 residential dwelling units.



City of El Segundo

Pacific Coast Commons Specific Plan
Existing General Plan

CITY OF EL SEGUNDO



City of El Segundo

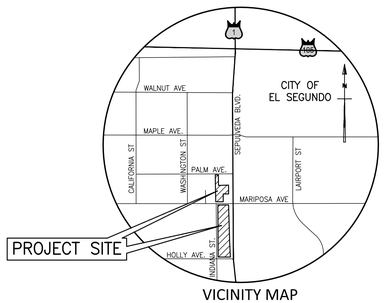
Pacific Coast Commons Specific Plan
Proposed Specific Plan and General Plan

CITY OF EL SEGUNDO

Default Folder: Y:\map_proj\Planning\Pacific Coast Commons Specific Plan

VESTING TENTATIVE TRACT MAP No. 82806

FOR MERGER, SUBDIVISION AND RESIDENTIAL/COMMERCIAL CONDOMINIUM PURPOSES



VICINITY MAP
(NOT TO SCALE)

LEGAL DESCRIPTION

(PER CHICAGO TITLE INSURANCE COMPANY ORDER No. 00107022-994-LT2-DB DATED MARCH 22, 2019)

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF EL SEGUNDO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1: (APN: 4139-025-075)

LOT 428 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 2: (APN: 4139-025-073, 074, 076, 081)

LOTS 385, 386, 387, 429 AND 430 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 3: (APN: 4139-025-091)

LOTS 382, 383, 384, 431, 432 AND 433 IN BLOCK 123 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM PARCELS 1 AND 2, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM, GAS, ASPHALTUM, OTHER HYDROCARBONS AND OTHER MINERALS AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OPERATIONS AND THE EXCLUSIVE RIGHT TO USE THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN, OR WITHDRAWING THEREFROM GAS, OIL, OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 4: (portion of APN: 4139-024-057)

THE WESTERLY 60 FEET OF LOTS 2 AND 9 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 5: (APN: 4139-024-058)

LOTS 1, 2, 9 AND 10 IN BLOCK 113 OF EL SEGUNDO, IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20 PAGES 114 AND 115 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 60 FEET OF SAID LOTS 2 AND 9.

ALSO EXCEPT THEREFROM THE NORTHERLY 181.00 FEET OF SAID LOTS 1 AND 2.

ALSO EXCEPT THE SOUTH 147.03 FEET OF LOT 10.

ALSO EXCEPT THEREFROM ALL PETROLEUM, GAS, ASPHALTUM AND OTHER HYDROCARBONS AND OTHER MINERALS, WHETHER SIMILAR TO THOSE HEREIN SPECIFIED OR NOT, WITHIN OR UNDERLYING OR THAT MAY BE PRODUCED FROM SAID LAND, TOGETHER WITH THE EXCLUSIVE RIGHT TO ENTER INTO, ACROSS OR THROUGH THE SUBSURFACE OF SAID LAND FOR THE PURPOSE OF TAKING OR PRODUCING ANY PETROLEUM AND OTHER HYDROCARBONS, AND OTHER MINERALS IN AND UNDER SAID LAND, BY DIRECTIONAL DRILLING OR OTHER SUBSURFACE OF SAID LAND FOR THE PURPOSE OF INJECTING THEREIN OR WITHDRAWING THEREFROM GAS, OIL OR OTHER SUBSTANCES, WHETHER HYDROCARBON OR NOT, FOR STORAGE, REPRESSURING OR OTHER PURPOSES, BUT WITH NO RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS GRANTED TO STANDARD OIL COMPANY OF CALIFORNIA, A CORPORATION, BY DEED RECORDED APRIL 28, 1947 IN BOOK 24472 PAGE 357, OFFICIAL RECORDS.

PARCEL 6: (portion of APN: 4139-024-057)

A PARCEL OF LAND SITUATE IN THE CITY OF EL SEGUNDO, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, BEING A PORTION OF BLOCK 113 OF EL SEGUNDO, AS PER MAP RECORDED IN BOOK 20, PAGES 114 THROUGH 115, INCLUSIVE, IN THE OFFICE OF THE RECORDER OF SAID COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF LOT 1 OF TRACT NO. 48436, AS PER MAP RECORDED IN BOOK 1180, PAGES 68 THROUGH 69, INCLUSIVE, OF MAPS, IN THE OFFICE OF THE RECORDER OF SAID COUNTY; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58' 36" EAST 60.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF PALM AVENUE SOUTH 89° 58' 36" EAST 13.19 FEET; THENCE SOUTH 00° 01' 15" WEST 181.00 FEET; THENCE NORTH 89° 58' 36" WEST 13.11 FEET; THENCE NORTH 00° 01' 50" EAST 181.00 FEET TO THE TRUE POINT OF BEGINNING.

APN: 4139-025-057 thru 4139-025-058, 4139-025-073 thru 4139-025-076, 4139-025-081, 4139-025-091

SITE AREA

GROSS AREA (PER LEGAL DESCRIPTION) PROPERTY LINE FEE

EXISTING PARCEL 1	21,954 SQ. FT. OR 0.504 ACRES	
EXISTING PARCEL 2	129,864 SQ. FT. OR 2.981 ACRES	
EXISTING PARCEL 3	145,756 SQ. FT. OR 3.346 ACRES	
EXISTING PARCEL 4	29,650 SQ. FT. OR 0.681 ACRES	
EXISTING PARCEL 5	61,121 SQ. FT. OR 1.403 ACRES	
EXISTING PARCEL 6	2,380 SQ. FT. OR 0.055 ACRES	

GROSS AREA (TO STREET CENTERLINE)

EXISTING PARCEL 1	19,355 SQ. FT. OR 0.444 ACRES	
EXISTING PARCEL 2	123,029 SQ. FT. OR 2.824 ACRES	
EXISTING PARCEL 3	141,832 SQ. FT. OR 3.256 ACRES	
EXISTING PARCEL 4	32,050 SQ. FT. OR 0.736 ACRES	
EXISTING PARCEL 5	59,860 SQ. FT. OR 1.374 ACRES	
EXISTING PARCEL 6	2,644 SQ. FT. OR 0.061 ACRES	

NET AREA (POST-EXISTING RIGHT-OF-WAY IMPROVEMENTS, DEVELOPABLE PROPERTY)

EXISTING PARCEL 1	9,564 SQ. FT. OR 0.220 ACRES	
EXISTING PARCEL 2	89,928 SQ. FT. OR 2.064 ACRES	
EXISTING PARCEL 3	97,922 SQ. FT. OR 2.248 ACRES	
EXISTING PARCEL 4	29,350 SQ. FT. OR 0.674 ACRES	
EXISTING PARCEL 5	48,975 SQ. FT. OR 1.124 ACRES	
EXISTING PARCEL 6	2,380 SQ. FT. OR 0.055 ACRES	

NET AREA (POST-EXISTING RIGHT-OF-WAY IMPROVEMENTS, DEVELOPABLE PROPERTY)

PROPOSED LOT 1	56,692 SQ. FT. OR 1.301 ACRES	
PROPOSED LOT 2	39,425 SQ. FT. OR 0.905 ACRES	
PROPOSED LOT 3	67,487 SQ. FT. OR 1.549 ACRES	
PROPOSED LOT 4	33,811 SQ. FT. OR 0.776 ACRES	
PROPOSED LOT 5	67,056 SQ. FT. OR 1.539 ACRES	
PROPOSED LOT 6	13,649 SQ. FT. OR 0.313 ACRES	

NET AREA (POST-PROPOSED DEDICATIONS, DEVELOPABLE PROPERTY)

PROPOSED LOT 1	56,692 SQ. FT. OR 1.301 ACRES	
PROPOSED LOT 2	39,425 SQ. FT. OR 0.905 ACRES	
PROPOSED LOT 3	67,487 SQ. FT. OR 1.549 ACRES	
PROPOSED LOT 4	33,811 SQ. FT. OR 0.776 ACRES	
PROPOSED LOT 5	67,056 SQ. FT. OR 1.539 ACRES	
PROPOSED LOT 6	13,649 SQ. FT. OR 0.313 ACRES	

EXCEPTIONS

(PER CHICAGO TITLE INSURANCE COMPANY ORDER No. 00107022-994-LT2-DB DATED MARCH 22, 2019)

1. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORDS.

(2) THE RESERVATION OF THE SOUTH 25 FEET OF LOT 428 OF THE NORTH 25 FEET AND THE WEST 25 FEET OF LOT 385, THE WEST 25 FEET OF LOT 386, THE WEST 25 FEET AND THE SOUTH 25 FEET OF LOT 387, AND THE NORTH 25 FEET OF LOT 430, FOR PRIVATE ROADWAYS AND TO LAY AND MAINTAIN THEREIN, WATER AND GAS PIPES, SEWERS, ELECTRIC LIGHT AND POWER, TELEGRAPH AND TELEPHONE LINES, POLES AND CONDUITS, TOGETHER WITH A PERPETUAL ENTRY THEREON FOR THE ERECTION, LAYING AND MAINTENANCE THEREOF, AND THE CONSTRUCTION AND MAINTENANCE OF CURBS, SIDEWALKS AND GUTTERS THEREON FOR THE PERPETUAL AND IRREVOCABLE USE OF THE OWNER OR OWNERS OF EACH OF THE LOS IN SAID BLOCK 123, AND TO THEIR HEIRS OR ASSIGNS AS APPURTENANT TO EACH OF SAID LOTS, AS RESERVED BY LOS ANGELES TRUST AND SAVINGS BANK OF THE MAP OF EL SEGUNDO, RECORDED IN BOOK 22 PAGES 106 AND 107 OF MAPS.

(3) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: PACIFIC-SOUTHWEST TRUST AND SAVINGS BANK
PURPOSE: ROAD
RECORDING NO: IN BOOK 4897 PAGE 294, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

SAID EASEMENT WAS SINCE BEEN ASSIGNED TO THE CITY OF EL SEGUNDO AS TO THE NORTH 25 FEET OF LOTS 385 AND 430.

(4) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF EL SEGUNDO
PURPOSE: SANITARY SEWER LINES
RECORDING NO: IN BOOK 17140 PAGE 25, OF OFFICIAL RECORDS
AFFECTS: SOUTHERLY 7.5 FEET OF LOT 428

(5) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT,

COURT: SUPERIOR COURT
CASE NO.: 357580
PURPOSE: PUBLIC STREET AND HIGHWAY
RECORDING NO: IN BOOK 13174 PAGE 92, OF OFFICIAL RECORDS
AFFECTS: THOSE PORTIONS OF LOTS 429 AND 430, LYING EAST OF A LINE DESCRIBED AS BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF SAID LOT 430, WITH AS LINE THAT IS PARALLEL WITH AND 70 FEET WEST OF THE EAST LINE OF SAID LOTS; THENCE SOUTH ALONG SAID PARALLEL LINE TO A POINT THEREON DISTANT 783.85 FEET SOUTHERLY FROM THE CENTER LINE OF MARIPOSA AVENUE, 40 FEET WIDE, AS SHOWN ON SAID MAP; THENCE SOUTHERLY ALONG A CURVE CONCAVE TO THE EAST AND HAVING A RADIUS OF 3050 FEET TO THE SOUTH LINE OF SAID LOT 429.

(6) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF EL SEGUNDO
PURPOSE: SANITARY SEWER LINES
RECORDING NO: IN BOOK 17075 PAGE 253, OF OFFICIAL RECORDS
AFFECTS: THE SOUTHERLY 7.5 FEET OF LOT 387

(7) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY, A CALIFORNIA CORPORATION
PURPOSE: POLE LINES AND CONDUITS
RECORDING DATE: NOVEMBER 14, 1949
RECORDING NO: 2141, IN BOOK 31464, PAGE 123, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

(8) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF EL SEGUNDO, A MUNICIPAL CORPORATION
PURPOSE: PUBLIC STREET
RECORDING DATE: SEPTEMBER 16, 1957
RECORDING NO: 3151, OF OFFICIAL RECORDS
AFFECTS: SOUTHERLY 25 FEET OF LOTS 387 AND 428 TO BE KNOWN AS HOLLY AVENUE

(9) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF EL SEGUNDO, A CORPORATION
PURPOSE: PUBLIC STREET
RECORDING DATE: JANUARY 16, 1957
RECORDING NO: 2787, OF OFFICIAL RECORDS
AFFECTS: THE WEST 25.00 FEET OF LOTS 385, 386 AND 387

(10) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT/PLAT;

IN FAVOR OF: LOS ANGELES TRUST AND SAVINGS BANK AND THE OWNERS OF OTHER LOTS
PURPOSE: POLE LINES AND CONDUITS, ROADWAY AND RAILROAD TRACKS
AFFECTS: THAT PORTION OF SAID LAND AS SHOWN ON SAID MAP.

(11) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: PACIFIC-SOUTHWEST TRUST AND SAVINGS BANK, A CORPORATION
PURPOSE: STREET
RECORDING DATE: JANUARY 26, 1926
RECORDING NO: IN BOOK 4571, PAGE 207, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

(12) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT,

COURT: SUPERIOR COURT
CASE NO.: 357580
PURPOSE: WIDENING OF ARIZONA DRIVE, NOW SEPULVEDA BOULEVARD
RECORDING DATE: JANUARY 28, 1934
RECORDING NO: IN BOOK 13174 PAGE 92, OF OFFICIAL RECORDS
AFFECTS: EASTERLY 70 FEET OF PARCELS 3& 5.

(13) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF LOS ANGELES
PURPOSE: PUBLIC STREET
RECORDING DATE: JUNE 30, 1952
RECORDING NO: 2469, IN BOOK 39276, PAGE 20, OF OFFICIAL RECORDS
AFFECTS: NORTH 5 FEET OF PARCEL 3

(14) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF EL SEGUNDO
PURPOSE: PUBLIC STREET
RECORDING DATE: MARCH 9, 1953
RECORDING NO: 1936, IN BOOK 41156 PAGE 359, OF OFFICIAL RECORDS
AFFECTS: WEST 25 FEET OF LOTS 382, 383 AND 384 OF PARCEL 3

(15) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
PURPOSE: UNDERGROUND CONDUITS
RECORDING DATE: JULY 1, 1958
RECORDING NO: 3792, IN BOOK D-143 PAGE 326, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

(16) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
PURPOSE: UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS
RECORDING DATE: AUGUST 24, 1979
RECORDING NO: 79-947919, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

(17) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
(PROPOSED TO DEDICATE THIS AREA TO CALTRANS AND GRANT AN INGRESS/EGRESS EASEMENT THAT INCLUDES THIS SAME AREA TO BRE EL SEGUNDO PROPERTY OWNER A LLC, A DELAWARE LIMITED LIABILITY COMPANY & BRE EL SEGUNDO PROPERTY OWNER B LLC, A DELAWARE LIMITED LIABILITY COMPANY)

GRANTED TO: CITY OF EL SEGUNDO, A MUNICIPAL CORPORATION
PURPOSE: PUBLIC STREET
RECORDING DATE: AUGUST 27, 1987
RECORDING NO: 87-1377588, OF OFFICIAL RECORDS
AFFECTS: PORTIONS OF THE LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

(18) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
(TO BE QUITCLAIMED)

GRANTED TO: EL SEGUNDO LAND AND IMPROVEMENT COMPANY
PURPOSE: PIPES AND CONDUITS
RECORDING DATE: MAY 26, 1916
RECORDING NO: IN BOOK 6294, PAGE 50 OF DEEDS
AFFECTS: SOUTH 2.5 FEET OF LOTS 1 AND 2 IN PARCELS 4 AND 5.

EXCEPTIONS CONT'D

(PER CHICAGO TITLE INSURANCE COMPANY ORDER No. 00107022-994-LT2-DB DATED MARCH 22, 2019)

19. COVENANTS, CONDITIONS AND RESTRICTIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING, BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAWS, AS SET FORTH IN THE DOCUMENT REFERRED TO IN THE NUMBERED ITEM LAST ABOVE SHOWN.

SAID COVENANTS, CONDITIONS AND RESTRICTIONS PROVIDE THAT A VIOLATION THEREOF SHALL NOT DEFEAT THE LIEN OF ANY MORTGAGE OR DEED OF TRUST MADE IN GOOD FAITH AND FOR VALUE.

(20) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
(TO BE QUITCLAIMED)

GRANTED TO: SECURITY-FIRST NATIONAL BANK OF LOS ANGELES CALIFORNIA
PURPOSE: PUBLIC UTILITY
RECORDING DATE: FEBRUARY 05, 1934
RECORDING NO: IN BOOK 12516 PAGE 382, OF OFFICIAL RECORDS
AFFECTS: NORTHERLY 2.5 FEET OF LOT 9 IN PARCEL 4

21. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

ENTITLED: MEMORANDUM OF LEASE
LESSOR: HACIENDA HOTEL, INC., A CALIFORNIA CORPORATION
LESSEE: T-MOBILE WEST CORPORATION, A DELAWARE CORPORATION
RECORDING DATE: DECEMBER 21, 2010
RECORDING NO: 2010-1889489, OF OFFICIAL RECORDS

THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

22. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT

ENTITLED: MASTER COVENANT AND AGREEMENT REGARDING ON-SITE BMP MAINTENANCE
DATED: OCTOBER 16, 2014
EXECUTED BY: RUBICON B HACIENDA LLC
IN FAVOR OF: CITY OF EL SEGUNDO
RECORDING DATE: NOVEMBER 26, 2014
RECORDING NO: 2014-1274355 OF OFFICIAL RECORDS

REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

(23) MATTERS CONTAINED IN THAT CERTAIN DOCUMENT

ENTITLED: MASTER COVENANT AND AGREEMENT REGARDING MAINTENANCE AND USE OF OFF-STREET PARKING
DATED: MAY 7, 2015
EXECUTED BY: RUBICON B HACIENDA LLC
IN FAVOR OF: CITY OF EL SEGUNDO
RECORDING DATE: JULY 1, 2015
RECORDING NO: 2015-0792116 OF OFFICIAL RECORDS

REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

(24) MATTERS CONTAINED IN THAT CERTAIN DOCUMENT

ENTITLED: MASTER COVENANT AND AGREEMENT REGARDING MAINTENANCE AND USE OF OFF-STREET PARKING
DATED: MAY 7, 2015
EXECUTED BY: RUBICON B HACIENDA LLC
IN FAVOR OF: CITY OF EL SEGUNDO
RECORDING DATE: JULY 1, 2015
RECORDING NO: 2015-0792117 OF OFFICIAL RECORDS

REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

25. ANY RIGHTS, INTERESTS, OR CLAIMS WHICH MAY EXIST OR ARISE BY REASON OF THE FOLLOWING MATTERS DISCLOSED BY SURVEY,

ALTA SURVEY BY: O. K. O. ENGINEERING, INC. (MICHAEL FURLONG)
DATE: MARCH 9, 2017, LAST REVISED JUNE 2, 2017
JOB NO.: 2017-33

A. A 0.3' ENCROACHMENT OF A BLOCK WALL LOCATED ON PARCEL 4 INTO THE STREET RIGHT OF WAY OF PALM AVENUE.
B. AN ENCROACHMENT OF 2 POWER POLES (#1191682E & #SC10150), CROSS ARMS AND OVERHEAD WIRES ACROSS THE NORTHERLY BOUNDARY OF PARCELS 4 AND 6, TO UNDISCLOSED AMOUNTS.
C. AN ENCROACHMENT OF POWER CROSS ARMS AND OVERHEAD WIRES ALONG THE WESTERLY BOUNDARY OF PARCEL 4, TO UNDISCLOSED AMOUNTS.
D. A 0.5' TO 0.7' ENCROACHMENT OF A CHAIN LINK FENCE 4 INTO THE STREET RIGHT OF WAY OF PALM AVENUE.
E. TWO OVERHEAD AREA LIGHTS CROSS THE WESTERLY BOUNDARY OF PARCEL 4.
F. A CHAIN LINK FENCE CROSSES THE EASTERLY BOUNDARY OF PARCEL 6 AND THE NORTHERLY BOUNDARY OF PARCEL 5.
G. AN UNRECORDED EASEMENT OR LESSER RIGHT FOR A POWER POLE (#1767353E) LOCATED ALONG THE NORTHERLY MOST SOUTHERLY BOUNDARY OF PARCEL 5.
H. AN UNRECORDED EASEMENT OR LESSER RIGHT FOR A POWER POLE (#1667351E) LOCATED ALONG THE SOUTHERLY MOST EASTERLY BOUNDARY OF PARCEL 5.
I. AN ENCROACHMENT OF A CONCRETE SIDEWALK ONTO PARCELS 4 AND 5 FROM THE STREET RIGHT OF WAY OF MARIPOSA AVENUE.
J. AN 2.8' ENCROACHMENT OF A BLOCK WALL ONTO PARCEL 4, AT THE SOUTHWEST CORNER, FROM THE LAND ADJOINING THE PROPERTY TO THE WEST.
K. AN UNRECORDED EASEMENT OR LESSER RIGHT FOR 3 TELEPHONE MANHOLES LOCATED NEAR THE NORTHEAST CORNER OF PARCEL 3.
L. AN UNRECORDED EASEMENT OR LESSER RIGHT FOR A 2.3' X 3.3' EDISON VAULT LOCATED NEAR THE NORTHWEST PORTION OF PARCEL 3.
M. AN UNRECORDED EASEMENT OR LESSER RIGHT FOR A POWER POLE (#1238780E) ALONG THE WESTERLY BOUNDARY OF PARCEL 3.
N. UNIDENTIFIED 1.3' X 3.3' AND 2.2' X 4.2' PULL BOXES LOCATED ALONG THE WESTERLY BOUNDARY OF PARCEL 3.
O. AN ENCROACHMENT OF A 9 STORY STUCCO BUILDING LOCATED ON PARCEL 3 OVER AN EASEMENT FOR ELECTRICAL UTILITY PURPOSES. SAID EASEMENT IS DESCRIBED IN ITEM 14 ABOVE (SHOWN AS ITEM # 15 HEREON).
P. AN ENCROACHMENT OF A 5 STORY STUCCO BUILDING LOCATED ON PARCEL 3 OVER AN EASEMENT FOR ELECTRICAL UTILITY PURPOSES. SAID EASEMENT IS DESCRIBED IN ITEM 14 ABOVE (SHOWN AS ITEM # 15 HEREON).
Q. AN ENCROACHMENT OF A SIDEWALK AND CAP RAMP ONTO THE PROPERTY FROM THE STREET RIGHT OF WAY OF SEPULVEDA BOULEVARD AND MARIPOSA AVENUE.
R. AN UNRECORDED EASEMENT FOR A PORTION OF SEPULVEDA BOULEVARD, PARCELS 1, 2, 3 AND 5
S. AN ENCROACHMENT OF A 9 STORY STUCCO BUILDING LOCATED ON PARCEL 2 OVER AN EASEMENT FOR TELEPHONE UTILITY PURPOSES. SAID EASEMENT IS DESCRIBED IN ITEM 1 ABOVE (SHOWN AS ITEM # 2 HEREON).
T. AN ENCROACHMENT OF A 9 STORY STUCCO BUILDING LOCATED ON PARCEL 2 OVER AN EASEMENT FOR UTILITY PURPOSES. SAID EASEMENT IS DESCRIBED IN ITEM 2 ABOVE (SHOWN AS ITEM # 3 HEREON).
U. AN ENCROACHMENT OF A 9 STORY STUCCO BUILDING LOCATED ON PARCEL 2 OVER AN EASEMENT FOR ROAD PURPOSES. SAID EASEMENT IS DESCRIBED IN ITEM 6 ABOVE (SHOWN AS ITEM # 2 HEREON).
V. AN ENCROACHMENT OR UNRECORDED EASEMENT FOR A POWER POLE (#708222H) AND GUY ANCHOR LOCATED ALONG THE NORTHERLY BOUNDARY OF PARCEL 1.
W. INTENTIONALLY DELETED.

26. AMENDED AND RESTATED DEED OF TRUST WITH ABSOLUTE ASSIGNMENT OF LEASES AND RENTS, SECURITY AGREEMENT AND FIXTURE FILING GIVEN TO SECURE AN INDEBTEDNESS IN THE AMOUNT SHOWN BELOW,

AMOUNT: $200,000,000.00
DATE: OCTOBER 2, 2018
TRUSTOR/GRANTOR TORRANCE INN JV, LLC, A DELAWARE LIMITED LIABILITY COMPANY, BRE EL SEGUNDO PROPERTY OWNER A LLC, A DELAWARE LIMITED LIABILITY COMPANY, BRE EL SEGUNDO PROPERTY OWNER B LLC, A DELAWARE LIMITED LIABILITY COMPANY, AND BRE EL SEGUNDO PARKING LLC, A DELAWARE LIMITED LIABILITY COMPANY
TRUSTEE: AMERICAN SECURITIES COMPANY, A CALIFORNIA CORPORATION
BENEFICIARY: WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT FOR THE LENDERS
LOAN NO.: NOT SHOWN
RECORDING DATE: OCTOBER 5, 2018
RECORDING NO: 20181017591, OF OFFICIAL RECORDS

AFFECTS: THE HEREIN DESCRIBED LAND AND OTHER LAND. (NOT PLOTTED - NOT A SURVEY MATTER)

27. AMENDED AND RESTATED ASSIGNMENT OF LEASES AND RENTS

ASSIGNED TO: WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT FOR THE LENDERS
RECORDING DATE: OCTOBER 5, 2018
RECORDING NO: 20181017592, OF OFFICIAL RECORDS

AFFECTS: THE HEREIN DESCRIBED LAND AND OTHER LAND. (NOT PLOTTED - NOT A SURVEY MATTER)

28. MATTERS WHICH MAY BE DISCLOSED BY AN INSPECTION AND/OR BY A CORRECT ALTA/NSPS LAND TITLE SURVEY OF SAID LAND THAT IS SATISFACTORY TO THE COMPANY, AND/OR BY INQUIRY OF THE PARTIES IN POSSESSION THEREOF.

29. ANY RIGHTS OF THE PARTIES IN POSSESSION OF A PORTION OF, OR ALL OF, SAID LAND, WHICH RIGHTS ARE NOT DISCLOSED BY THE PUBLIC RECORDS.

THE COMPANY WILL REQUIRE, FOR REVIEW, A FULL AND COMPLETE COPY OF ANY UNRECORDED AGREEMENT, CONTRACT, LICENSE AND/OR LEASE, TOGETHER WITH ALL SUPPLEMENTS, ASSIGNMENTS AND AMENDMENTS THERETO, BEFORE ISSUING ANY POLICY OF TITLE INSURANCE WITHOUT EXCEPTING THIS ITEM FROM COVERAGE.

THE COMPANY RESERVES THE RIGHT TO EXCEPT ADDITIONAL ITEMS AND/OR MAKE ADDITIONAL REQUIREMENTS AFTER REVIEWING SAID DOCUMENTS.

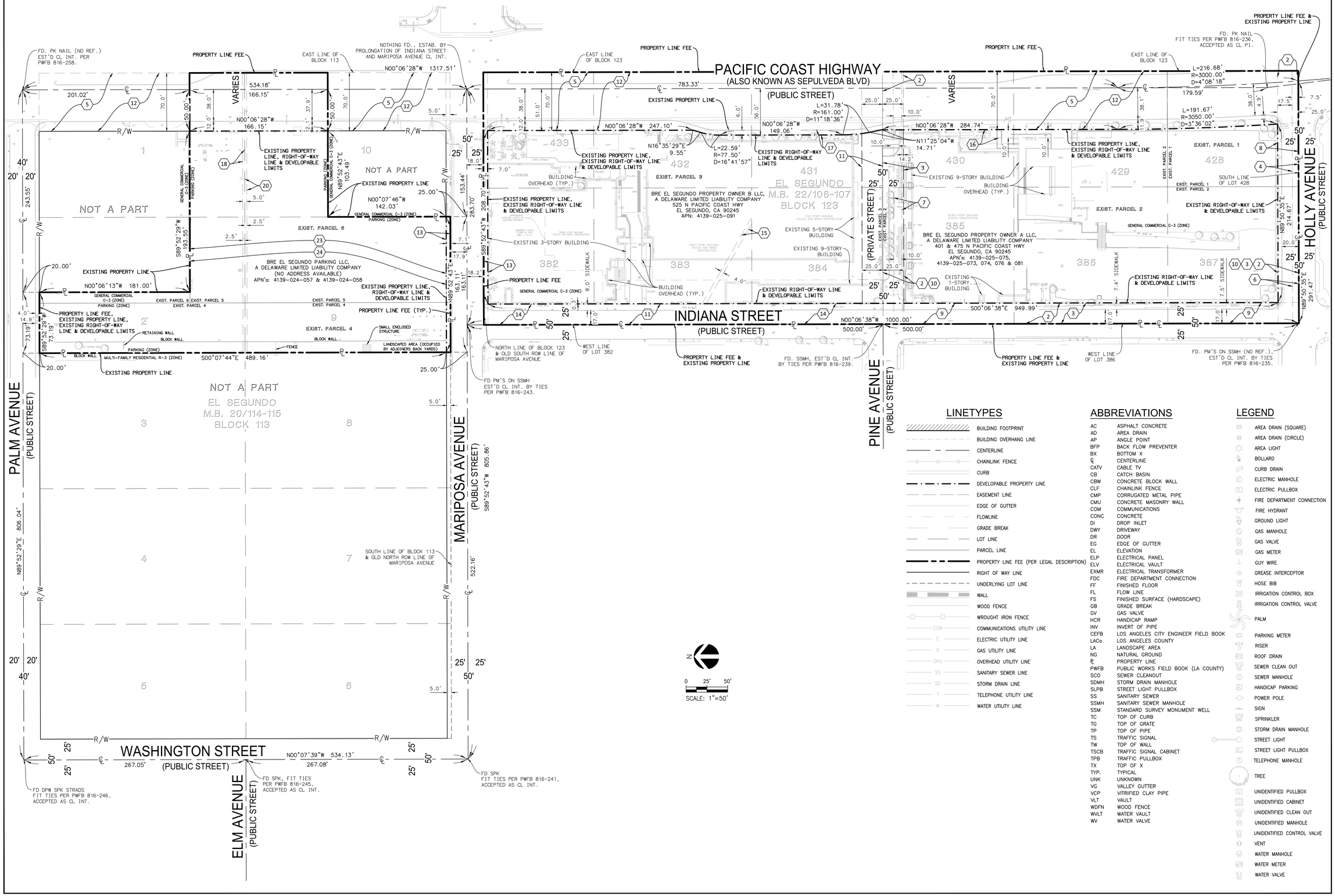
***REMAINING ITEMS ON PRELIMINARY TITLE REPORT NOT SHOWN AS PLOTTED ARE EITHER NOT PLOTTABLE, BLANKET IN NATURE OR NOT A SURVEY MATTER.

SETBACK TABLE PER CITY OF EL SEGUNDO (PROPOSED ZONING)

PACIFIC COAST HIGHWAY: BUILDING AND STRUCTURES WITHIN THE PCC MIXED-USE 1 (PCC MU-1) LAND USE DISTRICT, THE PCC COMMERCIAL-1 (PCC COM-1) LAND USE DISTRICT, THE PCC COMMERCIAL-2

VESTING TENTATIVE TRACT MAP No. 82806

EXISTING CONDITIONS



LINETYPES

- BUILDING FOOTPRINT
- BUILDING OVERHANG LINE
- CENTERLINE
- CHAINLINK FENCE
- CURB
- DEVELOPABLE PROPERTY LINE
- EASEMENT LINE
- EDGE OF GUTTER
- FLOWLINE
- GRADE BREAK
- LOT LINE
- PARCEL LINE
- PROPERTY LINE FEE (PER LEGAL DESCRIPTION)
- RIGHT OF WAY LINE
- UNDERLYING LOT LINE
- WALL
- WOOD FENCE
- WROUGHT IRON FENCE
- COMMUNICATIONS UTILITY LINE
- ELECTRIC UTILITY LINE
- GAS UTILITY LINE
- OVERHEAD UTILITY LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- TELEPHONE UTILITY LINE
- WATER UTILITY LINE

ABBREVIATIONS

AC	ASPHALT CONCRETE
AD	AREA DRAIN
AP	ANGLE POINT
BFP	BACK FLOW PREVENTER
BX	BOTTOM X
℄	CENTERLINE
CATV	CABLE TV
CB	CATCH BASIN
CBW	CONCRETE BLOCK WALL
CLF	CHAINLINK FENCE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY WALL
COM	COMMUNICATIONS
CONC	CONCRETE
DI	DROP INLET
DWY	DRIVEWAY
DR	DOOR
EG	EDGE OF GUTTER
EL	ELEVATION
ELP	ELECTRICAL PANEL
ELV	ELECTRICAL VAULT
EXMR	ELECTRICAL TRANSFORMER
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FL	FLOW LINE
FS	FINISHED SURFACE (HARDSCAPE)
GB	GRADE BREAK
GV	GAS VALVE
HCR	HANDICAP RAMP
INV	INVERT OF PIPE
CEFB	LOS ANGELES CITY ENGINEER FIELD BOOK
LACo	LOS ANGELES COUNTY
LA	LANDSCAPE AREA
NG	NATURAL GROUND
ℙ	PROPERTY LINE
PWFB	PUBLIC WORKS FIELD BOOK (LA COUNTY)
SCO	SEWER CLEANOUT
SDMH	STORM DRAIN MANHOLE
SLPB	STREET LIGHT PULLBOX
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SSM	STANDARD SURVEY MONUMENT WELL
TC	TOP OF CURB
TG	TOP OF GRATE
TP	TOP OF PIPE
TS	TRAFFIC SIGNAL
TW	TOP OF WALL
TSCB	TRAFFIC SIGNAL CABINET
TPB	TRAFFIC PULLBOX
TX	TOP OF X
TYP.	TYPICAL
UNK	UNKNOWN
VG	VALLEY GUTTER
VCP	VITRIFIED CLAY PIPE
VLT	VAULT
WDFN	WOOD FENCE
WVLT	WATER VAULT
WV	WATER VALVE

LEGEND

- AREA DRAIN (SQUARE)
- AREA DRAIN (CIRCLE)
- AREA LIGHT
- BOLLARD
- CURB DRAIN
- ELECTRIC MANHOLE
- ELECTRIC PULLBOX
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- GROUND LIGHT
- GAS MANHOLE
- GAS VALVE
- GAS METER
- GUY WIRE
- GREASE INTERCEPTOR
- HOSE BIB
- IRRIGATION CONTROL BOX
- IRRIGATION CONTROL VALVE
- PALM
- PARKING METER
- RISER
- ROOF DRAIN
- SEWER CLEAN OUT
- SEWER MANHOLE
- HANDICAP PARKING
- POWER POLE
- SIGN
- SPRINKLER
- STORM DRAIN MANHOLE
- STREET LIGHT
- STREET LIGHT PULLBOX
- TELEPHONE MANHOLE
- TREE
- UNIDENTIFIED PULLBOX
- UNIDENTIFIED CABINET
- UNIDENTIFIED CLEAN OUT
- UNIDENTIFIED MANHOLE
- UNIDENTIFIED CONTROL VALVE
- VENT
- WATER MANHOLE
- WATER METER
- WATER VALVE

kpff
700 FLOWER ST., Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
F: 213.266.5294
www.kpff.com

REVISIONS

DATE	△	ISSUED FOR

DATE	01/21/2021
PROJECT NUMBER	1800649
DRAWN BY	DB
CHECKED BY	CJ
SCALE	AS SPECIFIED

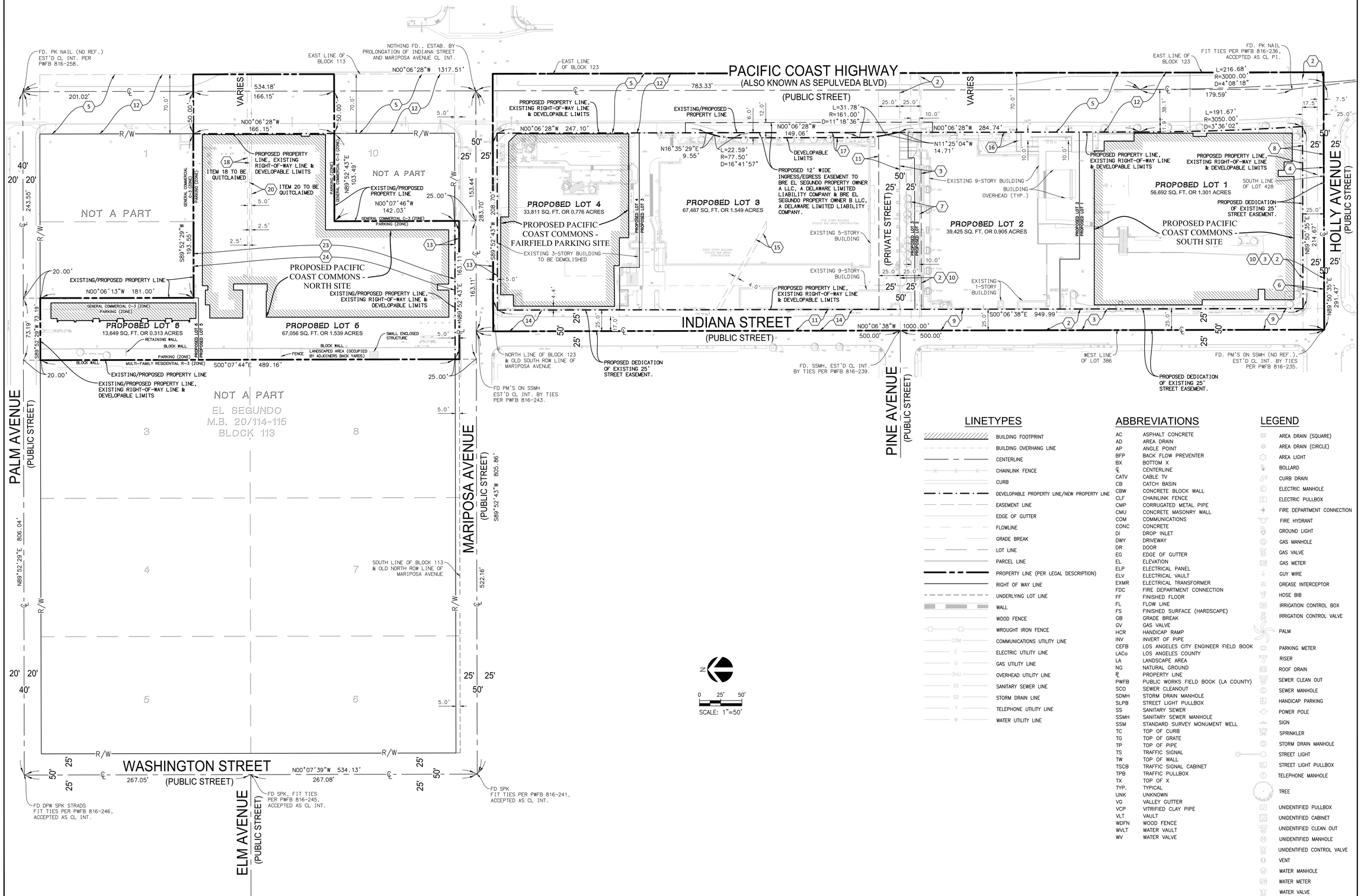
PROJECT DESCRIPTION
401, 475 & 525 N PACIFIC COAST HWY
EL SEGUNDO, CA 90245

SHEET NUMBER

SHEET 2 0F 3

VESTING TENTATIVE TRACT MAP No. 82806

PROPOSED CONDITIONS



LINETYPES

- BUILDING FOOTPRINT
- BUILDING OVERHANG LINE
- CENTERLINE
- CHAINLINK FENCE
- CURB
- DEVELOPABLE PROPERTY LINE/NEW PROPERTY LINE
- EASEMENT LINE
- EDGE OF GUTTER
- FLOWLINE
- GRADE BREAK
- LOT LINE
- PARCEL LINE
- PROPERTY LINE (PER LEGAL DESCRIPTION)
- RIGHT OF WAY LINE
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COM	COMMUNICATIONS
CONC	CONCRETE
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DWY	DRIVEWAY
DR	DOOR
EG	EDGE OF GUTTER
EL	ELEVATION
ELP	ELECTRICAL PANEL
ELV	ELECTRICAL VAULT
EXMR	ELECTRICAL TRANSFORMER
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
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FS	FINISHED SURFACE (HARDSCAPE)
GB	GRADE BREAK
GV	GAS VALVE
HCR	HANDICAP RAMP
INV	INVERT OF PIPE
CEFB	LOS ANGELES CITY ENGINEER FIELD BOOK
LACo	LOS ANGELES COUNTY
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PWFB	PUBLIC WORKS FIELD BOOK (LA COUNTY)
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SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SSM	STANDARD SURVEY MONUMENT WELL
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- AREA DRAIN (CIRCLE)
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- CURB DRAIN
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- HOSE BIB
- IRRIGATION CONTROL BOX
- IRRIGATION CONTROL VALVE
- PALM
- PARKING METER
- RISER
- ROOF DRAIN
- SEWER CLEAN OUT
- SEWER MANHOLE
- HANDICAP PARKING
- POWER POLE
- SIGN
- SPRINKLER
- STORM DRAIN MANHOLE
- STREET LIGHT
- STREET LIGHT PULLBOX
- TELEPHONE MANHOLE
- TREE
- UNIDENTIFIED PULLBOX
- UNIDENTIFIED CABINET
- UNIDENTIFIED CLEAN OUT
- UNIDENTIFIED MANHOLE
- UNIDENTIFIED CONTROL VALVE
- VENT
- WATER MANHOLE
- WATER METER
- WATER VALVE

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REVISIONS

DATE	△	ISSUED FOR

DATE	01/21/2021
PROJECT NUMBER	1800649
DRAWN BY	DB
CHECKED BY	CJ
SCALE	AS SPECIFIED

PROJECT DESCRIPTION

401, 475 & 525 N PACIFIC COAST HWY
EL SEGUNDO, CA 90245

SHEET NUMBER

SHEET 3 OF 3

FEHR PEERS

MEMORANDUM

Date: February 17, 2021

To: Lionel Uhry, Mar Ventures

From: Vivian Lee and Tom Gaul

Subject: Pacific Coast Commons – Shared Parking Analysis *LA19-3078*

Fehr & Peers conducted a shared parking analysis for the proposed Pacific Coast Commons (PCC) development. The objective of the shared parking analysis is to assess the potential parking demand of each of the three various sites of the project at full buildout to determine whether the proposed supply is adequate to meet peak demand. This report outlines the methodology used for the shared parking analysis, as well as the methodology used to determine the parking ratios used for the hotel and the residential land uses that is used in the shared parking analysis.

PROJECT DESCRIPTION

Pacific Coast Commons is proposed mixed-use development in the City of El Segundo consisting of 263 residential dwelling units and 11,000 square feet of commercial space. The project is just over ½-mile from the Metro Mariposa Green Line Station and is also serviced by several bus routes including two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two LADOT Commuter Express (Route 438, 574) routes. The residential buildings would provide a mix of 91 studio, 119 one-bedroom, and 47 two-bedroom units with parking provided in new parking structures. Six townhouse-style units are also proposed, each of which would provide individual garages. For the purpose of this analysis, the project is separated into three different sites, as follows:

- PCC North Site [Land Use Area 5]
    - 143 residential units (137 apartments & 6 townhomes)
        - 47 Studios
        - 67 One-Bedrooms
        - 23 Two-Bedrooms
    - 2,223 square feet of retail space
    - 253 total parking spaces
        - 241 parking spaces
        - 12 townhome parking spaces in individual garages

- PCC Fairfield Site [Land Use Area 3 & 4]
    - Fairfield Hotel (350 rooms, already in operation)
    - 3,273 square feet of retail space
    - 215 replacement parking spaces for the Fairfield Hotel

- PCC South Site [Land Use Area 1 & 2]
    - 120 residential units
        - 44 Studios
        - 52 One-Bedrooms
        - 24 Two-Bedrooms
    - 5,756 square feet of commercial space
        - 2,056 square feet of retail space
        - 3,700 square feet of fast casual restaurant
    - Aloft Hotel (246 rooms, already in operation)
    - 336 parking spaces

PARKING DEMAND MODEL

The shared parking analysis was conducted using methodology provided in the Urban Land Institute's (ULI) *Shared Parking, 2nd Edition*.[1] The model was calibrated and adjusted based on the current parking demand for the existing hotels at the site based on the empirical parking counts conducted in May 2019 and ITE parking ratios for multifamily residential properties. These include adjustments to specific base parking rates and time-of-day occupancy factors.

BACKGROUND ON URBAN LAND INSTITUTE'S SHARED PARKING

ULI sponsored a national study in 1984 that established a basic methodology for analyzing parking demand in mixed-use developments and developed averages for parking rates by land use. Fehr & Peers staff was involved in the 2004 update of this national study sponsored by ULI. The analysis presented in this memorandum uses data from the updated *Shared Parking, 2nd Edition* report.

Shared parking is a concept in which land uses in close proximity share a "pool" of available parking spaces in order to reduce the overall supply needed for the development as a whole. Shared parking is practical in situations where variations exist in vehicles by hour, by day, or season at individual land uses.

In the shared parking methodology, the base parking rate and daily/hourly/seasonal patterns for each land use are established, and then the overall parking demand is calculated by taking into account the unique travel characteristics of the project being analyzed. In this analysis, certain adjustments were made to the base parking rate and time-of-day occupancy factor.

The calibrated model was then used to estimate peak parking demand for the peak month of the year for each project site.

[1] *Shared Parking.* Urban Land Institute. (2004). https://uli.bookstore.ipgbook.com/shared-parking-products-9780874202328.php

PARKING DEMAND ASSUMPTIONS

To determine the parking demand for Pacific Coast Commons, the following assumptions were made:

- Each of the three garages can be utilized as "overflow" parking if needed due to one of the other sites parking demand exceeding its on-site supply.[2]
- Peak parking demand rates for the residential units was estimated based on data from the El Segundo Municipal Code parking requirements and the Institute of Transportation Engineers' (ITE) *Parking Generation, 5th Edition*[3]; as discussed further below.
- The parking provided for residents of the townhouses in the individual garages were not included as part of the analysis, but guest parking for the townhouses were included in the shared parking calculation.
- The hotel peak parking demand rate was calculated using empirical data collected in May 2019 as part of this study at the Aloft and Fairfield hotels already operating onsite; as discussed further below.
- Peak parking demands for the retail and restaurant uses was estimated based on the El Segundo Municipal Code parking requirements for those uses.

RESIDENTIAL PARKING SUPPLY AND DEMAND RATE

Residential Parking Demand Research

To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition

The Institute of Transportation Engineers published *Parking Generation, 5th Edition* in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas. The 5th Edition includes additional survey data from Center City Core and Dense Multi-Use Urban locations as well. The latest survey information differentiates whether the survey data was collected within close proximity (½ mile) to rail transit. While the report does not provide authoritative findings, recommendations, or standards on parking demand, it is often referenced by planners and designers in making parking supply estimations and decisions.

Table 1 summarizes the parking supply recommendations from ITE for mid-rise multifamily housing developments. The General Urban/Suburban not within ½ mile of rail transit rates are the most conservative, although it should be noted that Pacific Coast Commons is located approximately ½ mile from the Metro Green Line Mariposa Station.

---

[2] Based on Conditional Use Permits approved by the El Segundo Planning Commission on October 9, 2014.
[3] *Parking Generation, 5th Edition.* Institute of Transportation Professionals. (2019). https://www.ite.org/technical-resources/topics/trip-and-parking-generation/

Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
    - Proximity to transit can reduce the rate by approximately 25 percent

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different land uses allowed within the city. Section 15-15-6 presents the following requirements for multifamily developments:

- Two spaces per dwelling unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

Pacific Coast Commons Residential Parking Demand Rate

Based on the residential parking demand studies reviewed above, the following parking demand rates based on using a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used for the shared parking analysis:

- One resident space per bedroom
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

As shown in **Table 2**, this demand rate for the Pacific Coast Commons is conservative when compared to other similar projects (market rate, outside the ½ mile rail, etc.). Assuming that the demand is equal to the El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Table 3 shows the total parking demand based on the above demand rate.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ bedroom	91 bedrooms	91
1 Bedroom	1 space/ bedroom	119 bedrooms	119
2 Bedroom	1 space/ bedroom	94 bedrooms	94
Guest	1 space/ 3 units [a]	263 units	87
		Total	**391**

Parking demand for residents is projected to be 304 spaces. Demand for residential guests is estimated to be 87 spaces, for a total demand of 391 parking spaces.

Pacific Coast Commons Residential Parking Supply

However, the Pacific Coast Commons project is proposing to provide parking using a modified residential parking requirement, based on unit type/number of bedrooms, which is more conservative than the demand rate. The follow parking supply is proposed:

- One space per studio unit
- 1.5 spaces per one-bedroom unit
- Two spaces per two-bedroom unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

Table 4 shows the proposed parking supply based on the above modified residential parking requirements.

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
		Total	**451**

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.

HOTEL PARKING DEMAND RATE

Although hotel rates are available from ITE, these rates are highly variable. Since the hotels for this project are currently in operation, Fehr & Peers conducted an empirical analysis of the existing parking demands at the Fairfield and Aloft Hotels, in place of using the ITE rates.

Existing Parking Supply

A series of parking lots currently serve the Fairfield Hotel and the Aloft Hotel. The "North" parking lot, located north of Mariposa Avenue, provides 232 parking spaces. This parking lot is currently gate controlled. The on-site parking lot at the Fairfield Hotel provides 33 parking spaces. The Aloft Hotel parking lot, located north of Holly Avenue, provides 165 parking spaces. The Conditional Use Permit for the hotels allows the Fairfield and Aloft Hotels to share the parking in the North parking lot north of Mariposa Avenue; therefore, the series of parking lots is viewed in this analysis as a system containing a total of 430 parking spaces. All parking lots are utilized by hotel guests and employees.

Existing Parking Occupancy

Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Table 5 shows the occupied spaces at each parking lot on both nights. On Wednesday night/early Thursday morning, the North parking lot was 53% occupied, the Fairfield on-site parking lot was 58% occupied, and the Aloft parking lot was 61% occupied. In total, the three lots combined were 56% occupied. On Saturday night/early Sunday morning, the North parking lot was 69% occupied, the Fairfield on-site parking lot was 45% occupied, and the Aloft parking lot was 56% occupied. In total, the three lots combined were 62% occupied. Count sheets can be found in **Appendix A**.

Table 5: Hotel Parking Utilization

Thursday, May 2, 2019 - 2:00 AM					
Lot	**Regular**	**Handicap**	**Total Spaces Occupied**	**Total Spaces**	**% Occupied**
North	123	0	123	232	53%
Fairfield	17	2	19	33	58%
Aloft	98	2	100	165	61%
Sunday, May 5, 2019 - 2:00 AM					
Lot	**Regular**	**Handicap**	**Total Spaces Occupied**	**Total Spaces**	**% Occupied**
North	158	1	159	232	69%
Fairfield	13	2	15	33	45%
Aloft	91	2	93	165	56%

Hotel Room Occupancy

Because of the hotels' close proximity to the Los Angeles International Airport (LAX), a portion of rooms are occupied by flight crews on any given night. On the Wednesday night, the Fairfield Hotel was 94% occupied (330 out of 350 rooms) and the Aloft Hotel was 98% occupied (242 out of 246 rooms). Of the total occupied rooms at the Fairfield and Aloft Hotels, 47% and 19% were occupied by flight crews, respectively. On the Saturday night, the Fairfield Hotel was 76% occupied (265 out of 350 rooms) and the Aloft Hotel was 75% occupied (184 out of 246 rooms). Of the total occupied rooms at the Fairfield and Aloft Hotels, 54% and 22% were occupied by flight crews, respectively. **Table 6** shows the number of total occupied rooms.

Table 6: Hotel Room Occupancy

Thursday, May 2, 2019 - 2:00 AM			
Hotel	**Total Rooms Available**	**Total Rooms Occupied**	**Total % Occupied**
Fairfield	350	330	94%
Aloft	246	242	98%
Sunday, May 5, 2019 - 2:00 AM			
Hotel	**Total Rooms Available**	**Total Rooms Occupied**	**Total % Occupied**
Fairfield	350	265	76%
Aloft	246	184	75%

Hotel Parking Demand Rates

Table 7 shows the empirical hotel parking demand rates. The parking demand rates were calculated using the total number of parking spaces occupied and total rooms occupied. Due to the Conditional Use Permit for the hotel allowing the Fairfield and Aloft Hotels to share parking in the parking lot north of Mariposa Avenue, a combined demand rate was developed across both properties. On Wednesday night, the combined demand rate was 0.42 per occupied room. On Saturday night, the combined demand rate was 0.59 per occupied room.

Table 7: Hotel Parking Demand Rate

Thursday, May 2, 2019 - 2:00 AM			
Hotel	**Total Spaces Occupied**	**Total Rooms Occupied**	**Occupied Spaces per Occupied Room**
Fairfield & Aloft Combined	242	572	0.42
Sunday, May 5, 2019 - 2:00 AM			
Hotel	**Total Spaces Occupied**	**Total Rooms Occupied**	**Occupied Spaces per Occupied Room**
Fairfield & Aloft Combined	267	449	0.59

Both hotels have a higher demand rate on the weekend than weekday, even though more rooms are occupied during the weekday. This is likely due to more families/tourists staying at the hotel during the weekends and having personal/rental cars with them. During the week, the hotel guests are more likely to be there for business and utilize ride sharing vehicles for their stay. Similarly, the flight crews which stay at the hotel often during the week do not need parking spaces.

Parking Demand at Full Hotel Occupancy

The number of spaces occupied assuming full hotel occupancy was calculated using the higher observed demand rate for the entire site, which occurred on the weekend. At the Fairfield Hotel, 207 spaces are projected to be demanded when the hotel is at full occupancy. At the Aloft Hotel, 145 spaces are projected to be demanded when the hotel is at full occupancy. This is shown in **Table 8**. The overall demand for parking is 352 spaces when both the Fairfield and Aloft are at full room capacity.

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352

SHARED PARKING ANALYSIS PARAMETERS

In order to evaluate the number of spaces needed under shared parking conditions, a number of characteristics regarding a particular development must be known. The most important of these characteristics are the mix of land uses within the project and the size of each individual land use. The other parking-related factors that must be estimated in order to determine peak parking demand by-hour are described below.

PARKING RATIO

As described earlier in the report, parking ratios for the existing hotels were developed based on the counts conducted in May 2019. For the residential land use, a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used based on the literature review discussed previously. For the commercial land uses, El Segundo Municipal Parking requirements were used.

Table 9 shows a summary of base parking rates used in the parking demand model for each of the components. The table also notes the source for each parking ratio.

Table 9: Pacific Coast Common Parking Rates

Land Use Component	Parking Rate
Aloft Hotel [1]	0.59 spaces per occupied room
Fairfield Hotel [1]	0.59 spaces per occupied room
Multifamily Residential [2]	1 space per bedroom
Residential Guest Parking [3]	1 space for every third unit
Fast Casual Restaurant [3]	1 space for each 75 ft of dining area; 1 space for each 250 ft of nondining area
Retail [3]	1 space for each 300 ft

[1] Empirical data collected onsite at the hotels on a weekday (May 2, 2019) and weekend (May 5, 2019). Parking ratio was determined by dividing the number of occupied spaces being used overnight by the number of occupied hotel rooms. A combined demand rate was developed as the Fairfield and Aloft hotels share overflow parking at the parking lot north of Mariposa Avenue.
[2] Rate was taken from *ITE Parking Generation, 5th Edition* for mid-rise multifamily apartments in general urban/suburban settings and that are not within ½ mile of rail transit.
[3] Rates from parking requirements in Section 15-15-6 of El Segundo Municipal Code.

RESIDENTIAL PARKING

Based on the projected residential demand and the modified residential parking supply, Pacific Coast Commons is projected to have an oversupply of 60 residential parking spaces. Per the *Pacific Coast Commons Specific Plan*, up to five percent of the total non-guest multi-family residential parking is permitted to be shared with commercial uses.[4] Therefore, five non-guest multi-family residential parking spaces from the North Site and five non-guest multi-family residential spaces from the South Site will be included for use in the shared parking supply.

GUEST PARKING

In accordance with City of El Segundo Municipal Code requirements, guest parking was presumed to be provided in addition to the parking for the residential units. One guest parking space is required to be supplied for every three multifamily units.

MODE SPILT/INTERNAL CAPTURE

To be conservative for the shared parking analysis, no adjustments were made for mode spilt or internal capture.

AUTO OCCUPANCY

This shared parking analysis used the national averages for auto occupancy for all land uses. No changes were made to the ULI average auto occupancy rates.

TIME-OF-DAY PATTERNS

Time-of-day occupancy assumptions were adjusted for the Aloft and Fairfield hotels to estimate the guest and employee split during late (after 9pm) evening hours. Late evening hours are when hotel guests are anticipated to be settled into their rooms, but hotel staff is slowly decreasing into the morning hours. For other uses, ULI-recommended time-of-day factors were used.

SEASONAL VARIATIONS

The parking demand model takes into consideration the variation in activity for each of the land uses from month-to-month. ULI-recommended seasonal factors, which incorporate variations in travel during seasonal periods such as holiday shopping in the winter, were used.

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[4] *Pacific Coast Commons Specific Plan.* City of El Segundo (2021).

PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as "overflow" parking if needed, the project was analyzed as one combined site. While each individual site's peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B**. **Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	**792**	**354**	**438**

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	**3**
Fairfield	0	0	188	3	0	191	**24**
South	144	40	133	1	18	192	**-21**
Total	**304**	**88**	**321**	**5**	**18**	**432**	**6**

PCC NORTH SITE

As shown in **Table 10**, the project proposes 241 parking spaces for the North Site, with 189 parking spaces reserved for exclusively for residential tenant use. The remaining 52 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.

PCC FAIRFIELD SITE

The Fairfield site's peak parking shared demand is estimated to be 191 spaces. As shown in **Table 11**, the project proposes 215 parking spaces, indicating sufficient supply for the anticipated demand with a surplus of 24 spaces during the peak demand period.

PCC SOUTH SITE

As shown in **Table 10**, the project proposes 336 parking spaces for the South Site, with 165 parking spaces reserved for exclusively for residential tenant use. The remaining 171 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites. As summarized in **Table 11**, The South site is estimated to have a peak residential parking demand of 144 parking spaces and a peak shared parking demand of 192 spaces. As such, the South site would have a deficit of 21 shared parking spaces during the peak demand period. The excess demand can be accommodated by the surplus of spaces at the North and Fairfield sites, which have a combined surplus of 27 spaces.

CONCLUSION

The shared parking analysis demonstrates that sufficient parking would be provided to meet the demand of the various uses on-site.

It is anticipated that retail/restaurant patrons will be provided with free validated parking in the structures, hotel guests will continue to be charged for parking, and residents will not be charged a separate parking fee from their base rental rate. A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street.

PROJECT CONSTRUCTION PARKING DEMAND ANALYSIS

A parking analysis was also conducted for the Pacific Coast Commons construction period to understand the parking needs of construction employees and uses on-site. Phase 1 will construct the replacement parking for the Fairfield Inn & Suites site adjacent to the existing hotel. Phase 2 will consist of the construction of the South site. Phase 3 will consist of the buildout of the North site.

Construction will be phased based on two potential timelines. The first scenario analyzed is based on a sequential timeline with three separate phases. The second scenario analyzes a construction timeline in which Phase 2 and 3 will be constructed concurrently.

The shared parking analysis in **Appendix B** was used to determine the peak parking demand for each phase during construction hours. El Segundo Municipal Code (ESMC) limits construction activities to the hours from 7:00 AM to 6:00 PM Monday through Saturday, with no construction permitted on Sundays or holidays.

SEQUENTIAL CONSTRUCTION TIMELINE

Under a sequential timeline, Phase 1 of development will construct the replacement parking and new retail for the Fairfield Inn & Suites site adjacent to the existing hotel. During Phase 1, the Aloft and Fairfield Hotels will continue to be in operation. The second phase would consist of the construction of the South site, which consists of residential, retail, and parking. During Phase 2, both hotels will continue to operate, and new retail built in Phase 1 will be occupied. The third phase of development would consist of the buildout of the North site. During Phase 3, the retail and residential built on the South site in Phase 2 is assumed to be fully occupied.

During Phase 1 of construction, Fairfield and Aloft hotel guests would continue to park at the existing surface lots at their respective sites. The existing Fairfield surface lot has 232 parking spaces and the existing Aloft surface lot has 165 parking spaces, for a total of 397 parking spaces. Peak parking demand is estimate to occur on a weekday in June at 8:00 AM during Phase 1[5]. A peak demand of 171 parking spaces for the Fairfield Hotel and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 60 construction employee parking spaces. As shown in **Table 12**, the total anticipated demand of 350 spaces can be accommodated by the existing 397 parking spaces, with a surplus of 47 spaces.

[5] For the purpose of this analysis, the month of June was used to determine peak parking demand for all phases of construction as it is the peak demand month and provides the most conservative results.

Table 12: Sequential Construction Phase 1 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	-	171	60	231	-
South/Aloft	-	119	-	119	165
Total Overall	0	290	60	**350**	**397**

Once Phase 1 is completed, parking for the Fairfield site can be moved into the newly constructed garage, which will have 215 spaces. During Phase 2 of construction, Aloft parking can be accommodated via the existing surface lot of 232 spaces at the North site. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during Phase 2. A peak demand of 173 parking spaces for the Fairfield Hotel and newly constructed retail and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 75 construction employee parking spaces. As shown in **Table 13**, the total demand of 367 spaces can be accommodated by the 447 parking spaces supplied, with a surplus of 80 spaces.

Table 13: Sequential Construction Phase 2 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	2	171	-	173	215
South/Aloft	-	119	75	194	-
Total Overall	2	290	75	**367**	**447**

Once Phase 2 is completed, newly constructed uses will be able to park at the new South site garage of 336 spaces, in addition to the 215 spaces provided at the Fairfield garage constructed during Phase 1. Peak parking demand is estimated to occur on a weekday in June at 5:00 PM during Phase 3. A peak demand of 169 parking spaces for the Fairfield Hotel and newly constructed retail and 280 parking spaces for the uses on the South site will need to be accommodated, along with peak demand of 75 construction employee parking spaces. As shown in **Table 14**, the total demand of 524 spaces can be accommodated by the 551 parking spaces supplied, with a surplus of 27 spaces.

Table 14: Sequential Construction Phase 3 Parking Demand

Site	Residential	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	75	75	-
Fairfield	-	8	161	-	169	215
South/Aloft	138	29	113	-	280	336
Total Overall	138	37	274	75	**524**	**551**

CONCURRENT CONSTRUCTION TIMELINE

Under a concurrent timeline, Phase 1 of development will construct the replacement parking and new retail for the Fairfield Inn & Suites site adjacent to the existing hotel. During Phase 1, the Aloft and Fairfield Hotels will continue to be in operation. Phase 2 and 3 would occur concurrently and would consist of the construction of the South site and the North site. During the construction of these two sites, both hotels will continue to operate, and new retail built in Phase 1 will be occupied.

During Phase 1 of construction, Fairfield and Aloft hotel guests would continue to park at the existing surface lots at their respective sites. The existing Fairfield surface lot has 232 parking spaces and the existing Aloft surface lot has 165 parking spaces, for a total of 397 parking spaces. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during Phase 1. A peak demand of 171 parking spaces for the Fairfield Hotel and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 60 construction employee parking spaces. As shown in **Table 15**, the total demand of 350 spaces can be accommodated by the existing 397 parking spaces, with a surplus of 47 spaces.

Table 15: Concurrent Construction Phase 1 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	-	171	60	231	-
South/Aloft	-	119	-	119	165
Total Overall	0	290	60	**350**	**397**

Once Phase 1 is completed, the Fairfield site will have 215 parking spaces. Because construction of Phase 2 and 3 occur concurrently under this scenario, the newly constructed garage for the Fairfield Hotel under Phase 1 will be the only parking available. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during the concurrent construction of Phase 2 and 3. A peak demand of 171 parking spaces for the Fairfield Hotel and newly constructed retail and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 150 construction employee parking spaces. As shown in **Table 16**, the total demand of 442 spaces cannot be accommodated by the 215 parking spaces supplied, with a deficit of 227 spaces.

In order to accommodate the excess demand in parking during the concurrent construction of Phase 2 and 3, sufficient off-site parking with transport to and from the project site would need to be provided for hotel guests and employees, and construction employees.

Table 16: Concurrent Construction Phase 2/3 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	75	75	-
Fairfield	2	171	-	173	215
South/Aloft	-	119	75	194	-
Total Overall	2	290	150	**442**	**215**

APPENDIX A:

COUNT SHEETS

Prepared by National Data & Surveying Services

Parking Study

Location: 475 North/525 North Pacific Coast Highway **Date:** 5/2/2019
City: El Segundo, LA **Day:** Thursday

Lot	Restriction	2:00 AM
North	Regular	123
North	Handicap	0
Fairfield	Regular	17
Fairfield	Handicap	2
Aloft	Regular	98
Aloft	Handicap	2

Prepared by National Data & Surveying Services

Parking Study

Location: 475 North/525 North Pacific Coast Highway
City: El Segundo, LA

Date: 5/5/2019
Day: Sunday

Lot	Restriction	2:00 AM
North	Regular	158
North	Handicap	1
Fairfield	Regular	13
Fairfield	Handicap	2
Aloft	Regular	91
Aloft	Handicap	2

APPENDIX B:

SHARED PARKING ANALYSIS WORKSHEETS

Project Sitewide Peak Hour Parking Demand Determination
Appendix B

Weekday Estimated Peak-Hour Parking Demand

Site	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
North	189	194	200	201	203	203	204	204	204	204	204	213	223	242	241	240	**238**	227	213
Fairfield	149	154	173	159	150	152	146	146	153	152	160	169	177	177	182	177	**191**	195	181
South	280	294	313	308	305	307	304	301	298	295	300	323	337	353	358	350	**357**	350	320
Total	618	642	686	668	658	662	654	651	655	651	664	705	737	772	781	767	**786**	772	714

Weekend Estimated Peak-Hour Parking Demand

Site	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
North	189	199	199	201	202	203	203	204	204	204	204	213	222	241	241	240	238	228	213
Fairfield	149	155	173	159	149	151	145	145	153	153	161	168	175	175	181	177	191	195	181
South	276	292	309	307	306	306	304	300	301	294	300	319	335	351	353	343	350	343	316
Total	614	646	681	667	657	660	652	649	658	651	665	700	732	767	775	760	779	766	710

June

North Site - Weekday Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	1	3	3	4	4	4	4	4	4	4	4	3	2	1	-	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Residential Demand	100%	160	144	136	128	120	112	104	112	112	112	120	136	144	155	157	158	160	160	160
Reserved	100%	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
Guest	100%	-	5	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
TOTAL DEMAND	Customer	-	-	1	1	3	3	4	4	4	4	4	4	4	4	3	2	1	-	-
	Employee	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
	Reserved	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
	Guest	-	5	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
		189	194	200	201	203	203	204	204	204	204	204	213	223	242	241	240	238	227	213

June

North Site - Weekend Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	-	1	2	3	3	4	4	4	4	4	3	3	3	2	1	1	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Residential Demand	100%	160	144	136	128	120	112	104	112	112	112	120	136	144	155	157	158	160	160	160
Reserved	100%	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
Guest	100%	-	10	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
TOTAL DEMAND	Customer	-	-	-	1	2	3	3	4	4	4	4	4	3	3	3	2	1	1	-
	Employee	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
	Reserved	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
	Guest	-	10	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
		189	199	199	201	202	203	203	204	204	204	204	213	222	241	241	240	238	228	213

June

Fairfield Site - Weekday Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	2	4	5	6	6	6	5	5	6	6	6	5	3	2	1	-
Employee	80%	-	-	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	-	-
Hotel-Business	100%	146	138	123	108	92	92	85	85	92	92	100	108	116	116	123	131	146	154	154
Employee	100%	3	16	48	48	53	53	53	53	53	53	53	53	53	53	53	42	42	40	27
TOTAL DEMAND	Customer	146	138	124	110	96	97	91	91	98	97	105	114	122	122	128	134	148	155	154
	Employee	3	16	49	49	54	55	55	55	55	55	55	55	55	55	54	43	43	40	27
	Reserved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		149	154	173	159	150	152	146	146	153	152	160	169	177	177	182	177	191	195	181

ULI Base Data Has Been Modified.

June

Fairfield Site - Weekend Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	2	3	4	5	5	6	6	6	5	5	5	4	3	2	1	-
Employee	80%	-	-	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	-	-
Hotel-Business	100%	146	139	123	108	92	92	85	85	92	92	100	108	116	116	123	131	146	154	154
Employee	100%	3	16	48	48	53	53	53	53	53	53	53	53	53	53	53	42	42	40	27
TOTAL DEMAND	Customer	146	139	124	110	95	96	90	90	98	98	106	113	121	121	127	134	148	155	154
	Employee	3	16	49	49	54	55	55	55	55	55	55	55	54	54	54	43	43	40	27
	Reserved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		149	155	173	159	149	151	145	145	153	153	161	168	175	175	181	177	191	195	181

ULI Base Data Has Been Modified.

June

South Site - Weekday Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	1	2	3	3	3	3	3	3	3	3	3	3	2	1	-	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Family Restaurant	95%	6	12	14	18	20	21	24	21	12	11	11	18	19	19	19	14	13	12	6
Employee	100%	4	5	6	6	7	7	7	7	7	5	5	7	7	7	7	6	5	5	2
Hotel-Business	100%	103	97	86	76	65	65	59	59	65	65	70	76	81	81	86	92	103	108	108
Employee	100%	2	11	33	33	37	37	37	37	37	37	37	37	37	37	37	30	30	28	19
Residential Reserved	100%	144	130	122	115	108	101	94	101	101	101	108	122	130	140	141	143	144	144	144
Reserved	100%	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Guest	100%	-	4	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
TOTAL DEMAND	Customer	109	109	101	95	87	89	86	83	80	79	84	97	103	103	108	108	117	120	114
	Employee	6	16	39	40	45	45	45	45	45	43	43	45	45	45	45	37	35	33	21
	Reserved	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
	Guest	-	4	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
		280	294	313	308	305	307	304	301	298	295	300	323	337	353	358	350	357	350	320

ULI Base Data Has Been Modified.

June

South Site - Weekend Estimated Peak-Hour Parking Demand

		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	-	1	2	2	3	3	3	3	3	3	3	3	2	2	1	1	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Family Restaurant	95%	2	6	11	17	21	21	24	20	15	10	11	14	17	17	15	7	6	4	2
Employee	100%	4	5	6	6	7	7	7	7	7	5	5	7	7	7	7	6	5	5	2
Hotel-Business	100%	103	97	86	76	65	65	59	59	65	65	70	76	81	81	86	92	103	108	108
Employee	100%	2	11	33	33	37	37	37	37	37	37	37	37	37	37	37	30	30	28	19
Residential Reserved	100%	144	130	122	115	108	101	94	101	101	101	108	122	130	140	141	143	144	144	144
Reserved	100%	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Guest	100%	-	8	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
TOTAL DEMAND	Customer	105	103	97	94	88	88	86	82	83	78	84	93	101	101	103	101	110	113	110
	Employee	6	16	39	40	45	45	45	45	45	43	43	45	45	45	45	37	35	33	21
	Reserved	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
	Guest	-	8	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
		276	292	309	307	306	306	304	300	301	294	300	319	335	351	353	343	350	343	316

ULI Base Data Has Been Modified.

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (NORTH SITE)

PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply:	241 Stalls		Weekday					Weekday		
Land Use	Project Data Quantity	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj 10 PM	Peak Mo Adj June	Estimated Parking Demand
Community Shopping Center (<400 ksf)	2,223	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	1
Employee			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	0
Residential Demand	137	units	1.17	1.00	1.00	1.17	/unit	1.00	1.00	160
Reserved	1.38	sp/unit	1.38	1.00	1.00	1.38	/unit	1.00	1.00	189
Guest	143	units	0.33	1.00	1.00	0.33	/unit	1.00	1.00	48

ULI base data have been modified from default values.

Customer	1
Employee	0
Residential Reserved	189
Residential Guest	48
Total	238

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (FAIRFIELD SITE)

PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply:	215 Stalls		Weekday					Weekday		
Land Use	Project Data Quantity	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj 10 PM	Peak Mo Adj June	Estimated Parking Demand
Community Shopping Center (<400 ksf)	3,273	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	2
Employee			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	1
Hotel-Business	350	rooms	0.44	1.00	1.00	0.44	/rooms	0.95	1.00	146
Employee			0.15	1.00	1.00	0.15	/rooms	0.80	1.00	42
								Customer		148
								Employee		43
								Total		191

ULI base data have been modified from default values.

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (SOUTH SITE)

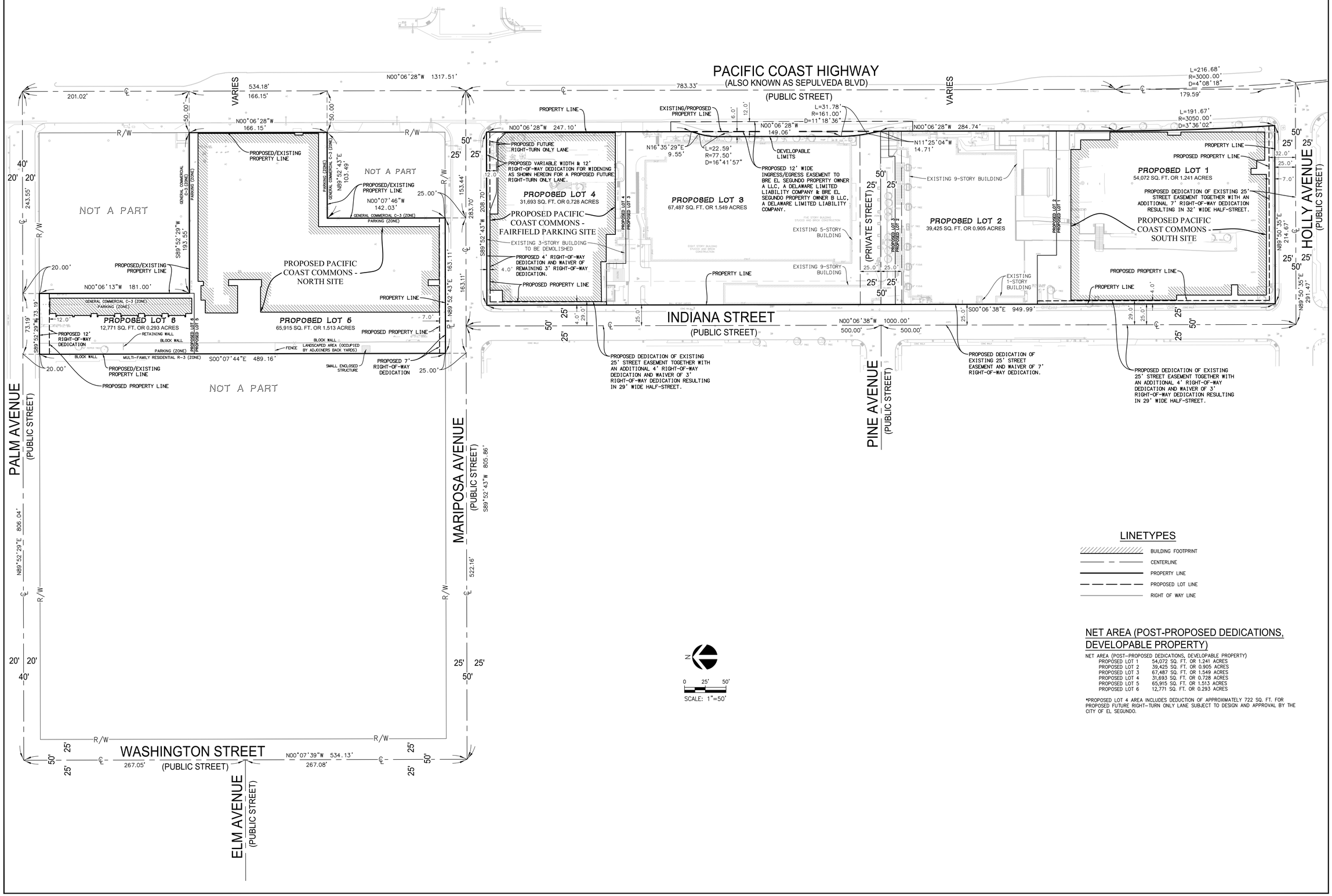
PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply:	336 Stalls		Weekday					Weekday		
Land Use	Project Data Quantity	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj 10 PM	Peak Mo Adj June	Estimated Parking Demand
Community Shopping Center (<400 ksf)	2,056	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	1
Employee			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	0
Family Restaurant	3,700	sf GLA	6.67	1.00	1.00	6.67	/ksf GLA	0.55	0.95	13
Employee			2.00	1.00	1.00	2.00	/ksf GLA	0.65	1.00	5
Hotel-Business	246	rooms	0.44	1.00	1.00	0.44	/rooms	0.95	1.00	103
Employee			0.15	1.00	1.00	0.15	/rooms	0.80	1.00	30
Residential Demand	120	units	1.20	1.00	1.00	1.20	/unit	1.00	1.00	144
Reserved	1.38	sp/unit	1.38	1.00	1.00	1.38	/unit	1.00	1.00	165
Guest	120	units	0.33	1.00	1.00	0.33	/unit	1.00	1.00	40

ULI base data have been modified from default values.

Customer	117
Employee	35
Residential Reserved	165
Residential Guest	40
Total	357

PROPOSED STREET DEDICATION PLAN



LINETYPES

- BUILDING FOOTPRINT
- CENTERLINE
- PROPERTY LINE
- PROPOSED LOT LINE
- RIGHT OF WAY LINE

NET AREA (POST-PROPOSED DEDICATIONS, DEVELOPABLE PROPERTY)

NET AREA (POST-PROPOSED DEDICATIONS, DEVELOPABLE PROPERTY)

PROPOSED LOT 1	54,072 SQ. FT. OR 1.241 ACRES
PROPOSED LOT 2	39,425 SQ. FT. OR 0.905 ACRES
PROPOSED LOT 3	67,487 SQ. FT. OR 1.549 ACRES
PROPOSED LOT 4	31,693 SQ. FT. OR 0.728 ACRES
PROPOSED LOT 5	65,915 SQ. FT. OR 1.513 ACRES
PROPOSED LOT 6	12,771 SQ. FT. OR 0.293 ACRES

*PROPOSED LOT 4 AREA INCLUDES DEDUCTION OF APPROXIMATELY 722 SQ. FT. FOR PROPOSED FUTURE RIGHT-TURN ONLY LANE SUBJECT TO DESIGN AND APPROVAL BY THE CITY OF EL SEGUNDO.

kpff
700 FLOWER ST., Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
F: 213.266.5294
www.kpff.com

REVISIONS

DATE		ISSUED FOR

DATE	01/22/2021
PROJECT NUMBER	1800649
DRAWN BY	DB
CHECKED BY	CJ
SCALE	AS SPECIFIED

PROJECT DESCRIPTION

401, 475 & 525 N PACIFIC COAST HWY
EL SEGUNDO, CA 90245

SHEET NUMBER

SHEET 1 0F 1

Pacific Coast Commons Specific Plan
Final Environmental Impact Report

State Clearinghouse No. 2020050508

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

FEBRUARY 2022

Printed on 30% post-consumer recycled material.

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A Revised Future Analysis

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1 Preface

1.1 Purpose

This Final Environmental Impact Report (EIR) has been prepared by the City of El Segundo (City) for the Pacific Coast Commons Specific Plan Project (Specific Plan or Project). This Final EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (Cal. Pub. Res. Code, Section 21000 et. seq., as amended) and implementing guidelines (Cal. Code Regs., Title 14, Section 15000 et. seq.).

Before approving a project, CEQA requires the lead agency to prepare and certify a Final EIR. The City has the principal responsibility for approval of the proposed Project and is therefore considered the lead agency under CEQA Section 21067. According to the CEQA Guidelines, Section 15132, the Final EIR shall consist of:

- The Draft EIR or a revision of the Draft EIR
- Comments and recommendations received on the Draft EIR either verbatim or in summary
- A list of persons, organizations, and public agencies commenting on the Draft EIR
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency

1.2 Format of the Final EIR

This Final EIR consists of the February 2021 Draft EIR and the following four chapters:

1 Preface. This chapter summarizes the contents of the Final EIR, the environmental review process, and several minor updates that occurred in the Draft EIR subsequent to the release of the Draft EIR for public review.

2 Response to Comments. During the 45-day public review period for the Draft EIR, 37 comment letters were received. This chapter contains these comment letters, which have been bracketed to organize the responses, and the City's responses to the comments as well as letters from the Southwest Carpenters and SAFER received by the City after the close of the public review period and responses to those comments.

3 Changes to the Draft EIR. Comments that are addressed in Chapter 2 may have resulted in minor revisions to the information contained in the February 2021 Draft EIR. Where necessary, deletions to the text are shown in ~~**bold strikeout**~~ and additions to the text are shown in **bold underline** in all applicable sections of the Draft EIR. Additionally, through the certification of this Final EIR, where the term "Draft EIR" is used in the text, this is now deemed to be "Final EIR."

4 Mitigation Monitoring and Reporting Program. This chapter of the Final EIR provides the mitigation monitoring and reporting program (MMRP) for the proposed Project. The MMRP is presented in table format and identifies mitigation measures for the proposed Project, the implementation period for each measure, the implementing party, and the enforcing agency. The MMRP also provides a section for recordation of mitigation reporting.

1.3 Environmental Review Process

1.3.1 Notice of Preparation

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of the proposed project. The EIR process is intended to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the proposed project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed project's significant effects. In addition, CEQA requires that an EIR identify adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was circulated for a 30-day public review starting on May 26, 2020, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City plans to prepare an EIR and to solicit input on the scope and content of the EIR. Additionally, a notice announcing the availability of the NOP was also published in the El Segundo Herald on May 21, 2020. Copies of the NOP were made available for electronic download on the City's website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects. Comments on the NOP were received from five agencies, seven letters/emails from individuals or groups, which are provided in Appendix A-2 to the Draft EIR.

A scoping meeting was held on June 10, 2020. Rather than conducting an in-person meeting, the Governor's Executive Order N-25-20 allowed local governments to hold meetings via teleconferencing while still meeting State transparency requirements. As such, the Project's Scoping Meeting was held online, through a webinar type format. The City hosted one Scoping Meeting on Wednesday, June 10, 2020, from 6:30 p.m. to 7:30 p.m. and was made available through the City's website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed Project. The City received five comments/questions with environmental concerns during the Scoping Meeting, which are provided in the Draft EIR under Table A of Appendix A-2.

1.3.2 Noticing and Availability of the Draft

The Draft EIR was made available for public review and comment pursuant to CEQA Guidelines Section 15087. The 45-day public review period for the Draft EIR started on February 25, 2021 and ended on April 12, 2021. At the beginning of the public review period, an electronic copy of the Draft EIR and an electronic copy of the Notice of Completion (NOC) and Notice of Availability (NOA) were submitted to the State Clearinghouse. Relevant State agencies received electronic copies of the documents. An NOA was distributed to interested parties and filed with the Los Angeles County Clerk as well as published in the El Segundo Herald. The NOA described where the document was available and how to submit comments on the Draft EIR. A hardcopy of the Draft EIR was available at the El Segundo Development Services Department located at 350 Main Street, El Segundo, CA 90245. Additionally, the NOA and the Draft EIR were available to be viewed on the City website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects.

The 45-day public review period provided interested public agencies, groups, and individuals the opportunity to comment on the contents of the Draft EIR. A total of 37 agency, organization, and individual comment letters

were received and are included in Chapter 2, Responses to Comments, of this Final EIR. Additionally, two organizations submitted comment letters prior to the City's December 9, 2021 Planning Commission hearing as well as seven individuals provided public comment. As such, Responses to Additional Comments Received has been included as part of Chapter 2, Responses to Comments, of this Final EIR.

1.3.3 Final EIR

The Final EIR addresses the comments received during the public review period and includes minor changes to the text of the Draft EIR in accordance with comments that necessitated revisions. This Final EIR will be presented to City decision-makers for potential certification as the environmental document for the proposed project. All agencies who commented on the Draft EIR will be provided with a copy of the Final EIR, pursuant to CEQA Guidelines Section 15088(b). The Final EIR will also be posted on the City's website at: https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects.

Pursuant to CEQA Guidelines Section 15091, the City shall make findings for each of the significant effects identified in this EIR and shall support the findings with substantial evidence in the record. After considering the Final EIR in conjunction with making findings under Section 15091, the lead agency may decide whether or how to approve or carry out the Project. When a lead agency approves a project that will result in the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency is required by CEQA to state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. Because the Project would result in significant and unavoidable impacts, a "statement of overriding considerations" will be prepared pursuant to CEQA Guidelines Section 15093 and supported by substantial evidence in the record.

1.4 Revisions to the Draft EIR

The comments received during the public review period for the Draft EIR resulted in minor clarifications and modifications in the text of the February 2021 Draft EIR, as shown in Chapter 3, Changes to the Draft EIR. These changes are included as part of the Final EIR, to be presented to City decision makers for review and consideration of certification and Project approval.

CEQA Guidelines Section 15088.5 identifies when a lead agency must recirculate an EIR. A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. Information includes changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not considered significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. As defined in CEQA Guidelines Section 15088.5(a), significant new information requiring recirculation includes the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The minor clarifications, modifications, and editorial corrections that were made to the Draft EIR are shown in Chapter 3, Changes to the Draft EIR, of this Final EIR. None of the revisions that have been made to the Draft EIR resulted in new significant impacts; none of the revisions resulted in a substantial increase in the severity of an environmental impact identified in the Draft EIR; and, none of the revisions brought forth a feasible project alternative or mitigation measure that is considerably different from those set forth in the Draft EIR. Furthermore, the revisions do not cause the Draft EIR to be flawed such that it precludes meaningful public review. As none of the CEQA criteria for recirculation have been met, recirculation of the EIR is not warranted. As stated in CEQA Guidelines Section 15088.5(b), "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

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2 Responses to Comments

2.1 Introduction

A draft version of the Environmental Impact Report (EIR) for the proposed Pacific Coast Commons Specific Plan (Project) was circulated for a 45-day public review from February 25, 2021 to April 12, 2021. This chapter of the Final EIR includes a copy of each comment letter provided during the 45-day public review period for the Draft EIR. The City of El Segundo (City) has prepared responses to each comment, which are included in this chapter. The comments are ordered numerically, and the individual issues within each comment letter are bracketed and numbered. The City's responses to comments on the Draft EIR represent a good-faith, reasoned effort to address the environmental issues identified by the comments. Under the CEQA Guidelines, the Lead Agency is required to evaluate and provide written responses to comments received on the Draft EIR (CEQA Guidelines, Section 15088).

As shown in Table 2-1 the City received comment letters from 1 agency, 4 organizations, and 32 community members. To finalize the EIR for the proposed Project, responses have been prepared for comments that were received during the public review period. In addition to providing individual responses to comments, one Topical Response has been prepared to respond to consistent comments raised by multiple commenters. When a commenter has made a comment that can be responded to using a Topical Response, the commenter is referred to the applicable Topical Response(s). For ease of reference, Topical Responses are included at the beginning of this Response to Comments chapter. In accordance with the requirements of CEQA Guidelines Section 15088(b), the City will provide a written response on comments submitted by public agencies to each respective public agency at least 10 days prior to certifying the Final EIR.

Table 2-1. List of Commenters

Comment Letter	Name	Type	Date
Agencies			
A1	Caltrans	Regional Agency	March 26, 2021
Organizations			
O1	CREED LA	Organization	March 8, 2021
O2	Attorneys for Southwest Regional Council of Carpenters	Organization	March 22, 2021
O3	Supporters Alliance for Environmental Responsibility ("SAFER")	Organization	April 12, 2021
O4	Sam Dunlap	Tribe	April 10, 2021
Individuals			
I1	BYDS Chow	Individual	February 27, 2021
I2	Wendy Martin	Individual	February 28, 2021
I3	Paul Morrison	Individual	March 1, 2021
I4	Susannah Harper	Individual	March 2, 2021
I5	Laura Honsowetz	Individual	March 3, 2021
I6	Jed Montgomery	Individual	March 12, 2021
I7	Richard Leos	Individual	March 19, 2021
I8	Chris Johnson	Individual	March 20, 2021
I9	Jed Montgomery	Individual	March 20, 2021

Table 2-1. List of Commenters

Comment Letter	Name	Type	Date
I10	Antoine Michael	Individual	March 21, 2021
I11	McKenna Wilson	Individual	March 22, 2021
I12	Stephanie Jordan and Brenton C. Graham	Individual	March 22, 2021
I13	Maggie Matchett	Individual	March 22, 2021
I14	Lizabeth Allen	Individual	March 22, 2021
I15	Paul and Cami Trump	Individual	March 26, 2021
I16	Neil R. Cadman	Individual	March 26, 2021
I17	Frank Glynn	Individual	March 26, 2021
I18	Frances de Freitas	Individual	March 28, 2021
I19	Stephanie Sauter and Paul Kelly	Individual	March 28, 2021
I20	Bill Watkins	Individual	March 29, 2021
I21	Matthew Klemp	Individual	April 1, 2021
I22	Venu Joshi	Individual	April 5, 2021
I23	Jim deCordova	Individual	April 8, 2021
I24	Julia Riboli	Individual	April 9, 2021
I25	Bianca Mendoza	Individual	April 11, 2021
I26	Paul Morrison	Individual	April 11, 2021
I27	David S. Poepoe and Stephanie Young	Individual	April 11, 2021
I28	Eli Buck	Individual	April 12, 2021
I29	Eli Buck	Individual	April 12, 2021
I30	Gayle CdeBaca	Individual	April 12, 2021
I31	Stephanie Jordan and Brenton C. Graham	Individual	April 12, 2021
I32	Lionel Uhry	Applicant	April 12, 2021

2.2 Topical Responses

Topical Response No. 1 – Cumulative Impacts

In response to comments regarding the listing of cumulative projects included in the Draft EIR, an additional three development projects identified by the City of El Segundo have been added to the cumulative projects list. Table 2-2, Additional Related Projects, below, represents three additional projects that were reasonably foreseeable at the time of the issuance of the Notice of Preparation of the Draft EIR. These projects are hereby incorporated into Table 2-3, List of Cumulative Projects, within Draft EIR Chapter 2. Please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR, for revisions. These edits do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures, as further demonstrated in the analysis below. Rather, this information merely augments the discussion that was already presented in the Draft EIR, and results in no changes to the conclusions or mitigation measures previously presented. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

Table 2-2. Additional Related Projects

Location ID	Related Project Location	Within City Limits	Land Use/Project Type	Unit	Size
31	1475 El Segundo Boulevard	Yes	Office	47.84	KSF
			Residential	4	DU
32	1320-1330 Franklin Avenue	Yes	Office	47.25	KSF
			Residential	4	DU
33	243 and 330 Kansas Street	Yes	Office	243.22	KSF

Note: DU = dwelling unit; KSF = thousand square feet

This Topical Response provides an assessment of these three additional related projects into the analysis of each topical sections assessed in the Draft EIR, as described below.

Aesthetics

As described in the Draft EIR (Section 4.1.5), the City is almost entirely built out, and cumulative projects within the City would be considered infill development. As further stated in Section 4.1.5, cumulative projects would not have a substantial adverse effect to existing scenic views of resources. The addition of the three related projects listed in Table 2-2 would not change this conclusion. Consistent with the other related projects listed in the Draft EIR, these three additional projects are infill, redevelopment projects in a highly urbanized area. They are located within the City, which does not identify any officially designated scenic vistas within City boundaries, and are not within the vicinity of the Santa Monica Mountains, San Gabriel Mountains, the coastline, or beaches. For the same reasons identified in the Draft EIR, cumulative projects would not have a substantial adverse effect to existing scenic views, and the newly added related projects would not change this conclusion.

With regard to scenic quality, the Draft EIR states that the proposed Project would have less than significant impacts on the scenic quality of the area and that no identified cumulative projects are within close proximity to the Project site such that combined effects could occur. While this analysis would remain the same for the revised related projects list provided in this Final EIR, one of the newly added related projects is situated closer to the Project site than the closest related project identified in the Draft EIR.[1] This more proximal related project is located at 243 and 330 Kansas Street. The northern boundary of this related project is located along Holly Avenue, approximately 0.15-mile west of the proposed Project's southern boundary along Holly Avenue. However, the sloping topography of Holly Avenue between the proposed Project site and the related project site, combined with the distance between the two projects, intervening development, two-way roadway, landscaping, and utility lines, would minimize the potential for the two projects to combine within one viewshed to change the scenic quality of the area. As such, the proposed Project and the newly added proximal related project would not result in a significant impact to scenic quality.

As the related projects are implemented, a more dense and urban character would occur within the City, as described in Section 4.1.5 of the Draft EIR. The addition of three related infill development projects to the Draft EIR's original list of 30 related infill development projects would not substantively alter the overall pattern of increased density and urbanization described in the Draft EIR. The three additional projects would be consistent with overall land use patterns and trends in the Project vicinity and would be required to comply with development

[1] By way of comparison, the closest related project identified in the Draft EIR is located at 455 Continental Boulevard & 1995 E Grand Avenue, which is over 0.3 mile southeast of the Project site. The related project at 243 and 330 Kansas Street is located approximately 0.15 mile southwest of the Project site. (The other two newly added related projects listed in Table 2-2 above are located in similar proximities to the Project site as the related projects identified in the Draft EIR.)

standards from the El Segundo Municipal Code and with applicable scenic quality regulations. Impacts related to conflicts with scenic quality regulations would remain less than significant, for the same reasons as identified in the Draft EIR.

With regard to shade/shadow, such impacts are site specific, and the geographic area of potential shade/shadow impacts is thus located within the immediate vicinity of the Project site. The distance between this related project and the Project site, as well as the intervening features, would preclude the shade/shadow impacts of the two projects from combining to produce a cumulative impact. Impacts would remain less than significant, and the newly added related projects would not change this conclusion.

As determined in the Draft EIR, upon compliance with applicable regulations and guidelines regarding light and glare, the proposed Project would not result in a cumulatively considerable light/glare impact. The related projects (including the three additional projects identified herein) would be subject to similar regulations and are infill projects within an already urbanized area. The addition of three related infill development projects to a list of 30 other infill development projects in an urbanized area would not change the conclusions regarding light/glare that are presented in the Draft EIR. Impacts would therefore remain less than significant, and the newly added related projects would not change this conclusion.

Air Quality / Greenhouse Gas Emissions

Cumulative impacts to air quality from construction and operation of the Project and other past, present, and reasonably foreseeable projects were discussed in Draft EIR Section 4.2, Air Quality. Under Threshold 4.2b and under Section 4.2.5, Cumulative Impact Analysis, the Draft EIR states if a project does not exceed the South Coast Air Quality Management District (SCAQMD) recommended daily regional or localized emission thresholds for criteria pollutants, then project-specific impacts would also not result in a cumulatively considerable increase in emissions. While the proposed Project would contribute emissions for both short-term construction and long-term operations, its emissions would not exceed the SCAQMD's criteria pollutant threshold for criteria air pollutant emissions; therefore, the Project's contribution would not be cumulatively considerable. Furthermore, other projects would also be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed SCAQMD thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. In addition, cumulative VOC emissions would be subject to SCAQMD Rule 1113 (Architectural Coatings).

Additionally, a localized significance thresholds (LSTs) analysis was prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-specific level projects. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways and only assess emissions generated from onsite sources. As previously discussed, the SCAQMD has promulgated guidance that if daily emissions generated by construction or operation of a project remain below the regional or localized mass daily thresholds, those emissions would not result in a significant air quality impact either at the project level or under regionally cumulative considerations. Project-related construction activities would not generate emissions in excess of site-specific LSTs as described under Threshold 4.3c in Section 4.2, Air Quality; therefore, site-specific impacts during construction and operation of the proposed Project would be less than significant and therefore, would not result in a cumulatively considerable increase in emissions of

nonattainment pollutants. Therefore, even with consideration of the additional related projects, the proposed Project's air quality emissions would be less than significant.

Likewise, with greenhouse gas (GHG) emissions, impacts are inherently cumulative as described in Draft EIR Section 4.6, as no single project could cause global climate change. The proposed Project was determined to result in emissions less than the significance threshold and would also be consistent with the City's Climate Action Plan. Therefore, even with consideration of the additional related projects, the proposed Project's GHG emissions would be less than significant.

Cultural Resources

As stated in the Draft EIR (Section 4.3.5), there are no known historical or archaeological resources on the Project site and as such, the Project site is not part of an existing or known grouping or district of historical or archaeological resources that would be impacted as part of the cumulative impacts of other projects. The addition of three related projects to the related projects list would not change this conclusion. The proposed Project site does not support significant historic built environment resources; as such, the Project would not have the potential to combine with any of the related projects (including the additional three projects identified herein) to produce a cumulatively considerable impact on historic built environment resources.

As identified in the Draft EIR, there is the potential for accidental discovery of archaeological resources during excavation activities associated with the proposed Project and the related projects, including those that have been added in this Final EIR. MM-CUL-2 identified in the Draft EIR would address the proposed Project's potential impacts related to inadvertent finds of archaeological resources. Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to archaeological resources would be mitigated, as applicable. The addition of three related projects to the list originally identified in the Draft EIR would not change this conclusion.

The potential for effects to human remains from the proposed Project and related projects (including the three additional related projects identified herein) would continue to be addressed by compliance with applicable regulations, as identified in the Draft EIR. Effects to human remains would not be cumulatively considerable, for the same reasons set forth in the Draft EIR. Therefore, even with consideration of the additional related projects, the proposed Project's impacts to cultural resources would be less than significant.

Energy

As stated in the Draft EIR (Section 4.4.5), buildout of the proposed Project and the related projects would increase demands for energy (electricity, natural gas, and petroleum). The addition of the three related projects identified in Table 2-2 would marginally increase the energy demands of the overall cumulative development scenario. As stated in Section 4.4.5, the proposed Project and the related projects would be subject to increasingly stringent energy efficiency requirements and are also expected to reduce vehicle miles traveled (VMT) by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. The three additional related projects would be subject to the same energy efficiency requirements as the other related projects and may also promote reductions in VMT through provision of jobs and housing in an already urbanized area. As such, the addition of three related projects to the overall cumulative scenario would not change the conclusions or the analysis presented in the Draft EIR in the category of energy.

Geology and Soils

As stated in the Draft EIR (Section 4.5.5), the majority of impacts from geologic hazards, such as rupture of a fault line, liquefaction, landslides, expansive soils, and unstable soils, are site-specific and are therefore generally mitigated on a project-by-project basis. Each related project would be required to adhere to required building engineering design per the most recent version of the California Building Code in order to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative project site. The addition of three related projects to the originally identified list in the Draft EIR would not change the cumulative impacts conclusions included in the Draft EIR.

With regard to paleontological resources, MM-GEO-1 would ensure that the Project's potential impacts to paleontological resources would be less than significant. Other cumulative projects that would have a potential to impact soils that are sensitive for significant fossils would also require mitigation, including the three additional projects listed in Table 2-2. The newly added related projects would not alter the cumulative impacts conclusions related to paleontological resources that was presented in the Draft EIR.

Hazards and Hazardous Materials

As stated in the Draft EIR (Section 4.7.5), cumulative projects would be subject to federal, state, and local regulations related to hazardous materials and other public health and safety issues. Adherence to these regulatory requirements would reduce incremental impacts associated with public exposure to health and safety hazards in the vicinity of each related project. Furthermore, hazards and hazardous materials impacts are generally site specific. For these reasons, the Draft EIR concludes that cumulative impacts associated with hazards and hazardous materials would be less than significant. The three additional related projects would not change the impacts or conclusion, as these additional related projects would be subject to the same federal, state, and local regulations related to hazardous materials that are identified in the Draft EIR. Furthermore, as stated in Section 4.7.5, the proposed Project itself would not create significant human or environmental health or safety risk that could combine with other project impacts to create a significant and cumulatively considerable impact. For these reasons, the proposed Project would not result in cumulatively considerable impacts related to hazards and hazardous materials, and the newly added related projects would not change this conclusion.

Hydrology and Water Quality

The cumulative scenario for water quality that is analyzed in the Draft EIR (Section 4.8.5) encompasses the geographic context of the South Santa Monica Bay Watershed and accounts for all anticipated cumulative growth within this geographic area. As such, the analysis is regional in nature and is not altered by the addition of the three related projects listed in Table 2-2. As with the other related projects identified in the Draft EIR, the additional related projects are infill development projects that could temporarily increase sedimentation during construction and could increase impervious surfaces during operations. However, the same water quality regulations identified in the Draft EIR would apply to the newly added related projects. For the same reasons stated in the Draft EIR, Project impacts associated with water quality standards and polluted runoff would be less than significant, and the Project would not contribute considerably to cumulative impacts. The newly added related projects would not change this conclusion.

The cumulative impact analysis for drainage that is analyzed in the Draft EIR discusses cumulative development in the City and its potential to increase impervious surfaces that could cause or contribute to storm drain system

capacity exceedance, alter the existing storm drain system, and/or require construction of new or expanded facilities. However, as stated in the Draft EIR, new development would be subject to the same requirements for low impact development infrastructure and best management practices to address the potential for increased runoff from development sites. All projects must comply with current state and local environmental regulations, such as the El Segundo Municipal Code mandates. The related projects that are added to the cumulative development scenario would be subject to these same regulations. Furthermore, these three additional projects are redevelopment projects located on existing urbanized, developed sites. As such, they would not be expected to contribute to an increase in impervious surfaces. For the same reasons identified in the Draft EIR, potential impacts to drainage associated with the Project would be less than significant, and the Project would not contribute considerably to cumulative impacts. The newly added related projects would not change this conclusion.

Land Use and Planning

As stated in the Draft EIR (Section 4.9.5), cumulative land use impacts could occur if any of the related projects would result in incompatible land uses, or result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. Given the built-out conditions of the greater Los Angeles Metropolitan region, including the Project site, the Draft EIR states that cumulative development would likely convert existing underutilized properties in the Project area to revitalized higher-density developments to respond to the need for housing, sources of employment, and associated retail land uses. The three newly added related projects fit into this pattern of cumulative development that is described in the Draft EIR. As further stated in the Draft EIR, land use conflicts are typically site-specific and not cumulative in nature; despite the number of cumulative projects in a given area, they would not necessarily compound to create cumulative land use conflicts. As such, the addition of the three related projects would not change the cumulative analysis or conclusions presented in the Draft EIR for land use and planning. Cumulative impacts related to land use and planning would thus remain less than significant for the same reasons identified in the Draft EIR. The newly added related projects would not change this conclusion.

Noise

The addition of three related projects would not change the impact determinations for noise as addressed in Draft EIR Section 4.10, Noise. While these three additional projects would have the potential to incrementally increase construction and operational noise intensity in the Project area, they would not change the Project's potential for contributing to cumulative effects. The three additional related projects are not directly adjacent to the Project site. As such, the proposed Project would not contribute to or overlap with localized noise and vibration effects associated with these projects.

By way of example, construction of the 243 and 330 Kansas Street related project (the nearest of the three additional projects) would appear to have existing noise-sensitive residential receptors at the northwest corner of E. Holly Avenue and Kansas Street that are as close as approximately 140 feet; however, these offsite receptors are 700 feet from the Project site. Since implementation of the Project and its component site-specific development, as well as unrelated development projects within its vicinity would all be subject to applicable noise standards, this means that construction noise from 243 and 330 Kansas Street would need to meet the City's construction noise threshold of 65 dBA at these offsite receptors 140 feet away. But because construction noise from the Project needs to comply with 65 dBA at its nearest offsite receptors, which include those at the northwest corner of E. Holly Avenue and Indiana Street that are less than 65 feet from the Project boundary, the Project construction noise exposure level at the Kansas Street receptors would be much less due to the additional 640 feet of distance travelled. With each doubling of distance representing a 6 dB reduction, the 65 dBA construction

noise level at the Indiana Street receptor would thus be at least 18 dB less (i.e., -6 dB at 130 feet, -12 dB at 260 feet, and -18 at 520 feet) and consequently a negligible acoustic contributor compared to what may be concurrent construction noise from 330 Kansas Street at these receptors. The same conclusion could be made for the offsite receptors at Indiana Street, because they are 700 feet from the 243 and 330 Kansas Street related project and would similarly receive an acoustically negligible contribution to the cumulative noise level. Such contribution is considered negligible in this context due to the principles of acoustical energy logarithmic summation: in summary, when two noise levels received at a common receptor are more than 10 dB apart, the result is effectively the larger of the two values. Both construction of the Project and the 243 and 330 Kansas Street related project could occur concurrently and individually comply with the City's construction noise standard, and each would not contribute to cumulative exceedances of noise standards of the other. Therefore, the incremental noise effect would remain as a less-than-significant impact with mitigation incorporated (included as MM-NOI-1) for Project construction noise.

Future development from implementation of the Project along with other projects would generate off-site traffic noise; however, even with increased traffic volumes, the noise generated from the three additional related projects would not represent a new significant impact. For instance, the predicted peak-hour traffic volumes for selected roadway intersections that include the effect of adding these three related projects to the cumulative and cumulative-plus-Project scenarios were numerically compared to earlier future traffic volumes used as inputs for studied roadway segments in the Draft EIR's Appendix J-1. The largest differences in total peak hour traffic, predicted to occur in the afternoon, at the Pacific Coast Highway intersections with E. Mariposa Avenue and E. Palm Avenue, result in no greater than a 0.09 dB increase in predicted traffic noise for the cumulative scenario and no greater than a 0.35 dB increase for the cumulative-plus-Project scenario. On these bases, and with no changes to roadway vehicle speeds or other modeling parameters, cumulative off-site traffic noise impacts would remain less than significant. Therefore, even with consideration of the additional related projects, the proposed Project's noise emissions would be less than significant.

Population and Housing

The cumulative population and housing analysis in the Draft EIR (Section 4.11.5) identifies two related projects that would contribute new residential units to the City: the projects at 540 E. Imperial Avenue and 1225 Mariposa Avenue. Two of the three newly added related projects (shown in Table 2-2 above) would contribute over 300,000 sf of office land uses and a total of eight new residential units to the City, in addition to the other related projects described in the Draft EIR. As such, these three projects would contribute primarily to the employment-generating uses within the City, which could further exacerbate the need for additional local housing stock. The three related project's new units would be small (e.g., approximately 500 sf) and are intended for the caretakers of the commercial properties, such as for security guards or others that need to stay overnight. The addition of 8 units intended to serve the planned office uses for the three new related projects would not be a substantial change in the context of cumulative housing and population growth for the City.

The Draft EIR further states that the related projects would primarily increase employment in the City. The three newly added related projects primarily consist of office uses and, therefore, would contribute to this overall pattern. Furthermore, as mentioned in the Draft EIR, the City is jobs rich and the eight new units proposed to serve the new office projects would not help to balance the jobs-to-housing ratio in the City. With or without the three additional related projects, the proposed Project would provide additional housing in a jobs-rich area. For the same reasons described in the Draft EIR, it is not anticipated that the proposed Project, in combination with other future foreseeable projects, would create a cumulatively considerable impact to population, housing, or employment. The newly added related projects would not change this conclusion and may in fact further support the need for the proposed Project's residential uses to facilitate a more balanced jobs-housing community.

Public Services and Recreation

The cumulative analysis for public services and recreation presented in the Draft EIR (Section 4.12.5) states that cumulative impacts to fire protection, police protection, schools, parks and recreational facilities, and other public facilities such as libraries would be generally addressed through development fees from the related projects. The addition of three related projects to the overall cumulative development scenario would incrementally increase demands on services but would also represent a commensurate increase in fees. As such, the analysis and conclusions in the Draft EIR would not change, and cumulative impacts would remain less than significant for the same reasons identified in the Draft EIR. The newly added related projects would not change this conclusion.

Transportation

The addition of three related projects would not change the impact significance conclusions as addressed in Draft EIR Section 4.13, Transportation. As described in Draft EIR Sections 4.6, Greenhouse Gas Emissions; 4.9, Land Use and Planning; and 4.13, Transportation, the proposed Project is consistent with plans addressing the circulation system (SCAG's 2020-2045 RTP/SCS, the City's Climate Action Plan, Metro's Long Range Transportation Plan, and LADOT's Short Range Transit Plan) and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities under cumulative conditions. The addition of three related projects would not change the proposed Project's proximity to public transit and the Project (and other related projects) would cumulatively contribute to transit ridership maintained by Metro and LADOT, which would result in less than significant impacts.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). Therefore, as stated in the Draft EIR, the City's LOS policy in the General Plan would not be applicable per Senate Bill (SB) 743; however, a discussion of the changes in the LOS analysis due to the inclusion of the three additional related projects is provided below for informational purposes.

The addition of the three related projects listed in Table 2-2 above is anticipated to change the LOS of the intersection at Pacific Coast Highway/El Segundo Boulevard in the AM peak hour from LOS D to LOS E, as shown in the attached memorandum (see Appendix A) to this Final EIR (Fehr & Peers 2021). Prior to the addition of these related projects, this intersection was forecast to operate at LOS D in the AM peak hour, as shown in Table 2-3. With the addition of the three related projects, this intersection is forecast to operate at LOS E in the AM peak hour, as shown in Table 2-4.

Table 2-3. Draft EIR Future (2027) Plus Project Intersection LOS Signalized Intersections

No.	Intersection	Peak Hour	Future (2027)		Future plus Project	
			V/C	*LOS*	*V/C*	*LOS*
6	Pacific Coast Highway/El Segundo Boulevard	AM	0.867	D	0.877	D
		PM	1.115	F	1.117	F

Source: Fehr & Peers, 2020 (Appendix J-1); adapted from Table 8A
Note: V/C = volume to capacity; LOS = Level of Service

Table 2-4. Revised Future Plus Project Intersection LOS Signalized Intersections

No.	Intersection	Peak Hour	Future (2027)		Future plus Project	
			V/C	*LOS*	*V/C*	*LOS*
6	Pacific Coast Highway/El Segundo Boulevard	AM	0.901	E	0.908	E
		PM	1.170	F	1.172	F

Source: Fehr & Peers, 2021
Note: V/C = volume to capacity; LOS = Level of Service

This changed future LOS condition would occur with or without the proposed Project. Importantly, the addition of the proposed Project would not individually contribute to an LOS change from the pre-Project condition. In summary, the addition of the three related projects would not result in the Project creating adverse circulation conditions regarding trips generated on the street network.

Additionally, the addition of three related projects would not result in a cumulatively significant impact related to VMT. As stated in Section 4.13, Transportation of the Draft EIR, the City has not yet adopted VMT guidelines, metrics, and significance criteria per SB 743 guidelines. As such, the impact thresholds used for this Project are based on the Governor's Office of Planning and Research (OPR) guidelines outlined in their Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018). As shown in Table 4.13-3 of the Draft EIR, the Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita (12.1 VMT). Per OPR guidelines, "…A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa…" Per the VMT analysis, the Project's VMT of 10.9 VMT falls below the efficiency-based threshold of 12.1 VMT, and the Project site is located within an urbanized area served by public transit. As such, the Project would not exceed the SCAG threshold for VMT and the Project's contribution to cumulative VMT would not be cumulatively considerable.

Finally, the addition of three related projects would not result in a cumulatively considerable significant impact related to emergency access. As with the proposed Project, driveways and/or circulation modifications proposed in the surrounding area would comply with applicable local, regional, state, and/or federal requirements. Further, since modification to access is largely confined to the Project site and the immediate surrounding area, Project-specific emergency access impacts would likely not impact other cumulative projects. Therefore, even with consideration of the additional related projects, the proposed Project's transportation impact conclusions would remain less than significant as stated in Draft EIR Section 4.13.

Tribal Cultural Resources

As stated in the Draft EIR (Section 4.14.5), cumulative impacts on tribal cultural resources consider whether impacts of the proposed Project together with other related projects identified within the vicinity of the Project site, when taken as a whole, substantially diminish the number of such resources within the same or similar context or property type. As discussed in the Draft EIR, there are no known tribal cultural resources on the Project site and the area is considered to be of low potential to contain unanticipated cultural or tribal cultural resources. Furthermore, mitigation measure MM-TCR-1 is set forth for the proposed Project to address the potential for inadvertent finds during excavation. The related projects would be subject to the same requirements of CEQA as the proposed Project and any impacts to tribal cultural resources would be mitigated, as applicable. The three related projects that have been added to the cumulative scenario are also subject to the same requirements, and mitigation would be applied

if necessary. As stated in the Draft EIR, impacts would not be cumulatively considerable after the Project-specific mitigation measure is applied. The newly added related projects would not change this conclusion.

Utilities and Service Systems

As stated in Section 4.15.5 of the Draft EIR, the proposed Project and each cumulative project would incrementally increase demands for utilities and service systems. The analysis in the Draft EIR demonstrates that available capacity exists to serve the proposed Project's water, wastewater, electricity, natural gas, telecommunications, and solid waste disposal needs. Similar to the Project, the capacity and availability of utilities to serve the related projects would be determined on a project-specific basis. In the event that upgrades are required due to cumulative projects, all construction work would be subject to local municipal code and applicable agency requirements, and would be subject to CEQA review accordingly. Furthermore, increases in water demand would be analyzed relative to the available supply outlined in the applicable Urban Water Management Plan and the increase in sewer generation for related projects located in the City would be governed under Title 12 of the El Segundo Municipal Code, which regulates public sewer facilities. The three newly added related projects would be subject to these same requirements and would also undergo analysis for utilities capacity on a project-specific basis. For the same reasons described in the Draft EIR, the Project's impacts to utilities and service systems would not be cumulatively considerable, and the newly added related projects would not change this conclusion.

Other Environmental Topics

With regard to cumulative impacts for the other environmental topics addressed in the Draft EIR, the addition of the three related projects described above would not change any impact determinations. While these projects would incrementally increase development intensity in the Project area, they would not change the Project's potential for contributing to cumulative effects. The three additional cumulative projects are not directly adjacent to the Project site. As such, the proposed Project would not contribute to or overlap with localized effects associated with these projects. Compliance with local and regional policies and regulations, combined with on-going monitoring of service levels for public services, utilities, and infrastructure, would preclude the Project from creating a cumulatively considerable impact, with or without the addition of the three above projects to the cumulative development scenario. Additional details are provided above for the other environmental topics addressed in the Draft EIR.

Conclusion

As outlined above, no new or different impacts requiring new or different mitigation would be required as a result of the additional related projects. No changes are required to the analysis or conclusions within the Draft EIR. No significant new information regarding the additional related projects within the meaning of CEQA Guidelines Section 15088.5 is presented herein, and as such, recirculation of the Draft EIR is not necessary.

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Comment Letter A1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7- OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0067
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

March 26, 2021

Paul Samaras
City of El Segundo, Development Services Department
350 Main Street
El Segundo, California 90245

RE: Pacific Coast Commons Specific Plan –
Draft Environmental Impact Report (DEIR)
SCH# 2020050508
GTS# 07-LA-2020-03504
Vic. LA-1 PM 25.455
Vic. LA-105 PM 00.474

Dear Paul Samaras,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed Pacific Coast Commons Specific Plan (Project) includes approximately 6.3 acres (post-dedication) of developed property located along Pacific Coast Highway. The entire area would receive a new General Plan Land Use Designation and zoning of Pacific Coast Commons Specific Plan. The adoption of a Specific Plan would allow for the following:

1. The continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767square feet of hotel development;
2. 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/townhomes;
3. 11,252square feet of new commercial/retail uses; and
4. Three new parking structures that would contain approximately 792 parking stalls.

A1-1

The nearest State facilities to the proposed project are SR 1 and I-105. After reviewing the DEIR, Caltrans has the following comments:

Caltrans acknowledges and supports infill development that provides a mix of land uses which allow a neighborhood to meet their needs for housing, work, and services, like the proposed Project aims to facilitate. Caltrans applauds the inclusion of a Shared Parking Analysis (Appendix J-2) which provides additional evidence that current municipal parking requirements result in more car parking than necessary. However, Caltrans still recommends reducing the amount of car parking to the fewest number of spaces possible. Research looking at the relationship between land-use, parking, and transportation indicates that car parking prioritizes driving above all other

A1-2

"Provide a safe and reliable transportation network that serves all people and respects the environment"

travel modes and undermines a community's ability to choose public transit and active modes of transportation. If the car parking structures must be built, they should be designed in a way that is conducive to adaptive reuse. They should contain flat floors with ramps on the exterior edge so that they can be more easily converted to beneficial uses in the future.

A1-2 Cont.

The project will not be providing unbundled car parking for residential units, despite it being a specific goal in the City of El Segundo Climate Action Plan. The DEIR states that this goal isn't applicable to the project, even though mandatory bundle parking has been shown to have a direct impact on housing costs, transportation choice, and ultimately results in additional Vehicle Miles Travelled (VMT). Additionally, the exact number of secure bike parking spaces to be provided is not specified. Caltrans recommends at least one long-term bicycle parking space per residential unit. Caltrans would encourage the Lead Agency to seriously consider unbundled car parking and providing an equitable number of long-term bike parking spaces as conditions of approval for this Project.

A1-3

For any work on or adjacent to Caltrans Right-of-Way, an Encroachment Permit will be required. Please reference the following right-of-way maps when applying: P23579-1, P23579-3.

Additionally, transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

A1-4

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS# 07-LA-2020-03504.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Response to Comment Letter A1

California Department of Transportation
March 26, 2021

A1-1 This comment summarizes the proposed Project's characteristics and location. The comment's summary of the Project's characteristics and location are correctly recorded with the exception of the Project site's acreage post street dedications. The comment letter recorded the approximate size as 6.3 acres. As detailed in Section 3.1, Project Summary, of the Draft EIR, the Project site totals approximately 6.385 gross acres or 6.23 acres post street dedications. No further response is required.

A1-2 This comment summarizes the Project and identifies the nearest State facilities, consistent with Draft EIR Section 4.13, Transportation. This comment also acknowledges that the Project constitutes an infill redevelopment rather than an all-new development and applauds the inclusion of the Shared Parking Analysis (included as Appendix J-2 of the Draft EIR) to reduce the parking requirements from what is currently required by the City of El Segundo. However, Caltrans still recommends reducing the number of parking spaces provided to the fewest number of spaces possible.

The Shared Parking Analysis reduced the City's parking ratios below what is required by the City's Municipal Code. Residential parking ratios were reduced from 2 spaces per dwelling unit to 1 space per studio, 1.5 spaces per 1-bedroom, and 2 spaces per 2-bedroom, which is supported by Institute of Transportation Engineers (ITE) rates per bedroom and further supported with research from Palo Alto (see Draft EIR, Appendix J-2, for a summary of this research). Hotel parking rates were also reduced based on the observed parking demands at the existing hotels, and then were adjusted to assume full occupancy of the rooms.

Caltrans also states that the proposed parking structures should be designed in a way that is conducive to adaptive reuse and should contain flat floors with ramps on the exterior edge so that they can be more easily converted to beneficial uses in the future. Taking into account site constraints, the parking structures have been designed to have flat floors to accommodate future conversions to different uses, as depicted in Figures 3-4C, Conceptual PCC-South Section, 3-5C, Conceptual PCC-Fairfield Parking Section, and 3-6C, Conceptual PCC-North Section of Chapter 3, Project Description of the Draft EIR.

A1-3 This comment states that the Project will not be providing unbundled parking for residential units, despite being a goal in the City of El Segundo Climate Action Plan. The Project Applicant has not proposed to unbundle parking in order to be responsive to community feedback received during public outreach in which concerns were expressed related to the potential for overflow parking into the adjacent residential community. Further, compliance with all goals of the City's Climate Action Plan is not mandatory to determine consistency. The Climate Action Plan is an aspirational document and does not modify what is in the City's General Plan or the El Segundo Municipal Code (ESMC). Further, vehicle parking is not a required threshold of consideration for the purposes of determining environmental impacts pursuant to CEQA.

The comment also points out that the number of bicycle parking spaces is not specified and recommends at least one long-term bicycle parking space per residential unit. This comment is acknowledged and will be taken into consideration by the City's decision makers as part of the Final

EIR. The Project will provide the following number of bicycle parking spaces, per the bicycle parking requirements established in the ESMC and CalGreen requirements:

- PCC South
  - 8 bike parking spaces for commercial uses
  - 34 bike parking spaces for residential use
- Fairfield Site
  - 6 bike parking spaces for commercial uses
- PCC North
  - 6 bike parking spaces for commercial uses
  - 24 bike parking spaces for residential use

The Project will provide more bicycle parking for both commercial and residential uses than is required by the City's Municipal Code.

Finally, Caltrans encourages the Lead Agency to consider unbundled car parking and providing an equitable number of long-term bike parking spaces as conditions of approval for this Project. This comment is acknowledged and will be shared with the City's decision makers.

A1-4 This comment states an Encroachment Permit will be required for any work on or adjacent to the Caltrans right-of-way and that a Caltrans transportation permit is required for oversized-transport vehicles utilizing State highways. These requirements are noted in the Draft EIR, within Section 3.7.3, Other Permits and Approvals. The comment also recommends large size truck trips be limited to off-peak hour commute periods. As stated in the Draft EIR, within Section 3.7.3, Other Permits and Approvals, the Project will require approval of a Traffic Control Plan in compliance with the California Manual Uniform Traffic-Control Devices. Additionally, MM-TRA-1 included in Section 4.13, Transportation, requires that the Traffic Control Plan address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors. These requirements are adequate to address potential impacts associated with use of large trucks during construction activities. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

Comment Letter O1

From: Sean Silva [redacted]
Sent: Monday, March 8, 2021 2:52 PM
To: Samaras, Paul
Subject: Public Records Request - 401 N PCH Project

Follow Up Flag: Follow up
Flag Status: Flagged

March 8, 2021

Via Email and U.S. Mail

City of El Segundo
Attn: Paul Samaras
350 Main St.
El Segundo, CA 90245
psamaras@elsegundo.org

RE: Public Records Act Request and Request for Mailed Notice of Public Hearings and Actions – Pacific Coast Commons, 401 N Pacific Coast Highway El Segundo, CA 90245

Dear Mr. Samaras,

CREED LA is writing to request a copy of any and all records related to the project, the Pacific Coast Commons, located at 401 North Pacific Coast Highway in El Segundo. The project consists of a 6-story building with 120 residential units and 5,700 square feet of commercial space and a second 6-story building with 137 apartment units and 5,500 square feet of commercial space; along with 6 detached townhomes. We are also writing to request copies of all communications and mailed notice of any and all hearings and/or actions related to the Project.

Our request for mailed notice of all hearings includes hearings, study sessions and community meetings related to the Project, certification of the MND (or recirculated DEIR), and approval of any Project entitlements. This request is made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152 and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. Our request includes notice to any City actions, hearings or other proceedings regarding the Project, Project approvals and any actions taken, or additional documents released pursuant to the California Environmental Quality Act.

Our request for all records related to the Project is made pursuant to the California Public Records Act. (Government Code § 6250 et seq.) This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed.

O1-1

1

We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me at (877) 810-7473 with a cost estimate before copying/scanning the materials.

Pursuant to Government Code Section 6253.9, if the requested documents are in electronic format and are 10 MB or less (or can be easily broken into sections of 10 MB or less), please email them to me as attachments.

My contact information is:

U.S. Mail
Jeff Modrzejewski
CREED LA
501 Shatto Place, Suite 200
Los Angeles, CA. 90020

Email
creedla@creedla.com

O1-1 Cont.

Please call me if you have any questions. Thank you for your assistance with this matter.

Sincerely,
Jeff Modrzejewski
Executive Director

2

Response to Comment Letter O1

CREED LA
March 8, 2021

O1-1 This comment requests a copy of any and all records related to the proposed Project, including copies of all communications and mailed notices of any and all hearings and/or actions related to the Project. The comment's request will be granted pursuant to Public Resource Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152, and Government Code Section 65092, as cited in the letter. Below is a list of approvals required for Project implementation.

As specified in the above listing, the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, would be considered at a public hearing by the City's decision makers. As such, these potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The designated contact for CREED LA will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the Lead Agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse.

Lastly, the comment only partially summarizes the project description by not including the components of PCC-Fairfield Parking. Please see Chapter 3, Project Description of the Draft EIR for more details, including Table 3-2, Conceptual Site Plan and Specific Plan Buildout Summary, for a breakdown of the proposed units and square footage for each land use. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter O2

Ph: (626) 381-9248
Fx: (626) 389-5414
Em: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA ELECTRONIC & U.S. MAIL

March 22, 2021

Tracy Weaver
City Clerk
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: allcityclerks@elsegundo.org

Paul Samaras
Principal Planner
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Public Records Act and Mailing List Request Regarding Pacific Coast Commons Specific Plan (SCH #: 2020050508).

Dear Ms. Weaver and Mr. Samaras,

On behalf of Southwest Regional Council of Carpenters ("**SWRCC**") and its members, this Office requests that the City of El Segundo ("**City**") provide any and all information referring or related to the Pacific Coast Commons Specific Plan ("**Project**") pursuant to the California Public Records Act ("**PRA**"), Cal. Government ("**Gov't**") Code §§ 6250–6270 (collectively "**PRA Request**").

Moreover, the SWRCC requests that City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

O2-1

The Southwest Regional Council of Carpenters is a labor union representing 50,000 union carpenters in six states, including in southern California, and has a strong interest in well-ordered land use planning and addressing the environmental impacts of development projects, such as the Project.

I. PUBLIC RECORDS ACT REQUEST.

SWRCC is requesting any and all information referring or related to the Project.

The Public Records Act defines the term "public record" broadly as "any writing containing information relating to the conduct of the public's business . . . regardless of physical form and characteristics." Gov't Code § 6252(d). "Records" includes all communications relating to public business regardless of physical form or characteristics, including but not limited to any writing, picture, sound, or symbol, whether paper, magnetic, electronic, text, other media, or written verification of any oral communication. Included in this request are any references in any appointment calendars and applications, phone records, or text records. These "records" are to include, but are not limited to correspondences, e-mails, reports, letters, memorandums, and communications by any employee or elected official of City concerning the Project.

Please include in your response to this request the following examples of "records," as well as any similar physical or electronic forms of communication: any form of writing such as correspondence, electronic mail records ("email"), legal and factual memoranda, facsimiles, photographs, maps, videotapes, film, data, reports, notes, audiotapes, or drawings. Cal. Government Code § 6252(g) (defining a writing to including "any record thereby created, regardless of the manner in which the record has been stored"). Responsive correspondence should include, inter alia, emails, text messages, or any other form of communication regardless of whether they were sent or received on public or privately-owned electronic devices "relating to the conduct of the public's business." Cal. Government Code § 6252(e); *Citizens for Ceres v. Super. Ct.* ("*Ceres*") (2013) 217 Cal. App. 4th 889, 909; *Citizens for Open Gov't v. City of Lodi* ("*Lodi*") (2012) 205 Cal.App.4th 296, 307, 311; *City of San Jose v. Superior Court* (2017) 2 Cal. 5th 608, 625 (finding that a public employee or officer's "writings about public business are not excluded" from the California Public Records Act "simply because they have been sent, received, or stored in a personal account.") .

O2-1 Cont.

This Office requests any and all information referring or related to the Project, including but not limited to:

(1) All Project application materials;

(2) All staff reports and related documents prepared by the City with respect to its compliance with the substantive and procedural requirements of the California Environmental Quality Act, Public Resources Code § 21000 et seq., and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq. (collectively "**CEQA**") and with respect to the action on the Project;

(3) All staff reports and related documents prepared by the City and written testimony or documents submitted by any person relevant to any findings or statement of overriding considerations adopted by the agency pursuant to CEQA;

(4) Any transcript or minutes of the proceedings at which the decisionmaking body of the City heard testimony on, or considered any environmental document on, the Project, and any transcript or minutes of proceedings before any advisory body to the public agency that were presented to the decisionmaking body prior to action on the environmental documents or on the Project;

(5) All notices issued by the City to comply with CEQA or with any other law governing the processing and approval of the Project;

(6) All written comments received in response to, or in connection with, environmental documents prepared for the Project, including responses to the notice of preparation;

(7) All written evidence or correspondence submitted to, or transferred from, the City with respect to compliance with CEQA or with respect to the Project;

(8) Any proposed decisions or findings submitted to the decisionmaking body of the City by its staff, or the Project proponent, Project opponents, or other persons;

O2-1 Cont.

(9) The documentation of the final City decision and approvals, including the final environmental impact report, mitigated negative declaration, negative declaration, or notice of exemption, and all documents, in addition to those referenced in paragraph (3), cited or relied on in the findings or in a statement of overriding considerations adopted pursuant to CEQA;

(10) Any other written materials relevant to the public agency's compliance with CEQA or to its decision on the merits of the Project, including the initial study, any drafts of any environmental document, or portions thereof, that have been released for public review, and copies of studies or other documents relied upon in any environmental document prepared for the Project and either made available to the public during the public review period or included in the City 's files on the Project, and all internal agency communications, including staff notes and memoranda related to the Project or to compliance with CEQA; and

(11) The full written record before any inferior administrative decisionmaking body whose decision was appealed to a superior administrative decisionmaking body prior to the filing of any litigation.

O2-1 Cont.

Please respond within 10 days from the date you receive this request as to whether this request specifies identifiable records not exempt from disclosure under the PRA or otherwise privileged or confidential, and are therefore subject to disclosure. This Office understands that this time may be extended up to 14 days for unusual circumstances as provided by Cal. Government Code § 6253(c), and that we will be notified of any extension and the reasons justifying it.

We request that you provide all documents in electronic format and waive any and all fees associated with this Request. SWRCC is a community-based organization. Please notify and obtain express approval from this Office before incurring any duplication costs.

If any of the above requested documents are available online, please provide us with the URL web address at which the documents may be downloaded. If any of the requested documents are retained by the City in electronic computer-readable format such as PDF (portable document format), please provide us with pdf copies of the

documents via email, or inform us of the location at which we can copy these documents electronically.

In preparing your response, please bear in mind that you have an obligation under Government Code section 6253.1 to (1) identify all records and information responsive to our request or the purpose of our request; (2) describe the information technology and physical location in which the records exist; and (3) provide suggestions for overcoming any practical basis for denying access to the records or information sought.

In responding to this request, please bear in mind that any exemptions from disclosure you may believe to be applicable are to be narrowly construed. *Marken v. Santa Monica-Malibu Unif. Sch. Dist.* (2012) 202 Cal. App. 4th 1250,1262; and may be further narrowed or eliminated by the adoption of Proposition 59, which amended article I, section 3(b)(2) of the California Constitution to direct that any "statute ... or other authority ... [that] limits the right of access" to "information concerning the conduct of the people's business" must be "narrowly construed."

As for any records that you nonetheless decline to produce on the grounds of an exemption, please bear in mind that the case law under the Public Records Act imposes a duty on you to distinguish between the exempt and the non-exempt portion of any such records, and to attempt in good faith to redact the exempt portion and to disclose the balance of such documents.

Please bear in mind further that should you choose to withhold any document from disclosure, you have a duty under Government Code section 6255, subd. (a) to "justify withholding any record by demonstrating that the record in question is exempt under express provisions" of the Public Records Act or that "the public interest served by not disclosing the record clearly outweighs the public interest served by disclosure of the record."

Finally, please note that you must retain and not destroy any and all records, notwithstanding any local record retention or document destruction policies. As the Court noted in *Golden Door Properties, LLC v. Superior Court of San Diego County* (2020) 53 Cal.App.5th 733 that a public agency "must retain '[a]ll written evidence or correspondence submitted to, or transferred from' . . . with respect to" CEQA compliance or "with respect to the project."

O2-1 Cont.

II. NOTICE LIST REQUEST.

We also ask that you put this Office on its notice list for any and all notices issued under the CEQA and the Planning and Zoning Law.

In particular, we request that City send by mail or electronic mail notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the City and any of its subdivision for the Project, or supported, in whole or in part, through permits, contracts, grants, subsidies, loans, or other forms of approvals, actions or assistance, including but not limited to the following:

- Notices of any public hearing held in connection with the Project; as well as
- Any and all notices prepared pursuant to CEQA, including but not limited to:
- Notices of determination that an Environmental Impact Report ("EIR") or supplemental EIR is required for a project, prepared pursuant to Public Resources Code Section 21080.4;
- Notices of availability of an EIR or a negative declaration for a project prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations;
- Notices of approval or determination to carry out a project, prepared pursuant to Public Resources Code Section 21152 or any other provision of law;
- Notice of approval or certification of any EIR or negative declaration prepared pursuant to Public Resources Code Section 21152 or any other provision of law;
- Notice of exemption from CEQA prepared pursuant to Public Resources Code section 21152 or any other provision of law; and
- Notice of any Final EIR prepared pursuant to CEQA.

This Office is requesting notices of any approvals or public hearings under CEQA and the California Planning and Zoning Law. This request is filed pursuant to California

O2-1 Cont.

Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 requiring agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send notice by regular and electronic mail to:

Mitchell M. Tsai, Attorney At Law
155 South El Molino Avenue
Suite 104
Pasadena, California 91101
Em: mitch@mitchtsailaw.com
Em: greg@mitchtsailaw.com
Em: leon@mitchtsailaw.com

O2-1
Cont.

We look forward to working with you. If you have any questions or concerns, please do not hesitate to contact our Office.

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Regional Council
of Carpenters

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Response to Comment Letter O2

Southwest Regional Council of Carpenters
March 22, 2021

O2-1 This comment requests a copy of any and all information related to the proposed Project, including any and all notices of any and all hearings and/or actions related to the Project. The comment's request will be granted pursuant to the California Public Records Act (Government Code §§6250-6270); California Environmental Quality Act (CEQA) (Public Resource Code §21000 et seq); and Planning and Zoning Law (Government Code §§65000-65010), as cited in the letter.

As specified in Section 3.7 of the Draft EIR, the Project applicant has requested approvals including the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, which would be considered at a public hearing by the City's decision makers. These potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The designated contacts for the Southwest Regional Council of Carpenters will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the Lead Agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter O3

LOZEAU DRURY LLP
T. 510.836.4200
F. 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
rebecca@lozeaudrury.com

Via Email

April 12, 2021

Paul Samaras, AICP
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245
psamaras@elsegundo.org.

Re: Comment on Draft Environmental Impact Report, Pacific Coast Commons Specific Plan (SCH# 2020050508)

Dear Mr. Samaras:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Project known as Pacific Coast Commons Specific Plan, aka SCH# 2020050508, including all actions related or referring to the proposed demolition of existing surface parking lots and construction of a new mixed use development located at 401-575 N. Pacific Coast Highway (PCH) and the parking lot on 600-block of PCH in the City of El Segundo ("Project").

After reviewing the DEIR, we conclude that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Development Services Department address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project. We reserve the right to supplement these comments during review of the Final EIR for the Project and at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

O3-1

Sincerely,

Rebecca Davis

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Response to Comment Letter 03

Supporters Alliance for Environmental Responsibility (SAFER)
April 12, 2021

03-1 This commenter's assertion that the Draft EIR "fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts" is inaccurate. This statement does not identify any deficiencies of the document and does not support this general assertion with any evidence.

The Draft EIR has been prepared in conformance with the substantive and procedural requirements of CEQA and the CEQA Guidelines. Specifically, the Draft EIR includes all of the required contents of an EIR and the associated required details and topics for analysis, as set forth in Sections 15120 through 15132 of the CEQA Guidelines. Furthermore, the Draft EIR was prepared by experts in the disciples of environmental impact assessment. For example, the topic of noise was evaluated by an Institute of Noise Control Engineering certified professional; the topic of archaeological resources was evaluated by a Registered Professional Archaeologist; the topic of historic resources was evaluated by professionals with master's degrees in the field; the topic of hazards and hazardous materials was evaluated by a professional engineer; and the topic of transportation was evaluated by an American Institute of Certified Planners professional. All conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

The Draft EIR presents a comprehensive analysis of the Project's potential environmental impacts and feasible mitigation measures and contains approximately 700 pages of detailed analysis, as well as a shorter executive summary that explains the analysis and conclusions in clean and simple language (as required by Section 15123 of the CEQA Guidelines). The Draft EIR is also consistent with Section 15121 of the CEQA Guidelines, in that it constitutes an informational document that informs public agency decision makers and the public generally of the significant environmental effect of a project, identifies possible ways to minimize the significant effects, and describes reasonable alternatives to the project. While the Draft EIR identifies a number of significant environmental effects, based on substantial evidence in the record, it also identifies feasible mitigation measures that would reduce all of the identified significant impacts to below a level of significance. One exception is a significant impact related to the Project's consistency with the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[2] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details. This conclusion and the infeasibility of mitigation for this impact is described and substantiated in Section 4.2.7 of the Draft EIR. For these reasons, the Draft EIR is considered adequate under CEQA, the Draft EIR meets the purpose and intent of CEQA, and the Draft EIR has imposed all feasible measures to mitigate the Project's significant impacts.

The commenter's assertion that the Draft EIR must be revised and recirculated is inaccurate. CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, describes the thresholds for recirculation of an EIR. Pursuant to Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of

[2] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

the draft EIR but before certification. New information can include a disclosure showing that a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, a substantial increase in the severity of an environmental impact, a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project (but the project's proponents decline to adopt it), or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Significant new information, as it is defined in CEQA Guidelines Section 15088.5, has not been added to this EIR subsequent to its release for public review. No changes have been made to the Project, and no changes have occurred in the environmental setting such that a new significant impact would occur or such that a substantial increase in the severity of an impact would occur. No additional data or other information has been added such that a new significant impact would occur or such that a substantial increase in the severity of an impact would occur. Additionally, no feasible project alternatives or mitigation measures considerably different from those in the Draft EIR that would clearly lessen the environmental impacts of the Project have been identified. Lastly, the Draft EIR is not fundamentally and basically inadequate and conclusory in nature. As described above, the Draft EIR includes extensive environmental analysis that was conducted by qualified professionals. The Draft EIR discloses a number of significant impacts that would result from the proposed Project and identifies mitigation that would reduce these significant impacts below a level of significance. As such, the Draft EIR is not required to be revised and recirculated, and the commenter has not presented substantial evidence to support a need for recirculation.

Section 15204 of the CEQA Guidelines states that "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments." This comment states that the Draft EIR "fails as an informational document" and that it "fails to impose all feasible mitigation measures." However, no explanation, examples, or evidence is provided in support of these statements. As further provided in Section 15204, "When responding to comments, lead agencies need only respond to significant environmental issues…" This comment does not provide evidence, or reference to, any significant environmental issues associated with the Project, and the claims set forth in this comment are not supported by any substantial evidence. (Substantial evidence must include "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts" (CEQA Guidelines Section 15384)).

Comment Letter O4

April 8, 2021

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
P.O. Box 86908
Los Angeles, California 90086

Attention:
Paul Samaras, AICP
Principal Planner
City of El Segundo

Subject:
Pacific Coast Commons Specific Plan (State Clearinghouse No. 2020050508)

Dear Mr. Samaras,

The Gabrielino Tongva Nation requests AB52 consultation on the proposed Pacific Coastal Commons Project in the city of El Segundo. Since the project location is within the traditional tribal territory of the Gabrielino Tongva Nation, our tribe's concerns will focus on any potential impacts to tribal cultural resources. We will also like to ensure that appropriate mitigation measures will be implemented for this project. O4-1

I look forward to discussing these issues with you at your earliest convenience.

Sincerely,

Sam Dunlap
Cultural Resource Director
(909) 262-9351
Samdunlap@earthlink.net

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Response to Comment Letter O4

Gabrielino Tongva Nation
April 8, 2021

O4-1 This comment states that the Gabrielino Tongva Nation (Tribe) requests Assembly Bill (AB) 52 consultation on the proposed Project. As described in Section 4.14, starting on page 4.14-7, the City contacted the Tribe in formal AB 52 notification on May 18, 2020. The Tribe did not respond within the 30-day window requesting consultation. Additionally, the Gabrieleno Band of Mission Indians – Kizh Nation sent a letter to the City on May 29, 2020 requesting consultation. Records of the AB 52 Consultation are included as Appendix K of the Draft EIR but are confidential and not for public view.

As discussed in Section 4.3, Cultural Resources, of the Draft EIR, MM-CUL-2 address potential impacts to archaeological resources (i.e., sites, features, or artifacts) and in Section 4.14, Tribal Cultural Resources, of the Draft EIR, MM-TCR-1 addresses potential impacts to tribal cultural resources. MM-CUL-2 and MM-TCR-1 are adequate to address all potential impacts to such resources, and no additional mitigation is required. However, while the window provided for consultation under AB 52 is concluded, the City will provide the results of the archaeological study to the Tribe and would review any additional information that the Tribe would like to provide with regards to tribal cultural resources or cultural resources that may be affected by the proposed Project.

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Comment Letter I1

From: BYDS Chow [redacted]
Sent: Saturday, February 27, 2021 2:39 PM
To: planning
Subject: Pacific Coast Commons -Objection

I1-1

Hi

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Response to Comment Letter I1

Byds Chow
February 27, 2021

I1-1 This comment provides an objection to the proposed Project, as stated in the subject line of the email. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration as part of this Final EIR. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter I2

From: wendy@martinlandscaping [redacted]
Sent: Sunday, February 28, 2021 6:48 AM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

February 28, 2021

Paul Samarus

RE: Pacific Coast Commons, El Segundo CA ,90245

Please keep me appraised of any developments, meetings, decisions etc. that become available regarding this proposed project as it develops. I2-1

Thank You

Wendy Martin

wendy052581@aolo.com

wendy@martonlandscapong.nmet

Wendy Martin / CFO
wendy@martinlandscaping.net
Office: 310-930-7892
www.MartinLandscaping.net
Lic. 932172

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Response to Comment Letter I2

Wendy Martin
February 28, 2021

I2-1 This comment requests to be notified of future information related to the proposed Project, including developments, meetings and decisions. As specified in Section 3.7 of the Draft EIR, the Project applicant has requested approvals including the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, which would be considered at a public hearing by the City's decision makers. These potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The commenter's email address will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the lead agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse.

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Comment Letter I3

From: Paul Morrison [redacted]
Sent: Monday, March 1, 2021 12:01 PM
To: Samaras, Paul
Subject: MAR CDC Holly, LLC

Morning Mr. Samaras

My name is Paul Morrison, I live at 421 Indiana Street, Apt 4. I am a Survey Party Chief with the City of Los Angeles, currently telecommuting.

I met the project engineers for this project late last year. They informed me that the work would start in 2 years, sometime in 2022 I would think. The water main is currently being replaced, which I assume is part of this project. I am 67 years old and will retire from the City of Los Angeles May 8th of this year.

I will be submitting a written comment regarding the environmental effects of this project before the deadline. This email has nothing to do with that pending comment.

This project will have definite quality of life consequences for me. As a construction Survey Party Chief I have some idea of the scope of the project. Will construction start as I was told, sometime in 2022? Will this project take 2 years to complete? Your response will help me make decisions that I need to think about.

I would greatly appreciate your feedback on these questions.

I3-1

Paul Morrison
Survey Division | Survey Party Chief
T: (213) 923-4694 | F: (310) 575-8864
1828 Sawtelle Blvd., Ste. 105
Los Angeles, CA. 90025

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Response to Comment Letter I3

Paul Morrison
March 1, 2021

I3-1 This comment includes a question related to the proposed Project's construction schedule. Section 3.4, Project Construction, of the Draft EIR includes a description of the construction schedule for the proposed Project. It is important to note that the actual timing of construction depends on various factors that are unknown at the time of the preparation of the Draft EIR; therefore, conservative assumptions were included in the Draft EIR to ensure an adequate analysis of potential impacts. As stated in the Draft EIR, it is anticipated that the three new development areas (i.e., PCC-South, PCC-Fairfield Parking, PCC-North) will be constructed sequentially in separate phases, and if so, are anticipated to be completed within 4 1/2 years of EIR certification and Project approval. However, the Draft EIR assumes an overlap of construction phases, which is possible depending on market conditions and would provide a more conservative analysis of short-term air quality, greenhouse gas, noise, and transportation impacts.

Section 3, Project Description of the Draft EIR describes that construction would begin as early as October 2021 (beginning of Phase 1) and end in July 2024 (end of overlapping Phase 2 and 3).[3] As shown in Table 3-3, Estimated Construction Schedule, the Draft EIR identifies site preparation and demolition as well as grading and evacuation would occur in Quarter 4 (Q4) of 2021. Additionally, building construction has been estimated to commence in Q1 of 2022.

Additionally, the comment notes an existing water main is being replaced. The commenter assumes the upgrade is part of the proposed Project. Although the comment is not specific in the particular water line under construction location, Section 4.15, Utilities and Service Systems, of the Draft EIR describes the existing and proposed water facilities supporting the Project site. Figure 4.15-1, Conceptual Water Utility Plan, of the Draft EIR provides the locations of the existing water lines and identifies the estimated domestic water demand for each of the proposed development areas within the Specific Plan, including PCC-South, PCC-Fairfield Parking, and PCC-North. Any required water line upgrades or improvements that would be a direct result of the proposed Project are not yet under construction and would not proceed unless the proposed Project is approved.

Lastly, the comment states an additional comment letter will be submitted by the commenter which will identify impacts to quality of life for the commenter. The aforementioned comment letter has been received and responded to; please see under Response to Comment Letter I26, below.

[3] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

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Comment Letter I4

From: Susannah Harper [redacted]
Sent: Tuesday, March 2, 2021 11:37 AM
To: Samaras, Paul
Subject: Keep small town feel of El Segundo

As a homeowner in El Segundo, the draw is the small town feel. Please reject the proposal for Pacific Coast Commons apartment complexes. I4-1

Sent from my IPhone

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Response to Comment Letter I4

Susannah Harper
March 2, 2021

I4-1 This comment expresses opposition to the proposed Project. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I5

From: Laura Honsowetz [redacted]
Sent: Wednesday, March 3, 2021 12:33 PM
To: Samaras, Paul
Subject: PCC high density apartment proposals

Hi Mr. Samaras,

I have been a resident of El Segundo for over 30 years and I have to say I have never written to the city about any building proposals thus far. I received a flyer on my door step the other day explaining the Pacific Coast Commons plan to build 2 multi-story apartment units. I was quite surprised and angered that this would even be considered. I hope the city is not so greedy as to proceed solely for the tax revenues this would generate. I5-1

This is a small town and we already recently added a huge number of new dwellings on the old Imperial School site just a short time ago. This added a large number of residents in a short amount of time that has impacted traffic, noise, school capacity, etc. We cannot continue to overdevelop our small little town. I live on the East side of town and we already have to content with hotel patrons and people parking in our neighborhoods to avoid airport parking fees (although this is down due to Covid now but I'm sure will resume eventually). We do not need more apartments on this side of town taking up residential parking spaces. I5-2

As it is, you can barely find parking in the Ralphs parking lot on any normal day. I can't imagine adding hundreds more people to this area and expecting it not to get worse. I love this small town and it's charm. This is one of the qualities that brings people here. I am not opposed to making our city better, but this is not it. We can improve upon existing buildings, but we do not need to add any new apartment buildings. I5-3

I know many people feel this way, but unfortunately there are many people that will not take the time to write.

Please do not approve this company's plan. We do not need it or want it.

Best regards,
Laura Honsowetz

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Response to Comment Letter I5

Laura Honsowetz
March 3, 2021

I5-1 This comment expresses opposition to the proposed Project. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

I5-2 The comment cites a recent project located at the former Imperial School site, which the commenter states resulted in a large number of new housing units and impacts to schools' capacity, and also states a general concern more traffic, noise, and overflow parking from the airport and hotels. Table 2-3, List of Cumulative Projects, of the Draft EIR identifies all anticipated cumulative projects at the time of the issuance of the Notice of Preparation, as well as the aforementioned site as #9 on the cumulative projects list, which comprises of 58 residential units within the City limits. The proposed Project's cumulatively considerable impacts were analyzed within each section of Chapter 4, Environmental Analysis, of the Draft EIR. As presented, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[4] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.

As such, the effects of the proposed Project on the environment (combined with other past, present, and reasonably foreseeable future development in the City) are analyzed and disclosed in the Draft EIR, and mitigation measures have been provided to reduce impacts to the extent feasible. Nevertheless, the commenter's general opposition to the proposed Project and further growth in the City will be included in this Final EIR for review and consideration by decision makers.

I5-3 This comment notes existing parking conditions on residential streets and is concerned for the Project's impacts to parking. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR.

[4] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Comment Letter I6

From: Jed Montgomery [redacted]
Sent: Friday, March 12, 2021 2:40 PM
To: Samaras, Paul
Subject: Pacific Coast Commons Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mr. Samaras,

I live near the proposal site. I was wondering if this is adopted what the city is doing, thinking of doing, or requiring developer to do in order to mitigate any potential negative impacts? I6-1

1. Issue parking permits for all surrounding streets that **excludes** any Hotel, Restaurant, Retail and PCC resident? I6-2
2. Speed bumps along Washington St between Mariposa and Maple to deter short cutters when traffic backs up at Mariposa/PCH or just close off Washington Street access from Mariposa altogether ? I6-3
3. Plant dense tall hedge on west side of parks to dampen propagation of noise pollution ?
4. Fund a Residential Sound Insulation program for homes with largest noise impact? Dual double pane windows
5. Require developer to buy noise easements?
6. Change adjacent Park hours to mitigate potential of unwanted activity and/or noise? Currently, I believe they are technically all 24 hrs / day I6-4

Sincerely,
Jed Montgomery

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Response to Comment Letter I6

Jed Montgomery
March 12, 2021

I6-1 This comment asks whether the proposed Project has been adopted and what the City is doing in order to mitigate the Project's impacts.

The proposed Project will be considered for approval by City decision makers at a public hearing for the Project. Decision makers will also consider this EIR for certification. The Draft EIR for the Project has identified a number of potentially significant environmental impacts under CEQA that would be associated with the proposed Project. (A list of these impacts can be found Table ES-1 in the Executive Summary of the Draft EIR.) Mitigation measures have been set forth in the Draft EIR for all of the potentially significant impacts (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[5] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). As part of the Project approval process, City decision makers will be required to adopt a mitigation monitoring plan (if the Project is approved), which is required to be in place and effective throughout all phases of the Project and would ensure that the identified mitigation measures are implemented. Mitigation measures that have been set forth for the Project include the use of efficient, low-emission construction equipment; measures to protect inadvertent discoveries of archaeological, paleontological, and/or tribal cultural resources during construction excavation; measures to ensure proper handling and disposal of hazardous materials that are encountered during construction; measures to reduce construction noise; and, measures to promote traffic safety during construction. These measures are also listed in Table ES-1 1 in the Executive Summary of the Draft EIR, as well as Sections 4.2 (Air Quality), 4.3 (Cultural Resources), 4.5 (Geology and Soils), 4.7 (Hazards and Hazardous Materials), 4.10 (Noise), 4.13 (Transportation), 4.14 (Tribal Cultural Resources).

I6-2 This comment provides a recommendation for the City to issue parking permits for all surrounding streets that would exclude any hotel, restaurant, retail, and Pacific Coast Commons residents.

The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. Nevertheless, the suggestion to provide parking permits for surrounding streets that excludes any hotel, restaurant, retail, and Pacific Coast Commons residents will be provided to City decision makers for their review and consideration as part of this Final EIR.

While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). As mentioned in the parking evaluation (Shared Parking Analysis, Fehr & Peers, February 2021), residential parking is not anticipated to be

[5] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan.

unbundled (i.e., the residents would not be charged a separate parking fee from their base rental rate). Furthermore, as described in Appendix J-2 of the Draft EIR, a before and after study could be conducted on the adjacent residential streets to understand if the Project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street. The Project applicant would work with residents to suggest the boundaries of this potential permit parking district. A permit parking district is implemented by the City at the request and approval of the residents. The proposed Project would not prohibit the formation of permit parking, but it is not required for the proposed Project.

I6-3 This comment provides a recommendation for the City to install speed bumps along Washington Street (between Mariposa Avenue and Maple Avenue) or to close off Washington Street access from Mariposa Avenue to prevent short cuts.

The topic of transportation is evaluated and discussed in Section 4.13, Transportation of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation under CEQA. Furthermore, it is noted that the Transportation Impact Analysis in the Draft EIR (Appendix J-1) provides details on distribution of traffic from the proposed Project. Approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Washington Street and California Street. As such, a very low percentage of Project-related traffic is expected to use local streets such as Washington Street. Nevertheless, the commenter's suggestion to add speed bumps along Washington Street between Mariposa Avenue and Maple Avenue or to close off Washington Street access from Mariposa Avenue will be provided to City decision makers for their review and consideration as part of this Final EIR.

I6-4 This comment provides a number of recommendations pertaining noise reduction, including a sound insulation program, double-pane windows, noise easements, and changing adjacent park hours.

The topic of noise is evaluated and discussed in Section 4.10, Noise of the Draft EIR. The analysis therein determined that construction noise from the proposed Project would be potentially significant; however, mitigation measure MM-NOI-1 would reduce this impact to below a level of significance, as described and substantiated in Section 4.10. Operational noise impacts caused by the Project were determined to be below a level of significance. As such, mitigation for long-term operations of the Project is not required under CEQA. Nevertheless, the commenter's suggestions with regard to noise will be provided to City decision makers for their review and consideration as part of this Final EIR.

Comment Letter I7

From: Richard Leos [redacted]
Sent: Friday, March 19, 2021 12:30 PM
To: Samaras, Paul; Planning
Subject: Questions and Comments on Pacific Coast Commons Development Proposal

Hello Mr Samaras:

Questions-

- Will all this increased housing and affordable housing possibly devalue current nearby/impacted properties? Some owner's retirement hinges on their property value. I7-1
- If it even is remotely so, what is being thought of to mitigate or abate losses for current owners? How is the balance of El Segundo sharing the cost? I7-1
- Can we utilize areas east of Sepulveda and south of Grand? (Rezone if necessary and this seems like a good alternative, it still gives great access to transit and jobs) I7-2
- How will this impact the quality of life for current nearby/impacted residents? I7-3
- Why is such extreme high density needed? We have tons of For Rent available in El Segundo. With **COVID, people can telecommute** and don't need to be close to work. This is the new trend as numerous companies have adopted it and the airline industry as a whole has said they expect a 30% drop in business travel that WILL NOT comeback because of **telecommuting**. I7-4
- Lionel Uhry indicated that parking will be charged. Will this be mandatory or optional for resident? And is this a lifetime guarantee from all current and future owners of the property? Is this a lifetime guarantee from the City of El Segundo and future City government officials? I7-5

Comments-

- Especially impacted are those in close proximity to these developments and recent buyers I7-6
- Worried about increased congestion, noise, traffic....basically lowered quality of life I7-6
- I have noticed that rent prices have dropped recently and for example Imperial Blvd, every single building has a "For Rent" sign in the yard, market forces at work, why mess with it...?? I7-7

Employment Proximity-

- I referred to access to jobs in the "question" portion above, but are you aware that the **overwhelming majority of employees at LAX (largest employer in the area) already live within 5-10 miles of their job?** This information was uncovered as a result of the CEQA process when LAWA was proposing the LAMP (Landside Access Modernization Program). I7-8
- Purpose of SCAG RHNA is to put people close to jobs, LAX employs around 50,000 (largest employer by far in area) I7-8
  - No jobs available at LAX now or near future I7-8
  - After 9/11 it took aviation 10 years to recover after this 1 day event, the pandemic will go on for over a 1 YEAR event, therefore no huge job needs in aviation I7-8
  - Also, when jobs needed at LAX, they will be filled by those furloughed or layed off. Currently those ppl are waiting it out on significantly higher EDD / Fed stimulus and will return (translation: all the "new" jobs at LAX already spoken for) I7-8
- I'm certainly not applying this to all, but historically people who live in apartments are less desirable neighbors and more likely to engage in crime or other anti-social behavior, whereas homeowner's (condos, etc) are engaged, accountable and incentivized for a greater quality of life over longer term which produces better I7-9

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outcomes for all. Unlike those who immediately think you're discriminating, that is definitely not the case. I don't care what demographic were to live there, they could be the most diverse affluent group in Los Angeles, it's just a fact with apartments. Who is looking out for the single family neighborhood? With my property taxes, mortgage interest (even currently refi'ed) and home mtc this total is nearly $10,000 **MORE** than what annual rent would cost me and I have a simple 2/1, 1,000 sq ft fixer upper. I'm almost better off renting if my property gets devalued. Why am I paying all of these super high taxes and get nothing for it?

I7-9 Cont.

- **Bottom line is this project has a high potential to negatively impact the nearby community's quality of life, property value and feels like an attack on the single family neighborhood. Telecommuting has been adopted, mass transit and walking has not. City of El Segundo has same complaints/concerns towards LAX as recently seen in the City's response to an LAX DEIR.**

I7-10

Regards,

Richard Leos

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Response to Comment Letter I7

Richard Leos
March 19, 2021

I7-1 This comment asks if the Project's proposed housing component would impact nearby residences' property values. According to the State CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." The Project's impact on the site's surrounding property values is not within the scope of required environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-2 This comment asks if the City could rezone and utilize areas east of Sepulveda Boulevard/Pacific Coast Highway and south of Grand Avenue as a Project site alternative. The potential for an alternative location for the proposed Project was considered within Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process. Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the proposed Project. As stated in CEQA Guidelines Section 15126.6(f)(2)(A), the Draft EIR shall analyze alternative sites based on whether or not any of the Project's significant effects would be avoided or substantially lessened by putting that Project in another location. However, there are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation. Furthermore, only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR, and no other sites along Pacific Coast Highway or east of Pacific Coast Highway and South of Grand Avenue are under control by the Project applicant. As such, alternate locations east of Sepulveda Boulevard/Pacific Coast Highway and south of Grand Avenue were rejected as being infeasible.

I7-3 This comment questions the proposed Project's impacts to quality of life for current and nearby residents surrounding the Project site. While "quality of life" is not a topic that is addressed under CEQA, environmental effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[6] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.

I7-4 This comment questions the need for developing a high-density development in the City. The commenter is concerned that rental units are already available in the City and due to COVID-19, more

[6] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

people would prefer telecommuting and hence not need to live close to work. The commenter asks if the parking charge would be mandatory and would apply to all current and future property owners.

As described in Section 3.5, Project Objectives of the Draft EIR, the following objectives are set forth in support of the proposed Project's residential units: (1) Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan; and (2) Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees. These stated objectives, as well as the proposed Specific Plan, were determined to be consistent with the goals and policies of the City's General Plan, as described in Section 4.9, Land Use and Planning (see Table 4.9-1). Implementation of the proposed Project would not negatively impact any initiatives or public policies intended to increase telecommuting options. Furthermore, any potential long-term increases in the rate of telecommuting due to COVID are unknown at this time and any potential for a corresponding reduction in the need for housing in El Segundo is speculative.

As shown in the Section 4.13 of the EIR, the proposed Project is located in an efficient traffic analysis zone (TAZ) within the City, as measured using the new metric of transportation impact analysis under CEQA, i.e., Vehicle Miles Traveled (VMT). Therefore, the development of a high-density mixed-use project in the City would further improve availability of housing and jobs in a travel-efficient location served by bus routes and the Los Angeles County Metropolitan Transportation Authority (Metro) C Line. The proposed Project would contribute to the housing supply inventory as required by the SCAG's Regional Housing Needs Assessment (RHNA). However, it is the decision of the City's elected officials to approve or deny the proposed Project. CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits.

I7-5 For a response to concerns regarding parking at the Project site, see Section 4.13, Transportation, of the Draft EIR. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Specifically, the comment raises concerns regarding paid parking at the Project site. As described in Appendix J-2, the hotels will continue to charge for parking on site and the retail uses will provide free parking with validation. Furthermore, the Project will be including the cost of parking within the residential rents and will not charge residents separately for parking.

I7-6 This comment raises concern for the residents surrounding the Project site and notes impacts related to noise and traffic would reduce quality of life. This comment is similar to the question above in Response to Comment I7-3, above. As such, please see the above response.

I7-7 This comment notes existing "For Rent" signs on properties along Imperial Boulevard. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-8 This comment generally asserts that the majority of employees at the Los Angeles International Airport (LAX) live near their jobs and that the demand for new employees in El Segundo will be reduced due to various factors, including the federal stimulus and the COVID-19 pandemic. Additionally, this comment's assertion is speculative and not supported by evidence. This comment does not pertain to

the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-9 This comment expresses opposition to the proposed Project's housing component. The comment further states socio-economic concerns that are not within the scope of the environmental analysis required by CEQA. As such, no response is required.

I7-10 This comment summarizes the aforementioned points of opposition to the proposed Project, as responded to in I7-1 through I7-9. No further response is required.

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Comment Letter I8

From: Chris Johnson [redacted]
Sent: Saturday, March 20, 2021 4:05 PM
To: Planning
Cc: Samaras, Paul
Subject: Pacific Coast Commons proposal

Hi there.

I live in El Segundo, and have three kids in our schools. I was recently made aware of the Pacific Coast Commons development. Fortunately, a concerned citizen put a lot of time into analyzing the proposal and raised some very valid points calling for revision to the current plans. Please see his summary here: https://pacificcommonsno.wixsite.com/report I8-1

The last thing we need in El Segundo is an increase in auto congestion, and vehicles zooming up and down our to-become-more-crowded streets along which our kids play and ride their bikes. Please consider this a request to review the above website, and to it into consideration prior to April 11th. I8-2

Thank you.
-Chris Johnson

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Response to Comment Letter I8

Chris Johnson
March 20, 2021

I8-1 This comment expresses concern for the proposed Project and cites a website prepared in opposition to the Project. The website provides the same links and letters as those presented in Response to Comment Letter I21, included in this Final EIR. As such, please see Response to Comment Letter I21. No further response is required.

I8-2 This comment states the proposed Project would result in an increase in traffic congestion, including increased speed of vehicles on surrounding streets thereby threatening the safety of neighborhood children. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation. Furthermore, the Transportation Impact Analysis (included as Appendix J of the Draft EIR) provides details on distribution of traffic from the proposed Project. Approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Washington Street and California Street. As such, a minor amount of Project-related traffic is expected to use local streets such as Washington Street, which have capacity to accommodate the increase and would not result in new or increased hazards to pedestrian or bicyclists. No revisions to the Draft EIR are required.

The comment further asks for this comment to be reviewed and considered prior to April 11th. The Final EIR includes a copy of each comment letter provided during the 45-day public review period from February 25, 2021 to April 12, 2021. As such, the City has prepared responses to each comment for the City's review and consideration as part of this Final EIR. Under the CEQA Guidelines, the Lead Agency is required to evaluate and provide written responses to comments received on the Draft EIR (CEQA Guidelines, Section 15088). Therefore, this comment will be provided to City decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I9

From: Jed Montgomery [redacted]
Sent: Saturday, March 20, 2021 5:47 PM
To: Samaras, Paul; Planning
Subject: Re: Pacific Coast Commons Proposal

Any update on this? Did you receive it?

Sincerely,
Jed Montgomery

I9-1

On Fri, Mar 12, 2021 at 2:40 PM Jed Montgomery [redacted] wrote:

Hello Mr. Samaras,

I live near the proposal site. I was wondering if this is adopted what the city is doing, thinking of doing, or requiring developer to do in order to mitigate any potential negative impacts?

1. Issue parking permits for all surrounding streets that **excludes** any Hotel, Restaurant, Retail and PCC resident?
2. Speed bumps along Washington St between Mariposa and Maple to deter short cutters when traffic backs up at Mariposa/PCH or just close off Washington Street access from Mariposa altogether ?
3. Plant dense tall hedge on west side of parks to dampen propagation of noise pollution ?
4. Fund a Residential Sound Insulation program for homes with largest noise impact? Dual double pane windows
5. Require developer to buy noise easements?
6. Change adjacent Park hours to mitigate potential of unwanted activity and/or noise? Currently, I believe they are technically all 24 hrs / day

Sincerely,
Jed Montgomery

I9-2

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Response to Comment Letter I9

Jed Montgomery
March 20, 2021

I9-1 This comment consists of a follow-up to Comment Letter I6 and requests confirmation that the commenter's email was received by the City. The commenter's email (which is categorized as Comment Letter I6 in this chapter of the Final EIR) has been received by the City and is included in this Final EIR for review and consideration by decision makers.

I9-2 This comment consists of the email that comprises Comment Letter I6. As such, refer to Response to Comment Letter I6 for responses.

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Comment Letter I10

From: Antoine Michael [redacted]
Sent: Sunday, March 21, 2021 10:01 AM
To: Samaras, Paul
Subject: Pacific Coast Commons – Rejection

To whom it may concern,

As an El Segundo resident living on Washington Street, I'd like to formally reject the PCC proposal to build multiple apartment complexes.

The city feels like it has been on a steady decline in quality (increased vandalism + homelessness) already as it is and this would further push those issues.

The reason anyone moves to El Segundo is to get the benefits of a small neighborly community, which is rare in West LA. Crowding the city with high density apartments changes the entire vibe of the city and the current residents should have a say in whether or not they'd like that.

I10-1

Thanks,
Antoine

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Response to Comment Letter I10

Antoine Michael
March 21, 2021

I10-1 This comment expresses opposition to the proposed Project's housing component. Additionally, the comment states a concern for a decline in the quality of life in the City with an increase in vandalism and homelessness. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I11

From: McKenna Wilson [redacted]
Sent: Monday, March 22, 2021 11:49 AM
To: Samaras, Paul
Subject: Concerns about PCC proposed 6 story apartment complexes

Hello City Planner Paul Samaras,
I was made aware of the Pacific Coast Commons (PCC) proposing multiple high-density 6 story apartment complexes, 263 units, around me and I am very concerned. I live on the corner of Mariposa and Illions in the 9 unit condo buildings and the traffic has gotten increasingly worse over the past 6 years. Not taking into account where people are going to park and how the complexes will impact this community is something I strongly suggest looking into. Illinois Street and Indiana Street are heavily populated with cars parked from the surrounding business including Grand Motorsport, Bizhaus, Insight Investment Counsel, Walgreens, and the W XYZ bar. I11-1

Adding more residents would increase the density of this area significantly. There are already issues with parking with construction going for almost a year, on Illinois Street between E. Pine Ave and E. Holly Ave. This area already has a high volume of apartments and I am fully against the construction of the 6 story complexes around me. I11-2

If you have any further questions, please don't hesitate to reach out.

Thanks

McKenna Wilson
C: (310) 600-8109

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Response to Comment Letter I11

McKenna Wilson
March 22, 2021

I11-1 The commenter raises concern over increase in traffic and parking demand that could occur with the development of the proposed Project. The commenter notes that the streets adjacent to the Project site are already experiencing traffic congestion and parking shortages due to construction and development of high-density apartment complexes. For response to concerns regarding increased traffic along streets adjacent to the Project site, see Response to Comment I7-4.

I11-2 This comment addresses concern for parking-related construction impacts. The shortage of availability of parking in the area during construction is discussed in Section 4.13 of the Draft EIR. As such, and as further detailed in Section 4.13, the City would implement the following requirement as a condition of Project approval:

- If the timing of the proposed construction of PCC-South and PCC-North (i.e., Phase 2 and Phase 3) would overlap and the total parking demand would exceed the total parking supply, the Project applicant/developer would be required to accommodate the excess parking demand at an off-site location and provide shuttle service to and from the Project site accordingly to ensure that that parking is adequately provided during short-term construction activities. (Draft EIR Section 4.13, Development Agreements/Conditions of Approval, page 4.13-10)

Once the proposed Project and other related projects are constructed, the availability of parking would return to normal conditions that existed during the pre-construction phase. No changes or additions to the project description or environmental document are required in response to this comment.

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Comment Letter I12

From: Stephanie Jordon [redacted]
Sent: Monday, March 22, 2021 6:01 AM
To: Samaras, Paul
Subject: High density apartments

Dear Paul,

I Brenton C Graham @ 1630 e palm Ave

Unit 08 El Segundo , Ca have Air rights.

The parking structure would be blocking my

View of the mountains and the view of PCH.

I did not purchase my property 25 years ago

To look at a parking structure. This is not

An eminent domain situation.

Sent from my iPhone

I12-1

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Response to Comment Letter I12

Stephanie Jordon and Brenton C. Graham
March 22, 2021

I12-1 This commenter states that they reside in El Segundo and that the proposed parking structure would block the commenter's view of Pacific Coast Highway and of the mountains. The commenter further states that the Project does not involve eminent domain.

The uses that are proposed directly adjacent to the commenter's address include a proposed fire access lane and townhomes, which are consistent with the adjacent multi-family residences at 1630 Palm Avenue. The aesthetic impacts of the proposed Project, including its impacts on public views, have been evaluated in Section 4.1 of the Draft EIR. This analysis determined that the proposed Project would not have a substantial adverse effect to existing scenic views of the mountains, the coastline, or beaches as viewed from public vantage points. Generally, views of a highway (such as the Pacific Coast Highway) are not considered scenic. Effects on private views are not considered impacts on the environment under CEQA. Furthermore, the proposed Project does not involve eminent domain in any manner, as the proposed Project is completely within the private ownership of the Project applicant, with the exception of the off-site roadway improvement at Mariposa Avenue. Nevertheless, the commenter's concerns regarding views of the Project from their property will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I13

From: Maggie Matchett [redacted]
Sent: Monday, March 22, 2021 12:29 PM
To: Planning; Samaras, Paul
Subject: NO - High Density Apartments

WE DO NOT SUPPORT HIGH DENSITY APARTMENTS IN EL SEGUNDO

Our family will not support it, nor will we support any elected official who supports it.

We own three lots in town and will happily sell and move onto PV if this place gets over crowded.

I'm sure many others will as well.

I13-1

Thank you,
Maggie Matchett & Family

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Response to Comment Letter I13

Maggie Matchett
March 22, 2021

I13-1 This comment expresses opposition to the proposed Project's housing component. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

The comment further states they will move if the City gets overcrowded. As discussed in Section 4.11, Population and Housing, of the Draft EIR, the proposed Project would provide a resident population that exceeds the Southern California Association of Government's (SCAG's) projections. However, the proposed Project would support SCAG's goals and strategies for growth in the region by developing new housing which would improve the City's job/housing balance. As such, impacts related to population growth were found to be less than significant. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I14

From: LGA@310[redacted]
Sent: Monday, March 22, 2021 5:11 PM
To: Samaras, Paul
Subject: Re: El Segundo Pacific Coast Commons project

Hello Paul,

Thank you so much for your time today and for providing me with this information. I will definitely look into this project.

I'll also provide you with a picture and information on what I'm hoping to do in the front of my house.

I14-1

Thanks, again.

Best regards,

Lizabeth Allen

Sent from my iPhone

On Mar 22, 2021, at 3:26 PM, Samaras, Paul <PSamaras@elsegundo.org> wrote:

Hello Ms. Allen,

It was nice speaking with you. Per our conversation, I have added you to our email list for the Pacific Coast Commons project. In addition, if you would like to learn more about the project you can follow the link below to our "active projects" page on the City webpage. Please look for the Pacific Coast Commons (EA 1248) section. There is a link to the Environmental Impact Report (EIR) for the project and its appendices.

https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects

As I mentioned during our conversation, I would encourage you to submit your comments/concerns about the EIR or the project in general in writing. Just email me back with your thoughts, and I will make sure your comments are part of the record for the City Council to consider.

Regarding your own project at your residence, please email me your address and a detailed description of what you're trying to do and I will confirm whether or not a permit is required. A photograph will be helpful as well.

I14-2

Thanks,

Paul Samaras, AICP
Principal Planner
City of El Segundo

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Response to Comment Letter I14

Lizabeth Allen
March 22, 2021

I14-1 This comment presents an email communication from the commenter to City staff, which acknowledges receipt of Project information as well as a non-related comment concerning improvements to commenter's property. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I14-2 This comment presents an email communication from City staff to the commenter, which notifies the commenter that they have been included in the email communication listing for the proposed Project. In addition, City staff provided a link to the City's website which contains the Project's Draft EIR and technical appendices. City staff encouraged the commenter to provide written comments or concerns about the Draft EIR. Lastly, City staff acknowledged a non-related comment regarding improvements to the commenter's property. This comment does not contain specific concerns regarding the adequacy of the Draft EIR; no further response is required.

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Comment Letter I15

From: PAUL TRUMP [redacted]
Sent: Friday, March 26, 2021 9:47 AM
To: Samaras, Paul
Cc: Planning
Subject: 401-575 N. PCH Applicant MAR CDC Holly, LLC

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras: We write to strongly oppose allowing the development of new homes at the above address. For the same reasons that the City opposed LAX modernization on March 17, 2021, we to strongly oppose this project based on our concerns about increased noise pollution, negative affects to the air quality and traffic congestion impacting residents and other business. Mariposa is in the middle of this town and feeds traffic for people using the retail locations on the east side of PCH and Mariposa. Adding another 200-400 cars a day to the intersection would create extreme traffic congestion, noise, pollution and residential impacts. I15-1

My wife and two kids have lived at 1523 E. Mariposa, two blocks from the proposed location, for the past 24 years. In those 24 years we have seen many changes on this side of town. We have seen the addition of McDonalds to most recently In-N-Out. When the Hacienda hotel was operating their ballroom we would experience an increase in traffic, a reduction in parking, and an increase in trash left on the street. The traffic and trash have only increased with In-N-Out and people working from home. No longer is this City a peaceful Mayberry but slowing becoming a City based on the taxes provided by large companies, ADU's, and any other way it can increase revenue. I15-2

Today, if you look along Washington and Illinois in the early morning when the parks are empty, almost all street parking is taken. It is my belief that this is due to the number of people living in the apartments and townhomes on the streets the intersect Mariposa. For those of us that live within blocks of the proposed location, we would see increased parking along already congested streets and potential litter. There was a time when after nine or ten at night Mariposa would be almost empty, but not today. Traffic is a constant and the Fire and Police activity is a nightly event. By substantially increasing the population in this area, as well as the draw of shoppers, the area cannot handle the increases in traffic or noise. I15-3

We ask that the City please deny any developers request to add new homes along PCH as requested.

Thank you,
Paul and Cami Trump
1523 E. Mariposa Ave

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Response to Comment Letter I15

Paul and Cami Trump
March 26, 2021

I15-1 The commenters raise concern over development of the proposed Project because it would potentially increase noise, air, and traffic impacts to the residents and businesses in the area and especially along Mariposa Avenue.

As analyzed in Draft EIR Section 4.2, Air Quality, the proposed Project would result in less than significant impacts regarding the Project's potential to result in a cumulatively considerable net increase of criteria pollutants as well as the Project's potential to result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Mitigation was incorporated to reduce the Project's potential to expose sensitive receptors to substantial pollutant concentrations, thus, reducing the potential impacts to a less-than-significant level. Therefore, the commenter's concern for air pollution along Mariposa Avenue and the potential impacts to existing residential are analyzed in the Draft EIR. Although, the Draft EIR also determined a significant and unavoidable impact related to Project's potential to conflict with or obstruct implementation of the applicable air quality plan, these impacts considered on a regional scale (e.g., South Coast Air Basin). Furthermore, the determination is based on an exceedance in population growth projections in the Air Quality Management Plan and not related to the commenter's concern for vehicular emissions. No change is required.

Section 4.13, Transportation, of the Draft EIR analyzed the Project's potential impacts related to transportation and determined less than significant impacts would occur. As such, the Project would be consistent with existing programs, plans, ordinances, and policies addressing the circulation system; would be consistent with Section 15064.3(b) of the State CEQA Guidelines; and would result in less than significant impacts related to design hazards and incompatible uses. Mitigation was incorporated to reduce potential impacts related to emergency access. The commenter's concern for traffic congestion along Mariposa Avenue was analyzed within the Draft EIR and considered within the Project's design. In fact, implementation of the proposed Specific Plan includes site-specific development standards. Development Standard C.1 would reconfigure the eastbound lane of Mariposa Avenue at PCH from one left lane and one through-right lane to one left, one through, and one right-turn lane. The proposed right-turn lane is recommended to accommodate peak-hour 95th percentile queues. This infrastructure improvement has been taken into account for the plus-Project scenarios of the transportation impact analysis (i.e., Level of Service Analysis [LOS] for General Plan Consistency). Specifically, the Future plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Future Base and Future plus Project with improvement conditions at Mariposa Avenue. The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1).

With respect to noise, Table 4.10-6 of the Draft EIR includes assessment position "ST4", located on the corner of Illinois Court. and Mariposa Avenue. At this position, the change in traffic noise due to the

Project is expected to be a reduction, not an increase, due largely to the introduction of PCC buildings as occlusions to direct sound paths from PCH.

I15-2 The commenters state concerns with the recent commercial development in the area has changed the character of the neighborhood due to increased traffic congestion, reduced parking availability and an increase in trash accumulation on streets. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I15-3 The commenters state that there is an existing lack of on-street parking in the area and the proposed Project would cause a further increase in parking demand and traffic due to the addition of new population in the area.

For response to concerns regarding increased demands for parking in surrounding neighborhoods, see Response to Comment I6-2.

Comment Letter I16

From: Neil Cadman [redacted]
Sent: Friday, March 26, 2021 4:12 PM
To: Samaras, Paul
Subject: Pacific Commons Development

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul.

As a business owner, homeowner, and operator of a building across the street from the development (1729 E. Pine Avenue), I fully support the Continental Development/Mar Ventures proposed development of the parking structures and apartment/retail buildings on PCH. I16-1

Concerned about traffic, but we always adapt!

Thank you.

Neil R. Cadman, CPM®
President

214 Main Street #361
El Segundo, CA 90245
310-606-5894
ncadman@cadmangroup.net
www.cadmangroup.net
DRE #01061980

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Response to Comment Letter I16

Neil Cadman
March 26, 2021

I16-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

The comment further notes concern for traffic as a result of the proposed Project. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. The commenter's concern for traffic may relate to traffic congestion which is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines. Impacts related to vehicle miles traveled were found to be less than significant, no mitigation is required.

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Comment Letter I17

From: Frank Glynn [redacted]
Sent: Friday, March 26, 2021 5:23 PM
To: Samaras, Paul
Subject: Pacific Commons Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul:

I would like to register my support for the Pacific Commons project.
The parcels of land for proposed development have been a blight for as long as I have lived in town (26 years).
The developers have actively responded to the concerns raised by the community, and have created an appropriately scaled project.
I am fully in favor of mixed use developments that assist the City in meeting the mandated RHNA goals and that activate the street.

I17-1

Best wishes,

Frank

FRANK GLYNN AIA
www.sagarchitecture.com
Tel [redacted] Mob [redacted]

SAGA
architecture

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Response to Comment Letter I17

Frank Glynn
March 26, 2021

I17-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I18

From: Frances de Freitas [redacted]
Sent: Sunday, March 28, 2021 11:21 PM
To: Samaras, Paul
Subject: Pacific Coast Commons Comments

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul.

I live one block from the proposed development and am very concerned about the negative impacts from a six story apartment complex to our neighborhood. I18-1

Pacific Coast Commons Comments.

- A question was asked at the Environmental report scoping
- meeting about studying the impact charging for parking at Pacific Commons would have on parking on nearby residential streets, (Original Question. Will analysis be performed to understand the impact of charging for parking on the density of cars parked on
- surrounding neighborhood streets?) I understand parking is outside of the Environmental impact report but all analysis in the report assumes everyone would use Pacific Coast Commons provided parking. This assumption is flawed as people will not pay for the
- parking if there is free street parking. We already see this fact at the Fairfield and Aloft hotel where many guests opt to park on the street instead of paying for parking. Parking on Washington/Palm is already full each day due to people who work in nearby
- office buildings (near PCH and Imperial) which charge for parking as people who work there opt to park for free on our streets. A parking district was created near these office buildings but that only pushed the problem to the edge of the parking district
- around Palm Ave. Here there are numerous existing apartments and condos on Palm Ave between PCH and Washington Street with inadequate parking which already makes parking impossible on street cleaning days. The parking issue must be addressed and resolved
- (outside of the Environmental report) as apartment residents will clog the streets in front of our homes instead of paying for parking at the proposed complex. I18-2
-
-
- There is already a backup of cars to make a left turn
- from Mariposa onto PCH and adding traffic from all the people from a six story apartment and business building, it is extremely likely that people will take other streets such as Washington to go around the traffic, but Washington Street and Mariposa Ave are
- not studied in the report. Analysis of the impact of traffic on Washington Street must be included as it lies directly behind project location and will be used as a cut through due to congestion on Mariposa I18-3
-
-
- The metro Green line is unreasonably far for people to
- walk to and people do not use the 232 bus to connect to it due to its infrequent service I18-4
-
-
- The traffic analysis hinges on people actually using I18-5

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- the Mass Transit services but no analysis was done of current use of these services by people who already live in the same vicinity. The report uses generic assumptions that do not represent the people living here. The findings of such a survey would likely
- contradict the transport claims made by the environmental impact report. People who currently live here do not use MassTransit nor walk to nearby services.

I18-5 Cont.

- Someone at the scoping meeting also said ""I am a resident
- on Palm Avenue and permit parking would be necessary for current residents." When will the rest of the questions that are outside of the Environment Report get addressed?

I18-6

- Need to address the sound from the airport bouncing off
- a 6 story building into the surrounding neighborhood

I18-7

- The report did not truly study the impacts of this massive
- project in our neighborhood. It used generic data which does not represent reality here to get this project approved. It did not adequately address any of the actual issues with this project

I18-8

Thank you in advance for helping keep our neighborhood from being negatively affected from this massive development. Please let me know if you need any further information or clarification.

I18-9

Frances de Freitas

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Response to Comment Letter I18

Frances de Freitas
March 28, 2021

I18-1 The commenter states that they live one block from the proposed Project and are concerned about the negative impacts of the proposed Project in their neighborhood.

The proposed Project has been assessed for its impacts on the environment as part of the Draft EIR. Effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[7] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.). As such, the potential environmental effects of the Project on its surroundings (including the surrounding neighborhood) have been evaluated and disclosed in the Draft EIR, and any identified significant impacts would be mitigated to the extent feasible. The commenter's concerns regarding negative impacts to their neighborhood will be included as part of this Final EIR for City decision makers' review and consideration.

I18-2 This comment raises concerns regarding the impact of charging for parking at the Project site on the surrounding neighborhood streets. The main concern expressed is that people will not pay for parking at the Project site if there is free street parking in the surrounding neighborhoods. While the hotels will continue to charge for parking on site, the retail uses will provide free parking with validation. Furthermore, the Project will be including the cost of parking within the residential rents and will not charge residents separately for parking.

While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Based on the results of parking evaluation (Shared Parking Analysis, Fehr & Peers, February 2021) and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street. The Project applicant would work with residents to suggest the boundaries of this potential permit parking district. A permit parking district is implemented by the City at the request and approval of the residents. The proposed Project would not prohibit the formation of permit parking, but it is not required for the proposed Project.

I18-3 This comment raises concerns regarding the volume of traffic making an eastbound left-turn from Mariposa Avenue onto Pacific Coast Highway. The main concern is that because there is already a high

[7] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

level of vehicle volumes turning left at this intersection, vehicles will use other streets such as Washington Street to head north.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As detailed in this informational analysis, pre-COVID traffic counts show 120 vehicles per hour (vph) turning left in the AM peak hour and 107 vph in the PM peak hour (approximately 2 vehicles per minute) from eastbound Mariposa Avenue to northbound Pacific Coast Highway. The Project is projected to add 36 vph in the AM peak hour and 29 vph in the PM peak hour (approximately 1 vehicle every 2 minutes) to this movement. The analysis shows that this intersection operates at Level of Service (LOS) C under existing conditions (acceptable according to City of El Segundo standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a project feature. This right-turn lane is projected to improve capacity (i.e., less vehicles per lane per hour) at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project (and no right-turn lane) to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane.

Therefore, the Draft EIR estimated that Project traffic wanting to go north on Pacific Coast Highway would use Mariposa Avenue. Even if a disproportionately high percentage, such as 25%, of the Project traffic desiring to travel north on Pacific Coast Highway were to use Washington Street to Maple Avenue or Walnut Avenue instead, the effect on Washington Street would be small, with less than 5 cars every half hour on average during peak hours. This would not result in an impact pursuant to CEQA and no changes to the Draft EIR are required.

I18-4 This comment states that the Metro Green Line station is "unreasonably far for people to walk to" and that "people do not use the Metro bus line 232 to connect to the Metro Station."

The Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR; note that "Metro Green Line" is also referred to as "Metro C Line"). The Project site is located approximately 0.51-mile from the Mariposa Station. This distance equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours.

The commenter does not provide evidence that the distance between the Project site and the Mariposa Station is an "unreasonable walk" or that Metro Route 232 is not used to provide connections to the Mariposa Station.

The Project site is also located in proximity to other regional transit lines and to a wide diversity of land uses and services within reasonable walking distance. These factors, in combination, support and substantiate a conclusion that a portion of Project-related trips would be made via walking, bicycling, and/or transit. While the precise number of Project residents, employees, and patrons who would use

alternative modes of travel is unknown, a 5% trip credit was taken for walking, bicycling, and transit use, which is considered a conservative estimate, particularly given the transit services that are available in the Project area and the urbanized nature of the Project vicinity. Furthermore, U.S. Census data from 2019 shows that 6.7% of residents in the City take transit, walk, or bike. As such, analysis associated with the proposed Project's vehicular trips assumes that a small fraction of future Project residents, employees, and/or patrons would use transit, walking, and/or bicycling. As such, the Project's vehicular operational analysis which addresses traffic and intersection levels of service remains conservative in nature.

I18-5 This comment states that the traffic analysis hinges on the use of mass transit but that local residents do not use mass transit or walk to nearby services. The commenter states that the analysis uses generic assumptions that are not representative of local conditions and that findings of a local survey of transit use would likely contradict the assumptions used in the EIR.

See Response to Comment I18-4, which also addresses concerns regarding the EIR's assumptions related to alternative modes of transportation. As stated in Response to Comment I18-4, the trip credits taken for walking, bicycling, and transit use are minimal and conservative, particularly given the urbanized nature of the Project vicinity and the availability of transit services in the area. Furthermore, increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). Additionally, plans and policies are in place at the local, regional, and state level to support and encourage increased use of alternative modes of transportation. As these plans and policies are carried out, use of alternative modes of transportation (transit, walking, and bicycling) is expected to increase over time, particularly in urbanized areas.

Additionally, see Response to Comment I7-4, regarding VMT analysis (conducted using the SCAG travel demand model and documented in Section 4.13 of the Draft EIR) of the proposed Project, which demonstrates that that Project site is in a travel-efficient location served by bus routes and Metro C Line.

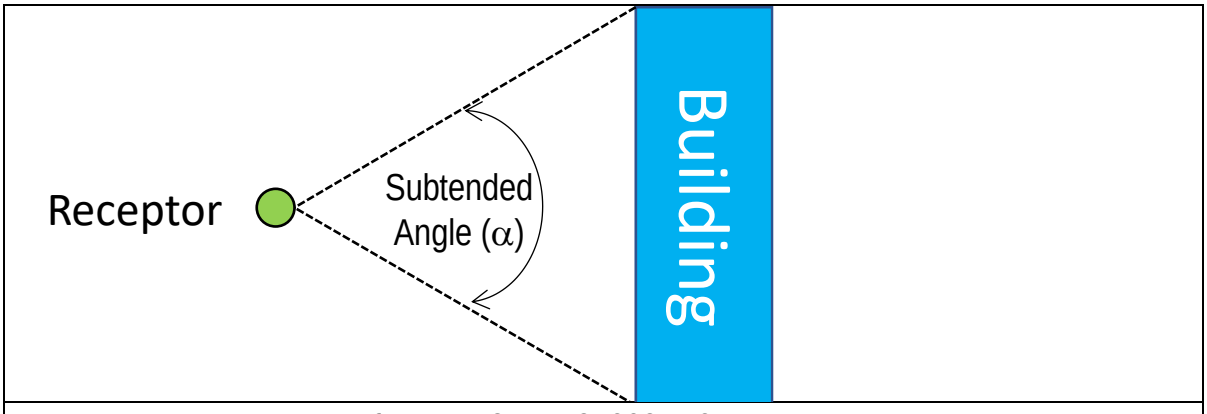
I18-6 This comment incorporates a question that was asked by another commenter at the EIR scoping meeting regarding parking permits for current residents. The commenter then asks when the questions not pertaining to the EIR will be answered by the City. As described in Draft EIR Section 1.5.2, Scoping Meeting, attendees of the webinar were able to provide comments and questions about the proposed Project to the City, the applicant, and the CEQA Consultant during the questions and answers portion of the meeting. Five comments/questions with environmental concerns during the Scoping Meeting (including the referenced commenter) are provided in Table A of Appendix A-2. This table cited Section 4.13, Transportation, of the Draft EIR for more information. Nevertheless, the comment regarding parking permits will be provided to City decision makers for their review and consideration as part of this Final EIR.

I18-7 This comment raises a concern about a multi-story building reflecting airport (aviation traffic) noise into its surrounding community.

Noise from LAX aviation traffic associated with the nearest southern runways travels approximately 4,000 feet before reaching the Project vicinity, by which time it has attenuated due to distance and other effects. This demonstrates why the Project vicinity is beyond the LAX aviation noise 65 dBA CNEL contour, as shown in Figure 4.10-2 of the Draft EIR. The diffuse noise from LAX aviation traffic impinging upon a proposed Project building façade would either be absorbed, diffracted, or reflected by its surface. But for a building façade that is porous (e.g., a parking garage), some sound would travel through the building unimpeded. The anticipated added sound contribution to an offsite receptor would depend on several variables that include its distance to the reflecting façade, the length of the façade, and the acoustical characteristics of the reflecting facade.

For an offsite receptor such as multi-family homes on the west side of Indiana Street, an introduced Project building façade across the street would present a surface that would reflect some LAX aviation traffic noise towards it. But the reflecting façade is not infinite in horizontal extent or height, nor would it be considered a perfect reflector, so the anticipated effect would be limited to no more than a 3 dB increase of the LAX aviation noise contribution to the outdoor sound environment at this nearby receptor. This situation would be analogous to a receptor near a highway, where a noise barrier installed on the opposite side and parallel with the highway reflects the roadway noise towards the receptor and for which Caltrans expects would be a maximum 3 dB increase.[8] The proposed Project building façade surface would not be considered a perfect reflector, as it would feature some irregular geometries that would help scatter or diffract sound, and the combination of window glazing and non-glazing elements would absorb noise that would then be re-transmitted to the building interior spaces.

The amount of actual reflection from this 3 dB ideal maximum, based on receptor proximity to the façade having finite length, can be approximated much in the same way that actual noise reduction from a finite-length noise barrier is less than ideal and can be estimated as shown in Figure 18 from Chapter 5 of the Housing and Urban Development (HUD) Noise Assessment Guidelines.[9] In summary, the more distant a receptor is to a barrier, the smaller is the angle "alpha" subtended by the endpoints of the barrier with the receptor at the vertex.



Estimated Building Façade Reflection = 3 dB – 3*COS(α/2)

[8] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

[9] United States Department of Housing and Urban Development (HUD). HUD Noise Guidebook. Date Published March 2009. https://www.hudexchange.info/sites/onecpd/assets/File/Noise-Guidebook-Chapter-5.pdf

Likewise, for a multi-family receptor across Indiana Street from a proposed Project building having length that would make angle "alpha" equal 45 degrees, the anticipated reflection of the incoming sound would be less than a 0.23 dB increase of the directly-received sound source. Only if the receptor were very near the façade, so that angle "alpha" approaches 180 degrees, would the estimated reflection, before application of any façade surface effects, be very close to 3 dB.

For a much more distant receptor, such as a single-family home in the neighborhood west of Washington Park, and ignoring façade surface effects and any sound path occlusion from intervening structures between it and the proposed building façades, the estimated reflection would be less than 0.01 dB for any angle "alpha" less than 9 degrees.

Thus, and for these above reasons, the expected LAX aviation noise increase due to proposed Project building reflection would be less than 3 dB, which is a less than perceptible difference and thus considered a less than significant impact. While this information regarding aviation noise effects has been added as part of this Final EIR, this additional information does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)). Operational noise impacts would remain less than significant.

Furthermore, addition of the proposed Project buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the nearby multi-family homes and more distant single-family home neighborhoods to the west of the Project site.

I18-8 This comment states that the "report did not truly study the impacts of this massive project in our neighborhood," that it "used generic data which does not represent reality here," and that "it did not adequately address any of the actual issues" associated with the proposed Project.

This response assumes that the commenter is referring to the Draft EIR in their comment. The Draft EIR has been adequately prepared under CEQA to serve as an informational document for decision makers and the public. See Response to Comment O3-2 for further information regarding the adequacy of the Draft EIR and its compliance with CEQA. Potential effects to the surrounding neighborhood and residents are discussed in the Draft EIR; see Response to Comment I18-1. The analysis in the Draft EIR is not generic; rather, the analysis is based on the existing setting of the Project area, including environmental factors and characteristics that are specific to the Project site and its vicinity, and a detailed description of the proposed Project, as set forth in Chapter 3, Project Description of the Draft EIR. The Technical Appendices C through L to the Draft EIR include analyses and modeling that is customized to the specific characteristics of the proposed Project. The comment does not provide any specific examples of "generic data" and no further response is necessary.

I18-9 This comment concludes the letter and does not express any additional issues pertaining to the environmental analysis in the EIR. No changes or additions to the project description or environmental document are required in response to this comment.

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Comment Letter I19

From: stephanie sauter [redacted]
Sent: Sunday, March 28, 2021 4:14 PM
To: Samaras, Paul
Cc: Boyles,Drew (Mayor)
Subject: High density apartment building in ES

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras,
I've seen some postings about the possibility of new housing along Sepulveda Blvd. I wanted to write in support of any project that increases the availability of housing in El Segundo.
As we're all aware, the state (county, city) has a serious housing crisis. Without building additional housing stock, that crisis will not end. I understand El Segundo is a town that like things they way they are. However, the status quo is not sustainable. We need to think progress, not be stuck on "how things have always been here."
My husband and I would both like others to be able to share in all the wonderful things that the community of El Segundo offers its residents.

I19-1

Best,
Stephanie Sauter & Paul Kelly
526 Arena Street
El Segundo

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Response to Comment Letter I19

Stephanie Sauter & Paul Kelly
March 28, 2021
Date

I19-1 This comment expresses support for the proposed Project and cites the proposed housing component. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I20

From: William WATKINS [redacted]
Sent: Monday, March 29, 2021 7:34 PM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras,
I support the Pacific Coast Commons project. I believe it will be an excellent use of the property around the west side of Pacific Coast Highway and Mariposa Ave.
Thank you,
---Bill Watkins
327 E. Oak Ave., El Segundo

I20-1

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Response to Comment Letter I20

Bill Watkins
March 29, 2021

I20-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I21

From: Matthew Klemp [redacted]
Sent: Thursday, April 1, 2021 10:49 AM
To: Samaras, Paul; Planning
Subject: Pacific Coast Commons DEIR Comments
Attachments: EIR Extracted Pages with Comments and Summary ABBREVIATED v1.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mr. Samaras,

Please find attached my questions/comments on the DEIR in pdf format. These comments are in a condensed format.

If you would like to see a fuller view of the same comments (although 1 version older) with full pages extracted from the DEIR please go the the website: https://tinyurl.com/EIRreview

Kindly confirm receipt of this email.

Regards,
Matthew

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Comments and Questions

El Segundo Construction Proposal
Pacific Coast Commons
Environmental Impact Review Report

(Excerpts from the report will be in *black* and my comments will be in *blue* or will be screenshots from the long form of my review.)

EIR Review Summary

- Key underlying assumptions and standards for project success are wishful thinking:
  - Many people will take mass transit
  - Many people will walk to mass transit
  - Many people will walk to downtown El Segundo from PCH
  - Significantly fewer cars at the new developments
  - Supply of new parking
  - Studies cited and manuals used in Report to support the above bullet points absolutely do not represent the El Segundo area nor broader metropolitan area.
  - Narrow assumptions and standards expose a **huge downside risk** which could blindside the City
  - Traffic Study in no way reflects the reality of the congestion in the area, epicenter being PCH/Mariposa as ANY commuter in the morning will tell you.

I21-1

- Los Angeles does not have widespread, reliable mass transit, nor has it been adopted by any significant amount of population by any stretch of the imagination. Los Angeles has tried for decades and failed at it.
- Don't put the cart before the horse. We need a much better transit infrastructure and citizenry adoption therein before we erect housing to capitalize on it.

I21-2

- Exclusion of key review areas:
  - Mariposa traffic to Downtown El Segundo
  - Current mass transit and pedestrian circulation in lieu of vehicle use in the immediate area
    1. Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?
    2. Currently, people from the area (excluding exercise) do not walk downtown nor to transit.

I21-3

  - LAX noise wasn't even studied: noise tends not to attenuate as much since PCH is a wide open tunnel for noise to run and echo off tall structures, unlike other topographical areas with differing shapes, materials, and structure.
    1. El Segundo proudly stood against LAX noise and expansion, now it's not a concern for this area? 65dBA contour aside, this noise will increase. This is also in agreement with the City Manager's office recent review of LAX expansion efforts.

I21-4

  - Parks
    1. The study said there is no impact and dismissed it.
    2. There are literally 3 huge parks a stone's throw away from this development.
    3. Children and park goers' safety is a concern.
    4. Demand for and use of parks will change.

I21-5

  - Reasonably foreseeable impacts of traffic and noise not even explored.
    1. Scope of study far to narrow. No "What if" analysis done.
    2. Bypass or shortcut traffic not analyzed. Washington St. completely ignored.

I21-6

- Standards used to calculate additional vehicles is not representative:
  - This will significantly impact the Parking and Transportation questions and analysis.
  - Will also impact the noise generation, safety, and quality of life concerns.

I21-7

- 2 **cars per dwelling unit is the El Segundo standard** and well established throughout LA. Studies cited in the Report for a lower number definitely are not representative of the area.

I21-7 Cont.

- Noise
  - Traffic, human activity, airport
  - Single Family Homes were excluded as a "Receptor" of unwanted noise.
  - Who believes that these huge, high density apartments and commercial developments are going to exist in a vacuum of their footprint or somehow only impact PCH?
  - Existing apartment height is 2 story, the proposed is 6 story for parking garage and housing. Noise concerns as follows:
    1. That height of garage will cause vehicle noise and car alarm noise to penetrate neighboring homeowners and existing apartments.
    2. LAX noise will be amplified by PCC acting as a reflector of noise. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-8

- Parking
  - Again the estimates hinge on people not bringing the average number of vehicles to the new development
  - Supply of new parking spots overestimated.
    1. ½ space for 1 bedrooms likely not accommodate a vehicle (disregard Lionel Uhry answered already)
    2. Study used for parking demand rate underestimated.
  - Where is the overflow gonna go?

I21-9

- Traffic
  - Due to the underestimation of vehicles, traffic will be an issue in the surrounding neighborhoods.
  - Even if it were accurate, traffic will increase dramatically on Mariposa back and forth to Downtown El Segundo
  - Increased traffic on the side streets of both apartment complexes due to bypassing congested intersections highly likely.
  - Study believes adding 1 right turn lane on Mariposa Ave will fix it all.
    1. This would fix the current congestion but certainly the future would be worse
    2. People already bypass the Mariposa/PCH intersection.
    3. Compounded by the gross underestimate of new vehicles in the area.

I21-10

- High Density housing is exactly what it says. The word "high density" in and of itself is impactful. To think otherwise is silly.

I21-11

- Alternate locations still seem to be viable
  - East of PCH or south of Grand seem to be win-wins, but were dismissed. We have 0 population in approx. 75% of our City limits.
  - PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?
  - A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.

I21-12

- COVID-19 prevented the study from field verifying data.

I21-13

Executive Summary Review

ES.3.2 Project Objectives

3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.

Comment:
This can be accomplished with the project being built south of Grand or East of Sepulveda and would be win-win for City and impacted residents in the proposed location. Telecommuting has allowed many more people to work from any location. LAX is largest employer in the area and those jobs have already been spoken for by citizens who already live in close proximity to LAX.

ES.3.2 Project Objectives

6. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and City's Downtown

Comment:
This statement is not reality and a long shot to be achieved. Putting the cart before the horse. Standards used, and data collected are not representative of reality as will be noted in appropriate sections.

- *Problem with Executive Summary is that it seems to be based more in wishful thinking and finding data or a study to support it.* ***Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?*** *The underpinnings of it depend completely on something that has never been proven to work in Los Angeles nor this area. Those things are:*
  - *Well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong, I wish it would work but it just has not. If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. But we are putting the cart before the horse.*
  - *"Downtown is walkable distance."* ***It is not.*** *I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit? LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet, with the exception of telecommuting. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit* ***as consistent with El Segundo standard****. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.*

I21-14

Table ES-1. Summary of Project Impacts

Noise

- Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Impact determined to be "Less than Significant"

Comment:

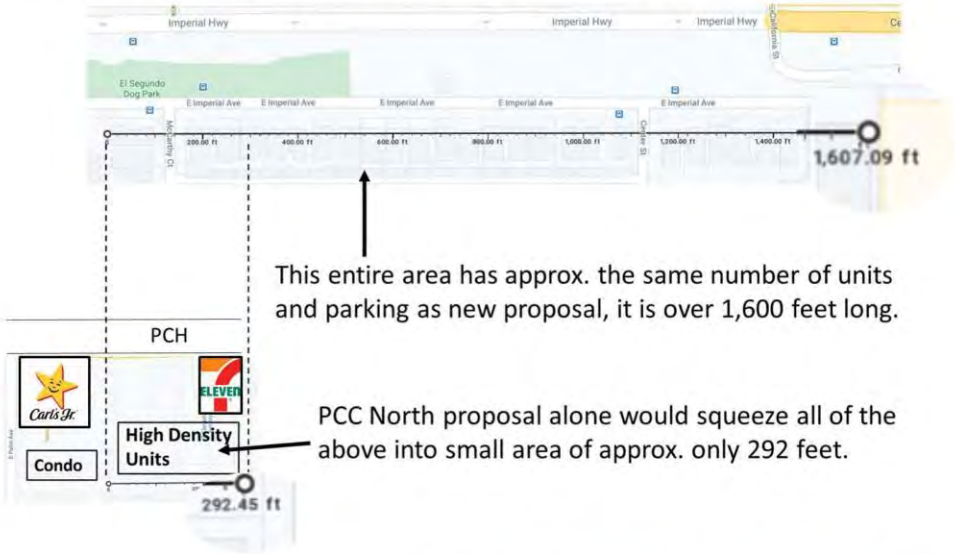
- *There will be a permanent increase in Noise*
  - *Human activity/population growth/high density*
  - *Traffic noise on surrounding streets and Mariposa all the way to downtown.*

I21-15

- *Again if this was built south of Grand or east of Sepulveda this would not impact the current residential population. The 2 ways to get into the Downtown area of El Segundo quickly, efficiently and with little to no impact to any resident in El Segundo is El Segundo Blvd and Imperial Hwy. If built south of Grand using El Segundo Blvd does not impact any residents.*

I21-15 Cont.

Super High Density for El Segundo





Proponents of project will say that the noise is attenuated here due to distance, and that it's not within the 65 dBA noise contour. These both may be true, however noise **does** propagate and echo off of walls as well, it's just as much of a physical property as attenuation is. So we cannot deny that this will send more airport noise into the community, it's just a matter of physics. PCH also allows a broad clear path for noise to be unimpeded unlike other areas.

LAX noise will be amplified by PCC echoing all of that noise due to its height. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-16

This perplexes me as El Segundo has proudly held back the expansion and noise of LAX (plaque on mortuary hill commemorating it).



El Segundo as a City participates in the regular LAX noise meetings. One of the responsibilities of LAX adjacent cities is to basically plan your City to mitigate Noise. I see a mixed message here. El Segundo will build tall buildings that bounce airport noise back into the City but then vehemently reject the idea of LAX expanding and making more noise. Please see the FAA Noise Abatement Policy below:

I21-16
Cont.

Table ES-1. Summary of Project Impacts

Population and Housing

- Would the project induce substantial unplanned population growth in an area? Impact determined to be "Less than Significant"

Comment

- *Obviously this is an impact and substantial. We have never had high density apartments like this. This is, by the word itself "high density" impactful to a community and region that has never had this type of development as opposed to a community that has numerous high density housing. So this is a monumental shift in how to look at housing, so if ever there would be a time to call something impactful it would be now. The first time we try something drastically new it is impactful for better or worse. Our infrastructure to support this drastic change is not there yet, nor is the population in large part given up vehicles. Again cart before the horse.*
- *Why are we cramming such high density into an already populated area? The area this is proposed in houses 99% of our population yet encompasses less than 25% of square acreage of City limits. If it's "parking lots are a poor utilization of space" I would say even a poorer utilization of space is all of the other approx. 75% of El Segundo City limits that has no housing. Spreading out, makes more sense and it would put those new residents closer to the mass Transit that is highly touted.*

I21-17

Table ES-1. Summary of Project Impacts

Parks

- Impact determined to be "Less than Significant"

Comment

- *In this section it asks if Parks will be impacted and the summary says "no". There are literally parks that are about 150' away ALL ALONG THE PROPOSED DEVELOPMENT SITE!*
- *Freedom Park, Washington Park, Constitution Park are all literally a stone's throw from the site. Unless the term Park is redefined for this study, I pay extra property taxes because I live next to these parks, El Segundo Parks and Rec upkeep them as I see them all the time and they are utilized like any other park by the normal definition. This really needs some explanation.*



- *Bypass and shortcut traffic (detailed in Transportation analysis) would impact these parks and potentially be a safety hazard*

I21-18

ES.5.2 Alternative "B" page ES-31

- Reduced Development Alternative: Exclusion of PCC North

Comment

- *This would be a viable alternative. I still don't believe some of the objectives are met but it lessens the overall impact to the community.*

I21-19

ES.6 Areas of Known Controversy page ES-35

Comment

- *I will address the following bullet points from the Executive Summary in forthcoming sections:*
  - *Potential noise*
  - *Potential increased traffic*
  - *Potential parking impacts*
  - *Other impacts will be discussed later as well*

I21-20

Noise Review

4.10 Noise

4.10.1 Sensitive Receptors page 4.10-5

Comment

- *Single family homes were a glaring omission in this category. Certainly the increased human activity in general, in the parks, via traffic and parking. Single family homes are threatened by unwanted noise that has significant potential not to just **tick** up but **spike** up.*

Page 4.10-6 top paragraph: Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

Comment:

- *Single family homes seem to be completely ignored. This is not only insulting, but grossly incorrect. **Traffic** and parking will add to noise (is there a lifetime guarantee that no hotel nor PCC resident nor guest are going to park in the single family neighborhood or any surrounding street?, domino effect of parking issues now and in the near future are a reasonable concern, look no further than apartments along Imperial, they come with parking garages, are **low** density and **still** spill over into the streets.*

I21-21

Existing noise environment page 4.10-6

For purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique...However, at the time of this writing and due to COVID-19 response effects,

I21-22

commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Comment:

- *The predictive modeling does not take into account whatsoever Mariposa traffic and all the shortcut traffic through residential streets and resulting ambient noise. If the project is so confident there will be no traffic in these areas then the City should have no qualms about turning them into cul de sacs or some other traffic deterrent method to guarantee no new residents are using shortcuts. Also, only **predictive modeling** was done with no field verification. Also, as an engineer myself someone should be thinking beyond the small foot print of 100' from project boundary that is extremely tight. At minimum, the scope should have been expanded for **reasonably foreseeable** traffic and noise impacts, which was **not** done. As the study indicates they could not collect data due to suppressed traffic and noise from COVID19, so admitting we do not have conclusive nor expanded scope data to back any of this up. So this is a big risk. Therefore more weight should be put on local residents in the **immediate** area for data. Was Traffic and Noise modeled down Mariposa and back streets? I haven't seen any.*

I21-22 Cont.

Page 4.10-9:

- Goal N1: Provision of a Noise-Safe Environment.
- Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code
- Policy N1-3.1: Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Comments:

- *N1 – Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH.*
- *N1-1 – see above*
- *N1-3.1 – this fails because of the potential for future repeal of mandatory pay for garage parking therefore pushing even more cars outside besides the overflow (I know the study says there will be an excess supply but I will comment more in the Parking section.)*

I21-23

4.10.3 Page 4.10-11

The property lines of the nearest multi-family residences to the west of the Project appear to be as close as 15 feet to the PCC North,

Comment:

- *In the future transiting vehicles in and out of garage, and garage itself will have significant impact on Illinois Ct. residents.*

I21-24

Page 4.10-15:

However, at the time of this writing and due to COVID-19 response effects, commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Comment:

- *Noise levels not reliable since down during the Pandemic as stated. Traffic and noise from vehicles and aircraft down 85%*

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Table 4.10-6 shows that at all six listed representative receivers, the addition of proposed Project traffic to the roadway network would result in a CNEL value increase of less than 3 dB, which is below the discernible level of change for the average healthy human ear.

Comment:

- *This was only predictive data and no field data collected due to COVID-19*
- *The predictive element also based on faulty conclusion that there will be far less vehicles than generally accepted by City of El Segundo, LA County and LA Metropolitan standards. Discussed in later sections.*

I21-25

Page 4.10-22: Permanent Increase in Ambient Noise Levels, Off-Site Traffic

- Cumulative off-site traffic noise impacts would be less than significant.

Comment:

- *Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life, even if the traffic was silent.*

I21-26

Transportation Review

4.13 – Transportation
Page 4.13-2, 3

- The study area selected for analysis in the TIA extends to and includes Center Street to the west, Nash Street to the east, Imperial Highway/Interstate (I) 105 to the north, and El Segundo Boulevard to the south.

Comment:

- *Shortcut traffic will increase on Walnut Ave and Maple Ave*
- *Traffic in general will increase significantly all along Mariposa Ave*
- *Washington St not even mentioned and it will receive a significant amount of bypass and shortcut traffic. The addition of one more lane at PCH/Mariposa will not make enough of a dent in traffic to prevent this, plus the estimate of new vehicles in circulation is way underestimated.*

I21-27

Transportation Impact Review

The transportation impact study was completed by Fehr and Peers located in the Appendix J-1.

APPENDIX A:
LANE CONFIGURATIONS AND TRAFFIC VOLUMES
Peak 1 Hour Traffic Volumes and Lane Configurations Project Only

Comment

- *In this appendix they have graphical depictions of intersections around the project area.*
- *In this particular appendix it shows how many more vehicles will be turning at an intersection during AM and PM rush hour due to the development of the Project.*
- *PCH/Maple Ave show **0** additional vehicles turning according to the study.*
- *PCH/Walnut Ave show **0** additional vehicles turning according to the study.*
- *They expect **absolutely no vehicles** will use these intersections as alternates compared to the main one at PCH/Mariposa.*
- *The first thing I did when moving to the area was **avoided Mariposa** and went to an **alternate side street**. Many people do this as I see it all the time speeding down Washington Street to get there. The same thing happens when trying to go southbound, Mariposa is backed up even with a dedicated right turn lane and the pedestrian crosswalk, it's quicker to go down Indiana behind the hotel and get on PCH from Holly or Grand.*
- *Also, please note my experience is during non-peak hours, I work the afternoon shift. I never have had to negotiate these intersections at peak times which obviously are way worse.*
- *PCH/Palm Ave – this is directly adjacent to the apartments on the north side*
  - *During the AM rush hour shows a total of 9 vehicles according to the study*
  - *During the AM rush hour, out of the **252 parking spots** in PCC North there will only be 9 vehicles that use Palm Ave?? The numbers just seem really suspect.*
- ***Conclusion** is that we are going to have a lot of **bypass or shortcut traffic** from PCC North apartments (gas station/7-11 parking lot) location and PCC South apartments (parking lot of the Aloft Hotel)*
- *These alternate streets were dismissed in the study.*
- *No Traffic Analysis was done for the impact on Mariposa going to Downtown El Segundo. So all those residents were sort of ignored. Mariposa residents already endure speeders and traffic, safe to assume it would get much worse for them.*

I21-28

Transportation Impact Analysis Summary

- *Traffic Study in no way reflects the reality of the congestion in the area, epicenter being PCH/Mariposa as ANY commuter in the morning will tell you.*
- *The Analysis conducted for the EIR was based on the number of additional vehicles the project would bring. This number comes from the Parking Analysis. As I have shown in that respective area and others, the standards used and data collection is not representative of what we currently have going on. 2 big underlying assumptions used in the EIR is that many people are going to forgo vehicles and walk to transit and walk to Downtown El Segundo*
  - ***Big question**: Why was there no study completed to even ask or analyze whether the current population of apartments, condos and single family homes in the immediate area do any of this??*
  - *It seems like a logical step to take if this is one of your Project objectives and basis for making a judgment on a Project, especially if it could be impactful to the neighborhood and city.*
  - *I live in the immediate area and have never seen even a trickle of people walking to Transit or Downtown. Only walkers are for exercise.*
- *Standards used as basis are not representative (should simply have used realistic standard set forth by the City of El Segundo, 2 cars per unit. Also the data sampling is suspect and not representative of the immediate surrounding area.*
- *Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that but we're putting the cart before the horse.*
- *We need a culture or cost of vehicle ownership of fewer cars before housing ideas capitalize on that.*

I21-29

- *If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.*
- *We do not have well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it?*
- *The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well-established historical average of 2 cars/unit.*

- *"Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it but we have no infrastructure nor adoption by the people to meet this objective.*
- *Therefore, I believe that the following numbers should be increased by at least 33%. This number is derived from the Parking Analysis. I have attempted to contact Fehr & Peers (contracted to conduct the Parking and Transportation Analysis) but have not received a call back in regard to their analysis.*
- *Conclusion: Mariposa/PCH intersection will be inundated and cause significant short cutting on residential streets. Also, Mariposa traffic situation will be aggravated significantly. Mariposa Ave not even evaluated, the congestion, speeding and hazards to children and all residents will increase.*
- *Shortcut traffic will pass by 4 parks (Independence, Constitution, Washington and Freedom Park) creating a hazard for children and park goers.*

I21-29 Cont.

Parking Review

The Parking Analysis was completed by Fehr and Peers located in the Appendix J-2.

Page 3:
Residential Parking Demand Research
To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition
The Institute of Transportation Engineers published Parking Generation, 5th Edition in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas.

Comment:

- *Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did. LA certainly isn't a one size fits all compared to other metro areas in the country.*

I21-30

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

I lived in SF Bay Area, BART and CalTrain used way way more than here. They at least have some people doing it. Also CalTrain, runs right through Palo Alto and immediately adjacent Stanford University. Students living in apartments are more likely to use it. We are comparing apples to oranges here.

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

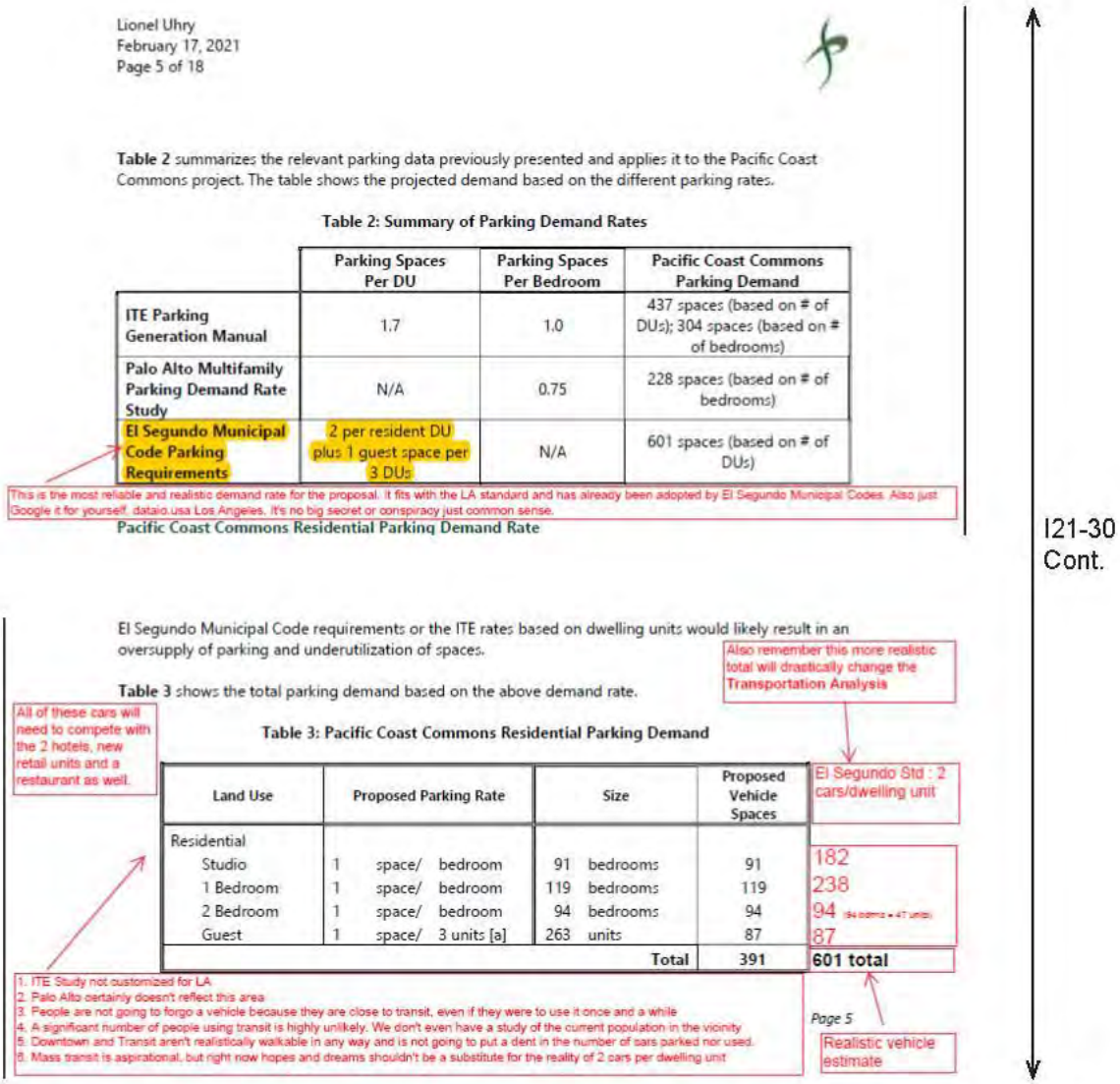
- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
  - Proximity to transit can reduce the rate by approximately 25 percent

Actually, on the contrary we have no relevant studies whatsoever that match our community nor Los Angeles adoption nor infrastructure built. We have the opposite, decades of failed attempts of construction and adoption.

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different

I21-30 Cont.



Lionel Uhry
February 17, 2021
Page 5 of 18

Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

This is the most reliable and realistic demand rate for the proposal. It fits with the LA standard and has already been adopted by El Segundo Municipal Codes. Also just Google it for yourself. dataiq.usa Los Angeles. It's no big secret or conspiracy just common sense.

Pacific Coast Commons Residential Parking Demand Rate

El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Also remember this more realistic total will drastically change the Transportation Analysis

Table 3 shows the total parking demand based on the above demand rate.

All of these cars will need to compete with the 2 hotels, new retail units and a restaurant as well.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces	El Segundo Std : 2 cars/dwelling unit
Residential				
Studio	1 space/ bedroom	91 bedrooms	91	182
1 Bedroom	1 space/ bedroom	119 bedrooms	119	238
2 Bedroom	1 space/ bedroom	94 bedrooms	94	94 (94 rooms x 47 units)
Guest	1 space/ 3 units [a]	263 units	87	87
		Total	**391**	**601 total**

1. ITE Study not customized for LA
2. Palo Alto certainly doesn't reflect this area
3. People are not going to forgo a vehicle because they are close to transit, even if they were to use it once and a while
4. A significant number of people using transit is highly unlikely. We don't even have a study of the current population in the vicinity
5. Downtown and Transit aren't realistically walkable in any way and is not going to put a dent in the number of cars parked nor used.
6. Mass transit is aspirational, but right now hopes and dreams shouldn't be a substitute for the reality of 2 cars per dwelling unit

Page 5

Realistic vehicle estimate

I21-30 Cont.

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
		Total	451

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.

This 1/2 space is calculated in the total supply. How big actually is 1/2 space? Would a mid-size sedan fit? How wide is it? It's like when you see all those "compact" parking spaces in a parking garage. They're overtaken even by mid-size vehicles. My guess is that the majority of the 119 one bedrooms units will use it to store bikes or maybe a scooter. This 1/2 space skews the true supply which will then be lower.

I21-30 Cont.

Page 6

Existing Parking Occupancy

These are not peak season numbers either. Summer obviously would be peak

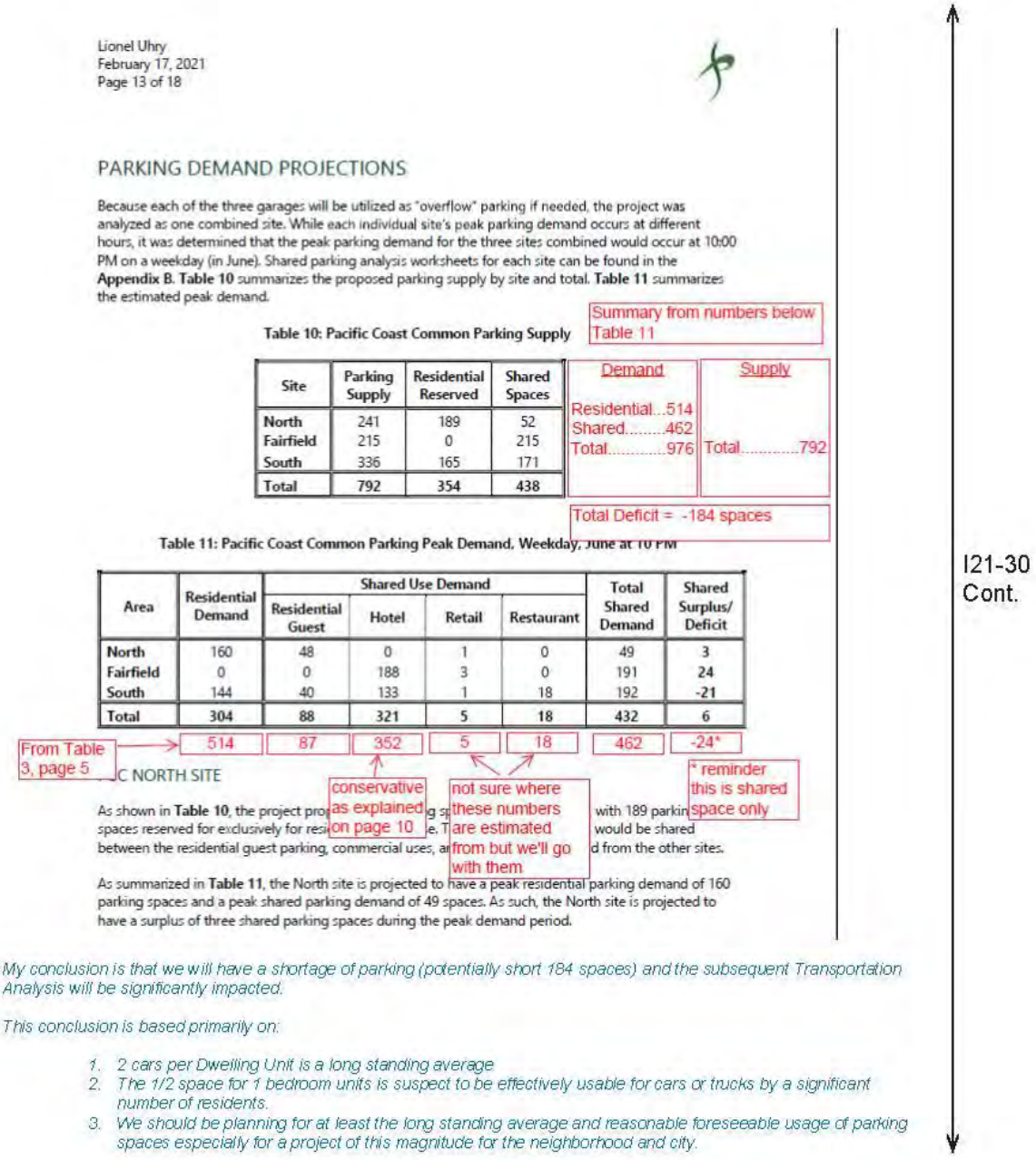
Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Sunday night? Usually Saturday night is the busiest

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352

This is based on non summer and non Saturday night data. I don't see this at all as "Peak Demand Rate". Now it may be demand rate during the low season, but not representative for the basis of such a large and potentially impactful development.



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PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as "overflow" parking if needed, the project was analyzed as one combined site. While each individual site's peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B. Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Summary from numbers below Table 11

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	792	354	438

Demand
Residential...514
Shared.....462
Total.....976

Supply
Total.....792

Total Deficit = -184 spaces

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	3
Fairfield	0	0	188	3	0	191	24
South	144	40	133	1	18	192	-21
Total	304	88	321	5	18	432	6
From Table 3, page 5 →	514	87	352	5	18	462	-24*

C NORTH SITE

conservative as explained on page 10

not sure where these numbers are estimated from but we'll go with them

* reminder this is shared space only

As shown in **Table 10**, the project pro g s with 189 parkin spaces reserved for exclusively for resi e. T would be shared between the residential guest parking, commercial uses, a d from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.

My conclusion is that we will have a shortage of parking (potentially short 184 spaces) and the subsequent Transportation Analysis will be significantly impacted.

This conclusion is based primarily on:

1. *2 cars per Dwelling Unit is a long standing average*
2. *The 1/2 space for 1 bedroom units is suspect to be effectively usable for cars or trucks by a significant number of residents.*
3. *We should be planning for at least the long standing average and reasonable foreseeable usage of parking spaces especially for a project of this magnitude for the neighborhood and city.*

I21-30 Cont.

Parking Analysis Summary

- *Standards used as basis are not representative (should simply have used realistic standard set forth by the City of El Segundo as seen on page 5, Table 2. Also the data sampling is suspect and not representative of the immediate surrounding area.*
- *Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that, but we're putting the cart before the horse.*
- *We need a culture of fewer cars or a very high cost of vehicle ownership before housing ideas can capitalize on that.*
  - *If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.*
  - *We do not have well established nor mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first, and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it? It's certainly not happening now, how will it magically happen after this proposal?*
  - *The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well-established historical average of 2 cars/unit.*
- *Also, please note the number of parking spots available total are shared between the 2 high density apartment buildings, 2 hotels, retail space and a restaurant. So this means that if parking runs out in PCC North then the individual will need walk to another structure and park their vehicle. Just don't see this ending well. This isn't mid-town Manhattan.*

I21-30 Cont.

Alternatives Review

6 Alternatives

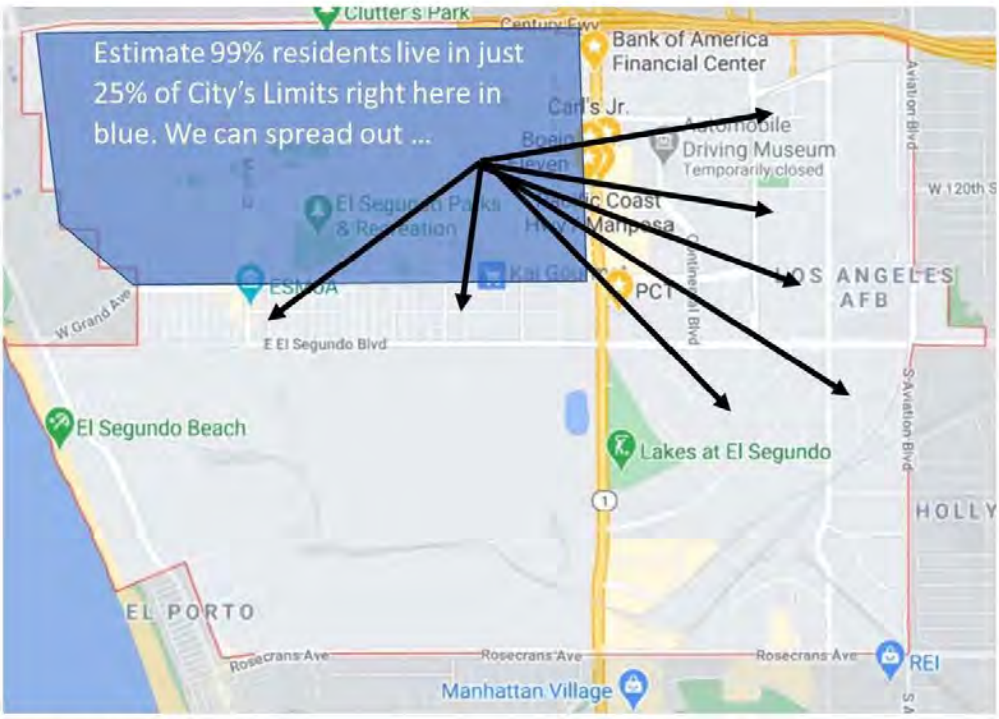
6.1 Introduction page 6-1

CEQA requires that Environmental Impact Reports (EIRs) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives"

Comment

- *Why aren't east of Sepulveda and south of Grand not viable alternatives?*
  - *They accomplish most all of the objectives much better than the current proposal*
  - *They have minimal negatives impacts to community especially compared to current proposal*
  - *It would be a win-win*
  - *We currently only utilize 25% of the El Segundo footprint for residential housing. Why can't we spread out and spread the impact?*
  - *PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?*
  - *A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across a broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.*

I21-31



I21-31 Cont.

6.2 Project Objectives page 6-2

2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities...
4. Enhance vehicular circulation through intersection improvements and street widening.
7. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

Comments:

- *Item 2: this adversely will impact neighboring residents. I don't see anything in the proposal that mitigates negative impacts to neighbors*
  - ***Traffic***
  - ***Safety (higher traffic adjacent to numerous parks)***
  - ***Parking***
  - ***Noise***
  - ***Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have***
  - ***Schools Lower teacher to student ratio***
  - ***Equates to lower quality of life and lower home values***
- *Item 4: vehicular circulation will get worse without a doubt. I will later go on to critique the EIR data but allow me to relay my personal experience. I live adjacent to Washington Park. When I first moved there it only took me a week to figure out that the Mariposa & PCH intersection is to be avoided at all costs no matter if I was headed north or*

southbound PCH. An aggravating factor is that I was seeing this always during non-peak hours. Peak hours are significantly worse. If I need to go north bound I would and will never use Mariposa, I will always bypass that intersection and head further north on Washington and get onto PCH via Maple. If I'm headed southbound I will approach Mariposa PCH and typically bypass the intersection via Indiana and pop out on Holly or Grand. These bypasses and shortcuts happened during non-peak hours, so add to this 263 more dwelling units during peak hours, traffic will increase significantly on these streets. Safety of park users will be at risk, not to mention numerous other negative impacts. New residents will figure this out just like I did, nothing surprising, everyone does it and will continue to do it. And in my opinion, and I will go into further detail later, the EIR data is severely underestimated both on standards used and data that is collected which ultimately results in recommendations on the top level Executive Summary. The devil is in the details and when you look at it, there are some serious flaws.

- *Item 7: please see "ES.3.2 page ES-6 #6 in list" above*

6.4 Alternatives... page 6-4 end of last paragraph

...the proposed site is just over 0.5- mile from the Metro C Line, whereas the Smoky Hollow Specific Plan area is farther away, thereby reducing potential access to regional transit for the Projects 618 future residents.

Comment

- *Smokey Hollow ruled due to it being a little further away from Transit, but wasn't one of the objectives to have Downtown El Segundo Walkable? This area actually is more equidistant between the 2 "walkable" areas. I don't believe people are gonna do the walking in the first place, but if someone does believe that will happen, making it more equidistant would be a better alternative.*
- *PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?*
- *A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.*

6.4 Alternatives... page 6-5 middle of page

Development of the Project on another site along PCH, which could provide a similar transition from the City's offices to the east and residential uses to the west, would not be feasible because no sites are under control by the Project applicant.

Comment

- *Development somewhere else along PCH was ruled out because the Project applicant has no sites under its control. My response would be "find a different applicant that does". I'm sure it's not as easy as it sounds but this is not a small undertaking that can have significant impacts to the City so the effort would be warranted.*
- *"Moving the Project to another location doesn't avoid impacts." East of Sepulveda and Smokey Hollow certainly reduce the impacts.*

I21-31
Cont.

6.6 Summary Table page 6-34

Table 6-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Reduced Development Alternative: Exclusion of PCC – North	Alternative C - Reduced Development: Reduce 1 Level from PCC-South and PCC-North
Aesthetics	LTS	▼	▼	▼
Air Quality:				
AQMP Consistency	SU	▼	▼	▼
Short-Term	LTS-MM	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Cultural Resources	LTS-MM	▼	—	—
Energy:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Geology and Soils	LTS-MM	▼	—	—
Greenhouse Gas Emissions:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Hazards and Hazardous Materials:				
Short-Term	LTS-MM	▼	▼	—
Long-Term	LTS	▼	—	—
Hydrology and Water Quality:				
Short-Term	LTS	▼	▼	—
Long-Term	LTS	▼	—	—
Land Use and Planning	LTS	▲	—	—

- Alternatives A and B all have reduced impacts in virtually every category which makes them a better possibility
- Disagree with the *Land Use and Planning* and *Transportation* for Alternatives having a greater impact for reasons already stated previously

12171
6-34

I21-31
Cont.

Agree, the "no build" alternative is the way to go

6.7 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as

Comments and Questions

I21-32

El Segundo Construction Proposal
Pacific Coast Commons
Environmental Impact Review Report

EIR Review Summary

- Key underlying assumptions and standards for project success are wishful thinking:
  - Many people will take mass transit
  - Many people will walk to mass transit
  - Many people will walk to downtown El Segundo from PCH
  - Significantly fewer cars at the new developments
  - Supply of new parking
  - Studies cited and manuals used in Report to support the above bullet points absolutely do not represent the El Segundo area nor broader metropolitan area.
  - Narrow assumptions and standards expose a **huge downside risk** which could blindside the City

I21-33

- Los Angeles does not have widespread, reliable mass transit, nor has it been adopted by any significant amount of population by any stretch of the imagination. Los Angeles has tried for decades and failed at it.

- Don't put the cart before the horse. We need a much better transit infrastructure and citizenry adoption therein before we erect housing to capitalize on it.

- Exclusion of key review areas:
  - Mariposa traffic to Downtown El Segundo
  - Current mass transit and pedestrian circulation in lieu of vehicle use in the immediate area
    1. Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?
    2. Currently, people from the area (excluding exercise) do not walk downtown nor to transit.

I21-34

  - LAX noise propagation: noise tends not to attenuate as much since PCH is a wide open tunnel for noise to run and echo off tall structures, unlike other topographical areas with differing shapes, materials, and structure.
    1. El Segundo proudly stood against LAX noise and expansion, now it's not a concern for this area? 65dBA contour aside, this noise will increase.

I21-35

  - Parks
    1. The study said there is no impact and dismissed it.
    2. There are literally 3 huge parks a stone's throw away from this development.
    3. Children and park goers' safety is a concern.
    4. Demand for and use of parks will change.

I21-36

  - Reasonably foreseeable impacts of traffic and noise not even explored.
    1. Scope of study far to narrow. No "What if" analysis done.
    2. Bypass or shortcut traffic not analyzed. Washington St. completely ignored.

I21-37

- Standards used to calculate additional vehicles is not representative:
  - This will significantly impact the Parking and Transportation questions and analysis.

I21-38

- Will also impact the noise generation, safety, and quality of life concerns.
- **2 cars per dwelling unit is the El Segundo standard** and well established throughout LA. Studies cited in the Report for a lower number definitely are not representative of the area.

I21-38 Cont.

- Noise
  - Traffic, human activity, airport
  - Single Family Homes were excluded as a "Receptor" of unwanted noise.
  - Who believes that these huge, high density apartments and commercial developments are going to exist in a vacuum of their footprint or somehow only impact PCH?
  - Existing apartment height is 2 story, the proposed is 6 story for parking garage and housing. Noise concerns as follows:
    1. That height of garage will cause vehicle noise and car alarm noise to penetrate neighboring homeowners and existing apartments.
    2. LAX noise will be amplified by PCC acting as a reflector of noise. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-39

- Parking
  - Again the estimates hinge on people not bringing the average number of vehicles to the new development
  - Supply of new parking spots overestimated.
    1. ½ space for 1 bedrooms likely not accommodate a vehicle
    2. Study used for parking demand rate underestimated.
  - Where is the overflow gonna go?

I21-40

- Traffic
  - Due to the underestimation of vehicles, traffic will be an issue in the surrounding neighborhoods.
  - Even if it were accurate, traffic will increase dramatically on Mariposa back and forth to Downtown El Segundo
  - Increased traffic on the side streets of both apartment complexes due to bypassing congested intersections highly likely.
  - Study believes adding 1 right turn lane on Mariposa Ave will fix it all.
    1. This would fix the current congestion but certainly the future would be worse
    2. People already bypass the Mariposa/PCH intersection.
    3. Compounded by the gross underestimate of new vehicles in the area.

I21-41

- High Density housing is exactly what it says. The word "high density" in and of itself is impactful. To think otherwise is silly.

I21-42

- Alternate locations still seem to be viable
  - East of PCH or south of Grand seem to be win-wins, but were dismissed.

I21-43

- COVID-19 prevented the study from field verifying data.

I21-44

Executive Summary Review

I21-45

the Project site is bound by Palm Avenue on the north, PCH on the east, Holly Avenue on the south, and Indiana Street on the west. Mariposa Avenue bisects the Project site. Regional access is via Interstate (I) 105 (Imperial Highway) to PCH or via I-405 (San Diego Freeway) via El Segundo Boulevard to PCH. Access to the Project site is currently provided by PCH on the east and Indiana Street to the west.

The Project site is currently occupied by surface parking lots, the Fairfield Inn and Suites Hotel, and the Aloft Hotel. The Project would allow for the redevelopment of the existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel property within the Project site through the adoption of a Specific Plan. The adoption of a Specific Plan would allow for the following: (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures that would contain approximately 792 parking stalls.

The Fairfield Inn and Suites Hotel and the Aloft Hotel would not be redeveloped or expanded, but the zoning for the existing properties would be changed to reflect the current land uses, buildings, and site improvements. While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. Through the implementation of the Specific Plan, these two hotels would be brought into full conformity with the land use designation and zoning for the Project site. The Specific Plan's three development areas are Pacific Coast Commons – South (PCC-South), Pacific Coast Commons – Fairfield Parking (PCC-Fairfield Parking), and Pacific Coast Commons – North (PCC-North).

I21-45 Cont.

In summary, the proposed Specific Plan would allow for the redevelopment of the PCC-South, PCC-Fairfield Parking, and PCC-North and would allow for the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties within the Specific Plan boundaries, which are currently existing legal, non-conforming uses, to be in compliance with the Specific Plan. The redevelopment of the PCC-South, PCC-Fairfield Parking, and PCC-North would result in physical changes to the environment. However, the proposed development standards of the Specific Plan would not result in physical changes to the currently existing legal, non-conforming hotel uses.

ES.3.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the underlying purpose of a project, and may discuss a project's benefits. The Project's specific objectives are as follows:

1. Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses.
2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan.
3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.

This can be accomplished with the project being built south of Grand or East of Sepulveda and would be win-win for City and impacted residents under current location.

12171
ES-5

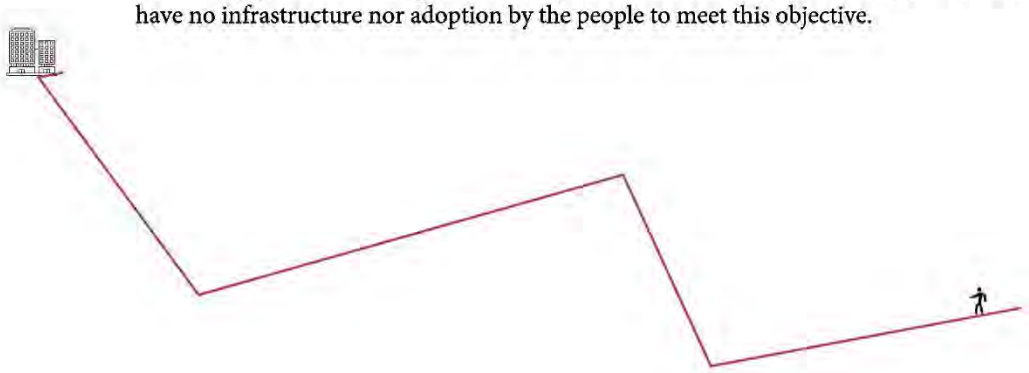
Comments on ES.3.2, page ES-6 #6, (next page)

- This statement is not reality and a long shot to be achieved. Putting the cart before the horse. Standards used, and data collected are not representative of reality as will be noted in appropriate sections.

- Problem with Executive Summary is that it seems to be based more in wishful thinking and finding data or a study to support it. **Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?** The underpinnings of it depend completely on something that has never been proven to work in Los Angeles nor this area. Those things are:

    - Well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong, I wish it would work but it just has not. If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. But we are putting the cart before the horse.
    - "Downtown is walkable distance." **It is not.** I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit **as consistent with El Segundo standard**. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.

I21-45 Cont.



4. Enhance bicycle and vehicular circulation through roadway intersection improvements that facilitate a safe and walkable community along Pacific Coast Highway.
5. Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.
6. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

I21-45 Cont.

ES.4 Summary of Environmental Impacts and Mitigation Measures

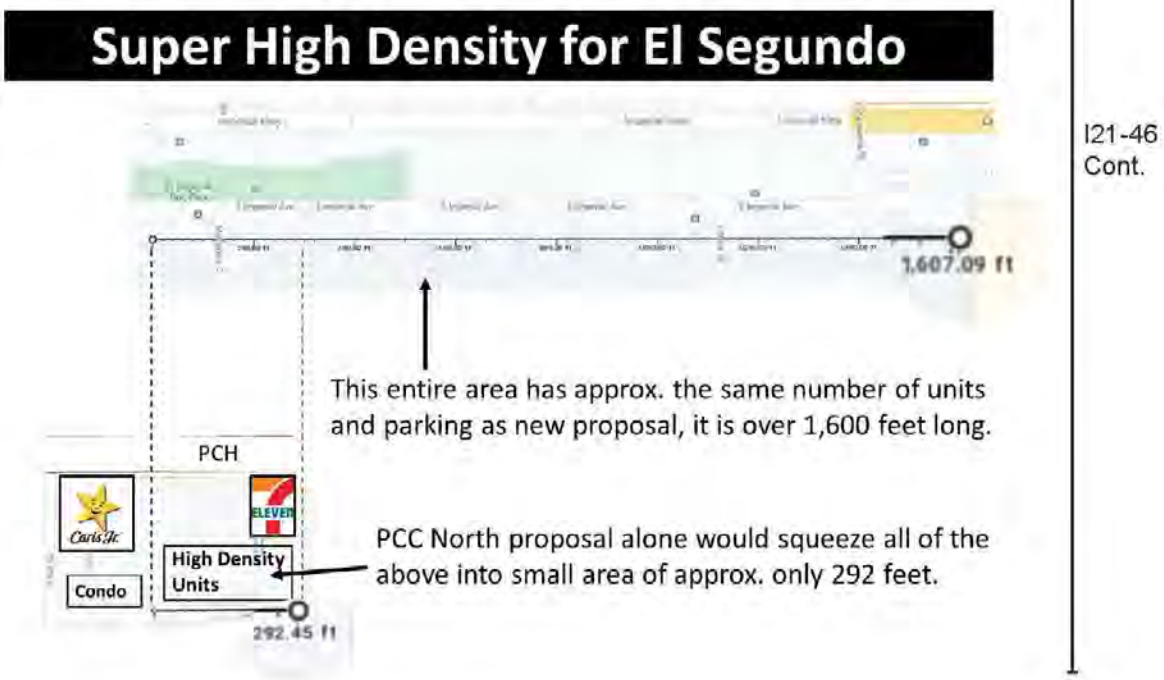
I21-46

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis related to the Project. Table ES-1 identifies a summary of the significant environmental impacts resulting from the Project pursuant to State CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4 of this Draft EIR. Table ES-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Comments on: Table ES-1 Summary of Impacts Noise section, page ES-20 (next page)

- There will be a permanent increase in Noise
  - Human activity/population growth/high density
  - Traffic noise on surrounding streets and Mariposa all the way to downtown.
  - LAX noise propagation off of a 6 story building not addressed
  - Again if this was built south of Grand or east of Sepulveda this would not impact the current residential population. The 2 ways to get into the Downtown area of El Segundo quickly, efficiently and with little to no impact to any resident in El Segundo is El Segundo Blvd and Imperial Hwy. If built south of Grand, using El Segundo Blvd does not impact any residents.

I21-46
Cont.





Proponents of project will say that the noise is attenuated here due to distance, and that it's not within the 65 dBA noise contour. These both may be true, however noise **does** propagate and echo off of walls as well, it's just as much of a physical property as attenuation. So we cannot deny that this will send more airport noise into the community, its just a matter of physics.

I21-47

LAX noise will be amplified by PCC echoing all of that noise due to its height. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.
This perplexes me as El Segundo has proudly held back the expansion and noise of LAX (plaque on mortuary hill commemorating it). El Segundo has forced LAX to modify its operations to mitigate noise and I, as an Airport Superintendent with the LAX airport authority know this first hand. We have numerous restrictions imposed and complied with.



I21-47 Cont.

El Segundo as a City participates in the regular LAX noise meetings. One of the responsibilities of LAX adjacent cities is to basically plan your City to mitigate Noise. I see a mixed message here. El Segundo will build tall buildings that bounce airport noise back into the City but then vehemently reject the idea of LAX expanding and making more noise. Please see the FAA Noise Abatement Policy below:

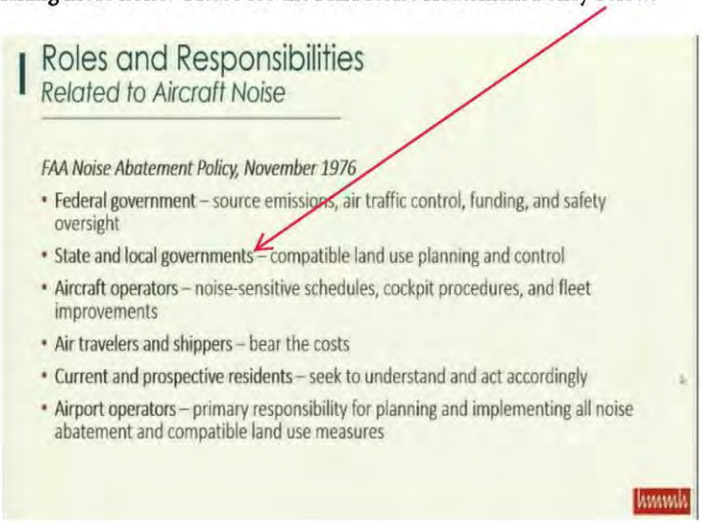


Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Land Use and Planning			
Would the project physically divide an established community?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on land use resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Noise			
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant Impact	MM-NOI-1: Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures: a. To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating	Less Than Significant

I21-48 Cont.

Table ES-1 Summary of Impacts Population and Housing section page ES-23 (next page)

- Obviously this is an impact and substantial. We have never had high density apartments like this. This is, by the word itself "high density", impactful to a community and region that has never had this type of development, as opposed to a community that has numerous high density housing. So this is a monumental shift in how to look at housing, so if ever there would be a time to call something impactful it would be now. The first time we try something drastically new it is impactful for better or worse. **Our infrastructure to support this drastic change is not there yet, nor is the population in large part given up vehicles.** Again cart before the horse.

I21-48

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on housing and/or population resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Public Services and Recreation			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			
Fire protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable

I21-48 Cont.

Table ES-1 Summary of Impacts, Parks misc section page ES-24 (next page)

- In this section it asks if Parks will be impacted and the summary says "no". There are literally parks about 100' away ALL ALONG THE PROPOSED DEVELOPMENT SITE!
- Freedom Park, Washington Park, Constitution Park are all literally a stone's throw from the site. Unless the term Park is redefined for this study. I pay extra property taxes because I live next to these parks. El Segundo Parks and Rec upkeep them, as I see them all the time and they are utilized like any other park by the normal definition. This really needs some explanation.
- Bypass and shortcut traffic (detailed in Transportation analysis) would impact these parks and potentially be a safety hazard

I21-49



Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Police protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Schools?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Parks?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Other public facilities?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Less than Significant Impact	No mitigation measures are required.	Not Applicable

I21-49 Cont.

(P). According to the City's General Plan, the General Commercial designation permits all retail uses, including hotel uses, and major medical facilities, at a maximum floor area ratio (FAR) of 1.0. Office uses are not permitted except for those providing personal services not exceeding 5,000 square feet such as travel and insurance agents (City of El Segundo 1992). The City's General Plan parking designation permits areas for parking automobiles, motorcycles, and bicycles in surface or structured parking (City of El Segundo 1992). While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. The Aloft Hotel is 98,741 net square feet in size with an existing 0.992 FAR based upon its current lot size and configuration where a maximum of 1.0 FAR is allowed. The three buildings that comprise the Fairfield Inn and Suites Hotel total 190,026 net square feet in size with an existing 1.94 FAR where 1.0 FAR is allowed (existing legal, non-conforming condition). Both properties are non-conforming in regard to many development standards as they were built prior to the current development standards of the General Commercial (C-3) Zone. Further, no further intensification of the land uses could occur with the current FAR standards. Therefore, the continuation of the City's General Plan would not allow for additional development to occur.

Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The existing hotel uses would remain in place and operational, the existing surface parking lots would be retained, no new buildings or parking garages would be constructed, no on-site landscaping improvements would occur, and no intersection improvements would occur.

E.S.5.2 Alternative B - Reduced Development Alternative: Exclusion of PCC–North

CEQA requires that EIRs "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (14 CCR 15126[a]). As presented in prior sections of this EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the applicable Air Quality Management Plan (AQMP). As such, Alternative B proposes a reduction in the Project to eliminate the significant impacts related to population growth projections and the AQMP, as well as lessen the proposed development intensity by eliminating PCC-North from the Specific Plan boundaries.

I21-50

As previously discussed in Section 4.11, Population and Housing, the Southern California Association of Government's (SCAG) forecasted population growth for the City of El Segundo is 500 persons between 2016 and 2045. Assuming 2.35 persons per household, the proposed Project's 263 residential units would accommodate 618 individuals at full occupancy of all units. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. Alternative B would not exceed SCAG's estimated projection through 2045.

As previously described in Section 4.2, Air Quality, considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a

This would be a viable alternative. I still don't believe some of the objectives are met but it lessens the overall impact to the community.

Environmental Setting, none of the anticipated cumulative projects are in close enough proximity to the Project site. At a distance of over 1,000 feet, aggregate noise emission levels from the nearest cumulative project to the southeast on Grand Avenue would attenuate due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography). Hence, noise due to construction of other projects would not meaningfully combine with future development under the Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to a studied noise-sensitive receptor is compliant with the aforementioned City threshold for construction noise as received by a residential property, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities; or,
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dB change).

Additionally, all future development under implementation of the Project, as well as unrelated construction projects within City limits, would be required to comply with limits on allowable construction hours per relevant **portions of the City's noise ordinance. Hence, for the above reasons, cumulative impacts due to cumulative** construction noise would be less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold 4.10.4(b) above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2025 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would generate a noise level increase of less than 3 dBA along the studied sample roadways in the vicinity of the Project. As such, anticipated increases would be below the significance threshold of 3 dBA; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life even if the traffic was silent.

I21-51

Noise Review

I21-52

pressure levels can also be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects when distances between a source and receptor are large.

- **Shielding by Natural or Human-Made Features** – A large object or barrier in the direct path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and ridgelines) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. While a line of trees may visually occlude the direct line between a source and a receptor, its actual noise-reducing effect is usually negligible because it does not create an acoustically solid barrier. Deep expanses of dense wooded areas, on the other hand, can offer noise reduction under the right conditions.

Vibration Characteristics

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes (Caltrans 2013b), such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. The maximum vibration level standard used by Caltrans for the prevention of structural damage to typical residential buildings is 0.3 ips PPV (Caltrans 2013b). For human annoyance, Caltrans guidance indicates that a more **stringent threshold of 0.2 ips PPV due to continuous vibration (e.g., nearby roadway traffic) would be "annoying."** Vibration velocity limits for transient or single events tend to be less stringent than those for continuous or **"steady-state" vibration sources.**

Sensitive Receptors

Single family homes were a glaring omission in this category. Certainly the increased human activity in general, in the parks, via traffic and parking. Single family homes are threatened by unwanted noise that has significant potential not to just tick up, but spike up.

I21-52 Cont.

Noise- and vibration-sensitive land uses are typically considered locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, and hospitals are usual examples, with others depending on what the local jurisdiction may have defined or established. Based on context from the City Noise Ordinance and General Plan Noise Element as summarized in Section 4.10.2, Relevant Plans, Policies, and Ordinances, sensitive receptors include multi-family homes located immediately to the west and northwest of the Project site. These existing sensitive receptors represent the nearest land uses with the potential to be impacted by construction and operation of future projects under the Project, including noise

See next page "Existing Noise Environment" page 4.10-6:

Comment: the predictive modeling does not take into account whatsoever Mariposa traffic and all the shortcut traffic through residential streets and resulting ambient noise. If the project is so confident there will be no traffic in these areas, then the City should have no qualms about turning them into cul de sacs or some other traffic deterrent method to guarantee no new residents are using shortcuts. Also, only predictive modeling was done with no field verification. Also, as an engineer myself someone should be thinking beyond the small foot print of 100' from project boundary that is extremely tight. At minimum, the scope should have been expanded for reasonably foreseeable traffic and noise impacts, which was not done. As the study indicates they could not collect data due to suppressed traffic and noise from COVID19, so admitting we do not have conclusive nor expanded scope data to back any of this up. This is a big risk. Therefore more weight should be put on local residents in the immediate area for data. Was Traffic and Noise modeled down Mariposa and back streets?

I21-53

Single family homes seem to be completely ignored. This is not only insulting but grossly incorrect. Traffic and parking will add to noise (is there a lifetime guarantee that no hotel nor PCC resident nor guest are going to park in the single family neighborhood or any surrounding street?, domino effect of parking issues now and in the near future are a reasonable concern, look no further than apartments along Imperial, they come with parking garages, are **LOW** density and still spill over into the streets

I21-53 Cont.

levels associated with the addition of Project-related traffic on the local roadway network. Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors. In addition to the off-site receptors listed above, the proposed residential uses to be constructed and occupied as part of the Project would be considered sensitive receptors after completion of construction and occupancy.

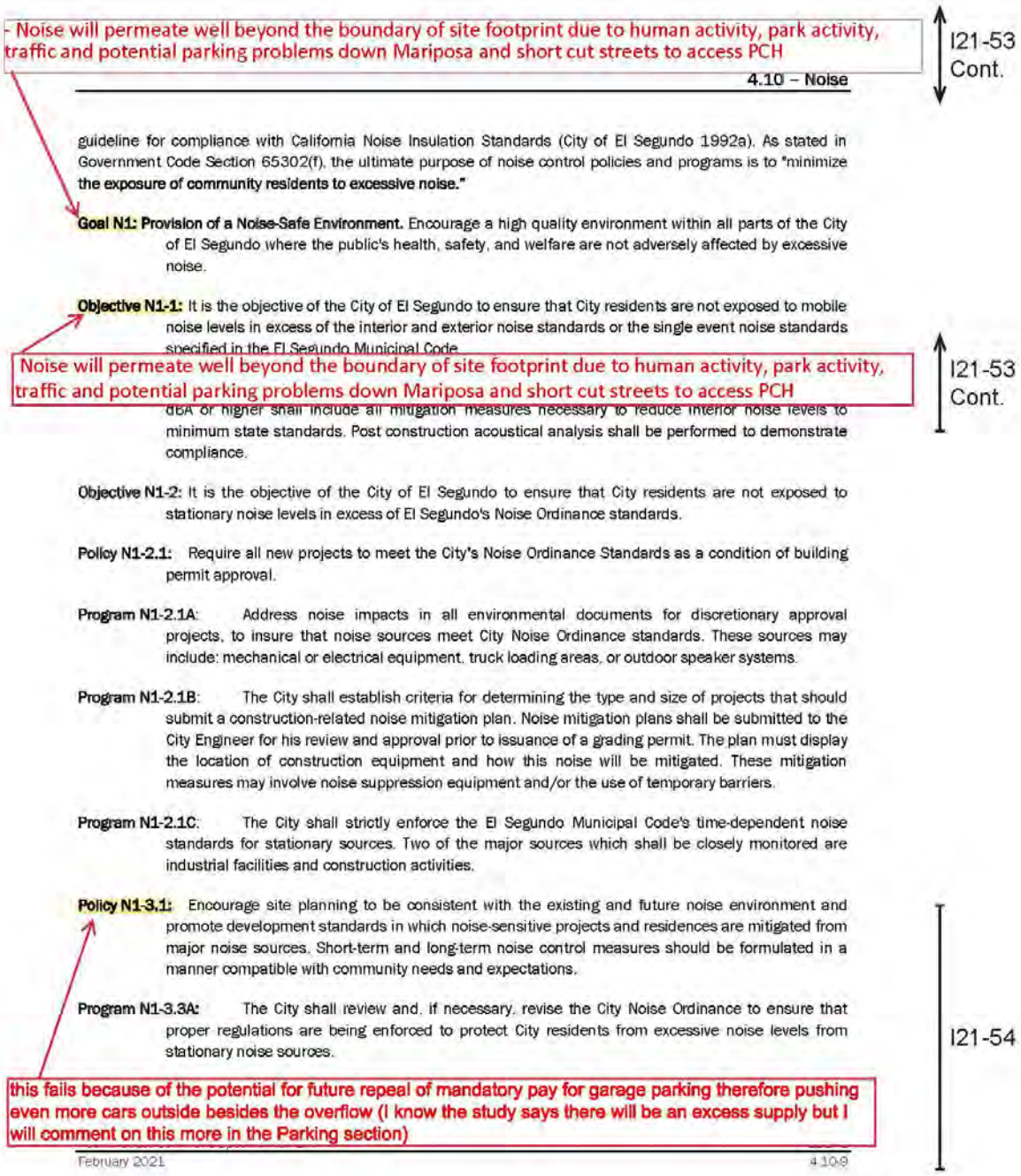
Existing Noise Environment

The existing noise environment of the Project area and its vicinity includes a variety of acoustical contributors that include aviation traffic from Los Angeles International Airport (LAX), proximate roadway traffic on PCH and the connected network of local streets, and an assortment of stationary noise sources that include commercial and industrial activities as well as operating heating, ventilating, and air-conditioning systems (HVAC) from residential and commercial land uses.

For purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique that is based on proximity of roadway traffic, which in this case PCH would be the expected dominant acoustical contributor. Under normal conditions, such estimates of the outdoor ambient sound levels would be confirmed with or supplanted by field-collected SPL measurements. However, at the time of this writing and due to COVID-19 response effects, commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Traffic noise levels representing existing (i.e., baseline or pre-Project) conditions were modeled with the FHWA Traffic Noise Model (TNM, Version 2.5) at representative noise-sensitive receivers ST1 through ST6 (see Figure 4.10-1, Traffic Noise Analysis). Details of the TNM inputs and output appear in Appendix H-2. These six receivers were modeled to be 5 feet above the local ground elevation. The traffic noise model prediction results have CNEL values ranging from 55 to 69 dBA. The predicted CNEL values for existing pre-Project conditions at sample receivers representing those nearest to PCH (ST3 and ST6) are each comparable to traffic-dominated outdoor ambient sound levels as estimated by Federal Transit Administration (FTA) guidance (i.e., Table 5-7 from the Transit Noise and Vibration Impact Assessment [FTA 2006]) and based on proximity to major roadways such as PCH. This correlation, with quantified differences no greater than 3 dB (a barely perceptible difference), between the modeled results and estimates from FTA guidance suggests the same TNM-based model can be used to predict the outdoor ambient levels for other surrounding roadways proximate to the Project and thereby evaluate **future "existing + project" traffic noise levels.**

The predicted pre-Project traffic sound levels are also generally consistent with what is depicted in Exhibit N-1 **from the City's General Plan Noise Element, which illustrates "existing CNEL noise contours" and suggests that**, due to the proximity of LAX, Interstate 105, and PCH, the CNEL for the neighborhood surrounding the Project would at least range from 60–65 dBA CNEL (City of El Segundo 1992a). Predicted existing traffic noise levels that are lower, such as 55 dBA CNEL at ST2, represent the modeled effect of existing buildings (i.e., the Fairfield Inn and Suites Hotel) occluding the sound emission from PCH. Where predicted levels are higher, such as 69.5 dBA CNEL at ST3 and ST6, the positions are merely closer to PCH and fully exposed to its acoustical contribution.



- Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH

I21-53 Cont.

4.10 – Noise

guideline for compliance with California Noise Insulation Standards (City of El Segundo 1992a). As stated in Government Code Section 65302(f), the ultimate purpose of noise control policies and programs is to "minimize the exposure of community residents to excessive noise."

Goal N1: Provision of a Noise-Safe Environment. Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise.

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH

I21-53 Cont.

dBA or higher shall include all mitigation measures necessary to reduce interior noise levels to minimum state standards. Post construction acoustical analysis shall be performed to demonstrate compliance.

Objective N1-2: It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1: Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A: Address noise impacts in all environmental documents for discretionary approval projects, to insure that noise sources meet City Noise Ordinance standards. These sources may include: mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

Program N1-2.1B: The City shall establish criteria for determining the type and size of projects that should submit a construction-related noise mitigation plan. Noise mitigation plans shall be submitted to the City Engineer for his review and approval prior to issuance of a grading permit. The plan must display the location of construction equipment and how this noise will be mitigated. These mitigation measures may involve noise suppression equipment and/or the use of temporary barriers.

Program N1-2.1C: The City shall strictly enforce the El Segundo Municipal Code's time-dependent noise standards for stationary sources. Two of the major sources which shall be closely monitored are industrial facilities and construction activities.

Policy N1-3.1: Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Program N1-3.3A: The City shall review and, if necessary, revise the City Noise Ordinance to ensure that proper regulations are being enforced to protect City residents from excessive noise levels from stationary noise sources.

I21-54

this fails because of the potential for future repeal of mandatory pay for garage parking therefore pushing even more cars outside besides the overflow (I know the study says there will be an excess supply but I will comment on this more in the Parking section)

February 2021 4.10-9

A.5.b. Loading docks, bays and parking spaces, delivery service areas, outdoor storage areas, stand-alone mechanical equipment facilities, should be located and designed to minimize their visibility, circulation conflicts and adverse noise impacts. Sound attenuation walls should be used where appropriate to **reduce noise where required by code or the Project's environmental analysis.**

A.5.e. Trash and recycling receptacles areas should be completely screened from public view from public rights-of-way with solid walls, wood, and/or landscaping.

4.10.3 Thresholds of Significance

The significance criteria used to evaluate a project's impacts related to noise are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to noise would occur if a project would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Generation of excessive groundborne vibration or groundborne noise levels.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local polices and regulations described in Section 4.10.2 and are listed below.

- Through adherence to the limitation of allowable construction times provided in the El Segundo Municipal Code (ESMC), construction-related noise levels attributed to the Project of less than 65 dBA (or as adjusted upwards for partial-hour activity durations) at residential property lines would be considered compliant with the ESMC and would result in less than significant impacts. The property lines of the nearest multi-family residences to the west of the Project appear to be as close as 15 feet to the PCC-North, 58 feet to the PCC-Fairfield Parking, and 62 feet to the PCC-South.
- Off-site noise impacts due to Project-generated traffic would be considered significant if Project-generated traffic causes an increase of 3 dBA CNEL (a barely perceptible difference) compared to existing traffic noise levels.
- Noise emission from Project-attributed stationary sources, such as rooftop HVAC systems operating at night to provide interior comfort for new residential and non-residential land uses implemented as a result of the Project, would be limited to a 5 dBA increase over the ambient levels at the nearest off-site existing residential properties.
- Noise emission from Project-attributed stationary sources, such as rooftop HVAC systems operating at night to provide interior comfort for new residential and non-residential land uses implemented as a result of the Project, would be limited to an 8 dBA increase over the ambient levels at the nearest off-site existing commercial properties.
- Guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within (Caltrans 2013b). As for the receiving structure itself, aforementioned Caltrans guidance from Section 4.10.2 recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

In the future transiting vehicles in and out of garage and garage itself will have significant impact on Illinois Ct

I21-55

Table 4.10-5. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and Equipment Types Involved)	Hourly L_{eq} at Nearest Noise-Sensitive Receptor to *Construction Site Boundary* (dBA)	Hourly L_{eq} at Nearest Noise-Sensitive Receptor to *Acoustical Centroid of Site* (dBA)
Architectural Coating (Air Compressor)	73	63
Paving (Paver, Concrete Mixer Truck, Roller)	77	71
Buildout Phase 2 (PCC-North)*		
Demolition (Concrete Saw, Excavator, Dozer)	84	N/A
Site Preparation (Dozer, Backhoe, Front End Loader)	82	N/A
Grading (Excavator, Grader, Dozer, Backhoe)	85	N/A
Construction (Crane, Manlift, Generator, Backhoe, Welder)	78	N/A
Architectural Coating (Air Compressor)	78	N/A
Paving (Paver, Concrete Mixer Truck, Roller)	81	N/A
Buildout Phase 3 (PCC- South)		
Demolition (Concrete Saw, Excavator, Dozer)	71	74
Site Preparation (Dozer, Backhoe, Front End Loader)	76	74
Grading (Excavator, Grader, Dozer, Backhoe)	77	74
Construction (Crane, Manlift, Generator, Backhoe, Welder)	72	70
Architectural Coating (Air Compressor)	72	63
Paving (Paver, Concrete Mixer Truck, Roller)	77	71

* For Phase 2, the nearest receptors are multi-family residential buildings west of the Project property line at PCC North, at which **the construction noise level needs to be assessed and compared with the City's 65 dBA threshold**

N/A = not applicable (since operating construction equipment would largely be near the construction site boundary for a considerable portion of Phase 2 construction).

As presented in Table 4.10-5, the estimated construction noise levels are predicted to be as high as 85 dBA hourly L_{eq} at the nearest existing residences when Project Buildout Phase 2 (PCC-North) grading activities take place. Aside from operation of an air compressor at the acoustical center of buildout Phases 1 and 3, noise from **construction for all phases is anticipated to exceed the City's hourly threshold of 65 dBA** L_{eq} at the existing nearest residential properties to the west. Thus, under these conditions construction noise would result in a temporary but significant noise impact at these receptors and require mitigation measures that—if designed and implemented properly by the Project applicant and its construction contractors—would need to demonstrate at least 5 dBA and as high as 20 dBA of sound abatement in order to yield Project-attributed construction noise levels that are compliant with this City standard. **Typical construction "sound blankets", such as those offered by** local suppliers, are capable of providing this 5 to 20 dBA range of acoustical insertion loss (i.e., the difference in measured sound level at a receiver after a sound-occluding element is placed in the direct path between the receiver and the noise source of interest). Thus, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level.

Table 4.10-6 illustrates the existing noise levels (2019) at the noise locations, and the anticipated post-Project noise levels. As previously discussed, for purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique that is based on proximity of roadway traffic, which in this case PCH would be the expected dominant acoustical contributor. Under normal conditions, such estimates of the outdoor ambient sound levels would be confirmed with or supplanted by field-collected SPL measurements. However, at the time of this writing and due to COVID-19 response effects,

I21-56

Noise levels not reliable since down during the Pandemic as stated. Traffic and noise from vehicles and aircraft down 85%

commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

I21-56 Cont.

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

This is only predictive, no field data to back it

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (West of Indiana Street)	59.0	56.1	59.5	55.5	-4.0
ST2 (Northwestern Project Boundary)	55.0	55.9	55.2	55.7	0.9
ST3 (Eastern Project Boundary Approximately 50 Feet from PCH)	69.5	68.2	70.3	68.7	1.6
ST4 (Northeast Corner of E Mariposa Avenue and Illinois Court)	63.0	62.7	63.3	62.9	-0.4
ST5 (Norther Project Boundary approximately 30 feet from E Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6 (Eastern Project Boundary approximately 50 feet from PCH)	69.5	69.6	70.2	70.2	0.1

dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

Scope of these too tight, does not address neighboring areas

Table 4.10-6 shows ve receivers, the addition of proposed Project traffic to the roadway network would result in a CNEL value increase of less than 3 dB, which is below the discernible level of change for the average healthy human ear. In fact, the installation of the proposed Project would add sound-path occlusion and result in predicted SPL that are lower than existing measured levels. Thus, a less-than-significant impact would occur for Project-related off-site traffic noise affecting existing residences in the vicinity.

Traffic Noise Exposure to Future Project Occupants

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly created Project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed Project. Nevertheless, the California Building Code requires that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Hence, the following predictive analysis of traffic noise exposure at the exteriors of occupied residences and outdoor living areas is provided for informational purposes. Additionally, this analysis of outdoor environmental noise to the newly created Project residences would be consistent with **the "post-construction acoustical analysis" per Program N1-1.9A from the City's General Plan** Noise Element.

In addition to the prediction results presented in Table 4.10-6, the FHWA TNM software was also used to predict the future plus Project scenario traffic noise levels at multiple on-site exterior areas, as listed in Table 4.10-7. At

Environmental Setting, none of the anticipated cumulative projects are in close enough proximity to the Project site. At a distance of over 1,000 feet, aggregate noise emission levels from the nearest cumulative project to the southeast on Grand Avenue would attenuate due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography). Hence, noise due to construction of other projects would not meaningfully combine with future development under the Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to a studied noise-sensitive receptor is compliant with the aforementioned City threshold for construction noise as received by a residential property, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities; or,
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dB change).

Additionally, all future development under implementation of the Project, as well as unrelated construction projects within City limits, would be required to comply with limits on allowable construction hours per relevant **portions of the City's noise ordinance. Hence, for the above reasons, cumulative impacts due to cumulative** construction noise would be less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold 4.10.4(b) above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2025 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would generate a noise level increase of less than 3 dBA along the studied sample roadways in the vicinity of the Project. As such, anticipated increases would be below the significance threshold of 3 dBA; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life even if the traffic was silent.

I21-57

Transportation Review

I21-58

Freeways

I-105 runs in an east/west direction north of the Project site and extends from Los Angeles International Airport to Norwalk. In the vicinity of the study area, I-105 provides three to four lanes in each direction. Interchanges are provided at Nash Street and PCH in the study area. I-105 connects to I-405 approximately 1.5 miles from the Project site.

I-405 runs in a north/south direction east of the Project site and extends from the San Fernando Valley to Irvine. In the vicinity of the of the study area, I-405 provides four travel lanes and a carpool lane in each direction (a total of 10 lanes). Interchanges are provided via the I-105 and at El Segundo Boulevard in the study area.

East/West Streets

Shortcut traffic will increase

- **Imperial Highway** is classified as a secondary arterial in the study area and runs north of the Project site. It provides three lanes in both directions with a raised median in the study area. Parking is not permitted along either side of the street in the study area.

Shortcut traffic will increase significantly

- **Walnut Avenue** is classified as a local commercial street west of PCH and secondary arterial east of PCH in the study area. It runs north of the Project site and provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Maple Avenue** is classified as a local residential street west of PCH and 4-lane collector east of PCH in the study area. It runs north of the Project site and provides one lane in both directions west of PCH and two lanes in both directions east of PCH in the study area. Parking is permitted along either side of the street in the study area.

Traffic in general will increase significantly

- **Palm Avenue** is classified as a local commercial street in the study area and runs north of the Project site. It provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Mariposa Avenue** is classified as a two-lane collector west of PCH and a secondary arterial east of PCH in the study area and runs between the Pacific Coast Commons – North (PCC-North) and Pacific Coast Commons – Fairfield Parking (PCC-Fairfield Parking) Project sites. It provides one lane in both directions west of PCH and two lanes in both directions east of PCH in the study area. Parking is permitted along either side of the street in the study area.
- **Holly Avenue** is classified as a local commercial/residential street in the study area and runs south of the Project site. It provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Grand Avenue** is classified as a secondary arterial in the study area and runs south of the Project site. It provides three lanes in both directions between PCH and Nash Street. Grand Avenue is constructed with two lanes in both directions west of PCH. Parking is not permitted along either side of the street in the study area east of PCH, however there are time restricted parking zones along some portions of Grand Avenue west of PCH.
- **El Segundo Boulevard** is classified as a secondary arterial west of PCH and major arterial east of PCH in the study area. It runs south of the Project site and provides two lanes in both directions west of PCH and three lanes in both directions with a raised median east of PCH in the study area. Parking is not permitted along either side of the street in the study area.

I21-58 Cont.

North/South Streets

- **Kansas Street** is classified as a local residential street in the study area that runs west of the Project site and provides one lane in both directions. Parking is permitted along either side of the street in the study area.
- **Indiana Street** is classified as a local commercial/residential street that fronts the western side of the Project site. It provides one lane in each direction with parking permitted on both sides of the street in the study area.
- **PCH** also known as State Route 1, is a major north/south state highway that runs along most of the Pacific coastline of California. It fronts the eastern side of the Project site and provides four lanes in both directions with a center median within the study area. Parking is not permitted along either side of the road in the study area. Previously in the City, this major arterial was referred to as **Sepulveda Boulevard**.
- **Lairport Street** is classified as a secondary arterial in the study area and runs east of the Project site. It provides one lane in both directions. Parking is permitted along either side of the street in the study area. Lairport Street becomes Continental Boulevard south of Mariposa Avenue.
- **Continental Boulevard** is classified as a secondary arterial in the study area and runs east of the Project site. It provides three lanes in both directions. Parking is not permitted along either side of the street in the study area. Continental Boulevard becomes Lairport Street north of Mariposa Avenue.
- **Nash Street** is classified as a secondary arterial in the study area and runs east of the Project site. It provides two lanes in both directions. Parking is not permitted along either side of the street in the study area.

I21-58 Cont.

** Washington St not even mentioned and it will receive a significant amount of bypass and shortcut traffic. The addition of one more lane at PCH/Mariposa will not make enough of a dent in traffic to prevent this, plus the estimate of new vehicles in circulation is way underestimated.

The Project site is served by public transit. Figure 4.13-2, Transit Routes, shows the various bus routes and Metro C Line that provide service in the study area. The Project site is located west of the Metro C Line Mariposa Station. The following bus routes are within the study area: two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two Los Angeles Department of Transportation (LADOT) Commuter Express (Route 438, 574) routes.

Details on the transit lines in the vicinity of the Project site are as follows:

- Metro C (formerly Green) Line – The C Line is a light rail line running between Redondo Beach and Norwalk in Los Angeles County. This line runs north/south east of the Project site along Nash Street. The C Line has average headways of 10 minutes during the weekday AM and PM peak periods. The C Line Mariposa Station is just over 0.5 miles from the Project site.
- Metro Line 232 – Line 232 provides local service between the City and downtown Long Beach. It runs along PCH east of the Project site in the study area. Line 232 has average headways of 20 minutes during the weekday AM peak period and 30 minutes during the weekday PM peak period.
- Metro Line 625 – Line 625 provides local service between the City and Los Angeles International Airport. It runs along Imperial Highway, north of the Project site in the study area. Line 625 has average headways of 25 minutes during the weekday AM peak period and 30 minutes during the weekday PM peak period.
- Beach Cities Line 109 – Line 109 provides local service between the City of Redondo Beach and Los Angeles International Airport. This line runs along east of the Project site along PCH. Headways average 30 to 45 minutes during peak periods.
- LADOT Commuter Express 438 – Line 438 provides express service from El Segundo to Downtown Los Angeles along Imperial Highway, north of the Project site. Line 438 has headways of 15 to 30 minutes during weekday AM and PM peak periods.

Transportation Impact Review

I21-59

Transportation Impact Analysis Summary





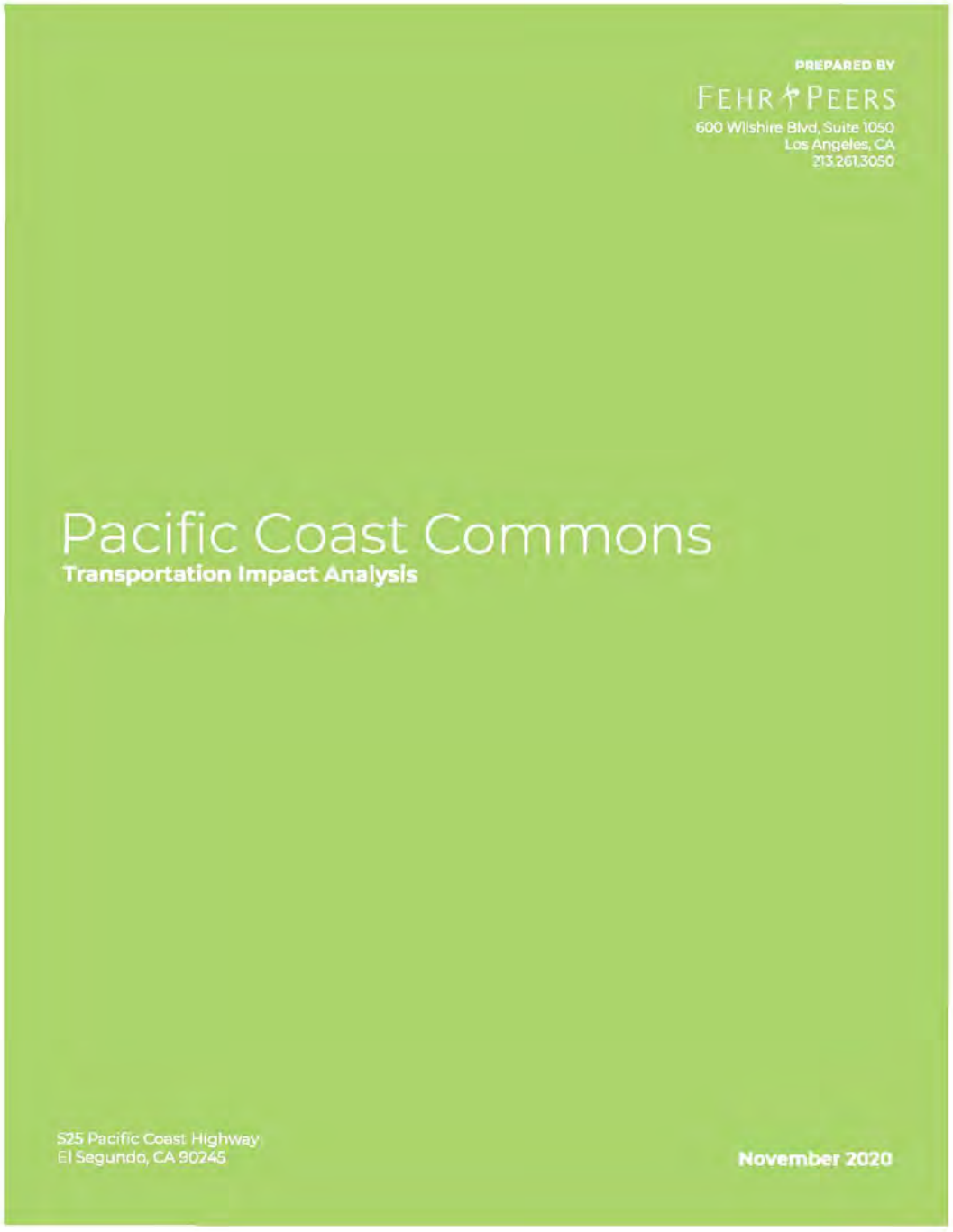
- The Analysis conducted for the EIR was based on the number of additional vehicles the project would bring. This number comes from the Parking Analysis. As I have shown in that respective area and others, the standards used and data collection is not representative of what we currently have going on. 2 big underlying assumptions used in the EIR is that many people are going to forgo vehicles and walk to transit and walk to Downtown El Segundo
  - **Big question**: Why was there no study completed to even ask or analyze whether the current population of apartments, condos and single family homes in the immediate area do any of this??
  - It seems like a logical step to take if this is one of your Project objectives and basis for making a judgment on a Project, especially if it could be impactful to the neighborhood and city.
  - I live in the immediate area and have never seen even a trickle of people walking to Transit or Downtown. Only walkers are for exercise.
- Standards used as basis are not representative (should simply used realistic standard set forth by the City of El Segundo 2 cars per unit. Also the data sampling is suspect and not representative of the immediate surrounding area.
- Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that but we're putting the cart before the horse.
- We need a culture or cost of vehicle ownership of fewer cars before housing ideas capitalize on that.
  - If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.
  - We do not have well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it?
  - The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well established historical average of 2 cars/unit.
- "Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it but we have no infrastructure nor adoption by the people to meet this objective.
- Therefore, I believe that the following numbers should be **increased by at least 33%**. This number is derived from the Parking Analysis. I have attempted to contact Fehr & Peers (contracted to conduct the Parking and Transportation Analysis) but have not received a call back in regard to their analysis.
- Conclusion: Mariposa/PCH intersection will be inundated and cause significant short cutting on residential streets. Also, Mariposa traffic situation will be aggravated significantly.
- Mariposa Ave not even evaluated, the congestion, speeding and hazards to children and all residents will increase.
- Shortcut traffic will pass by 4 parks (Independence, Constitution, Washington and Freedom Park) creating a hazard for children and park goers.

I21-59
Cont.

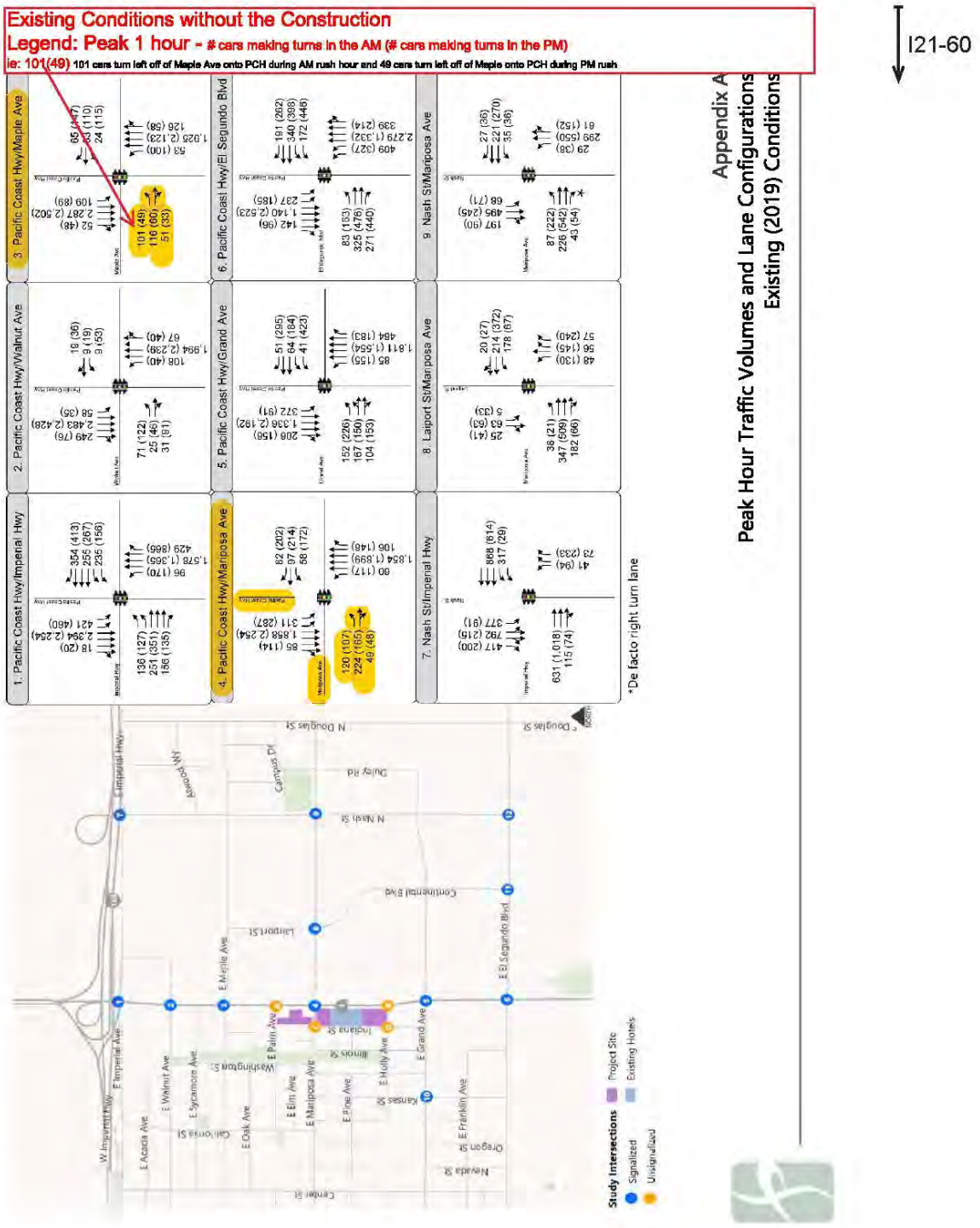


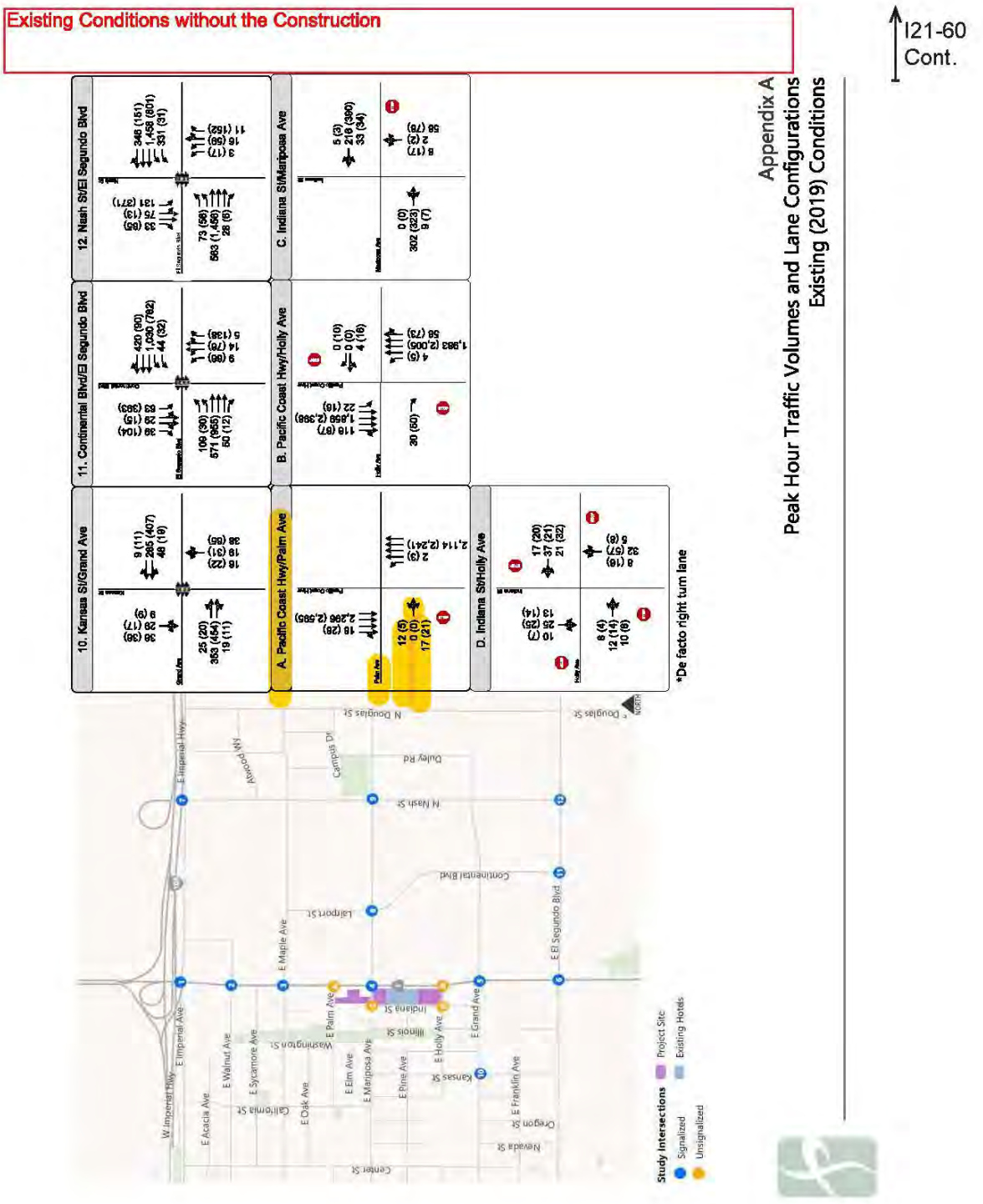


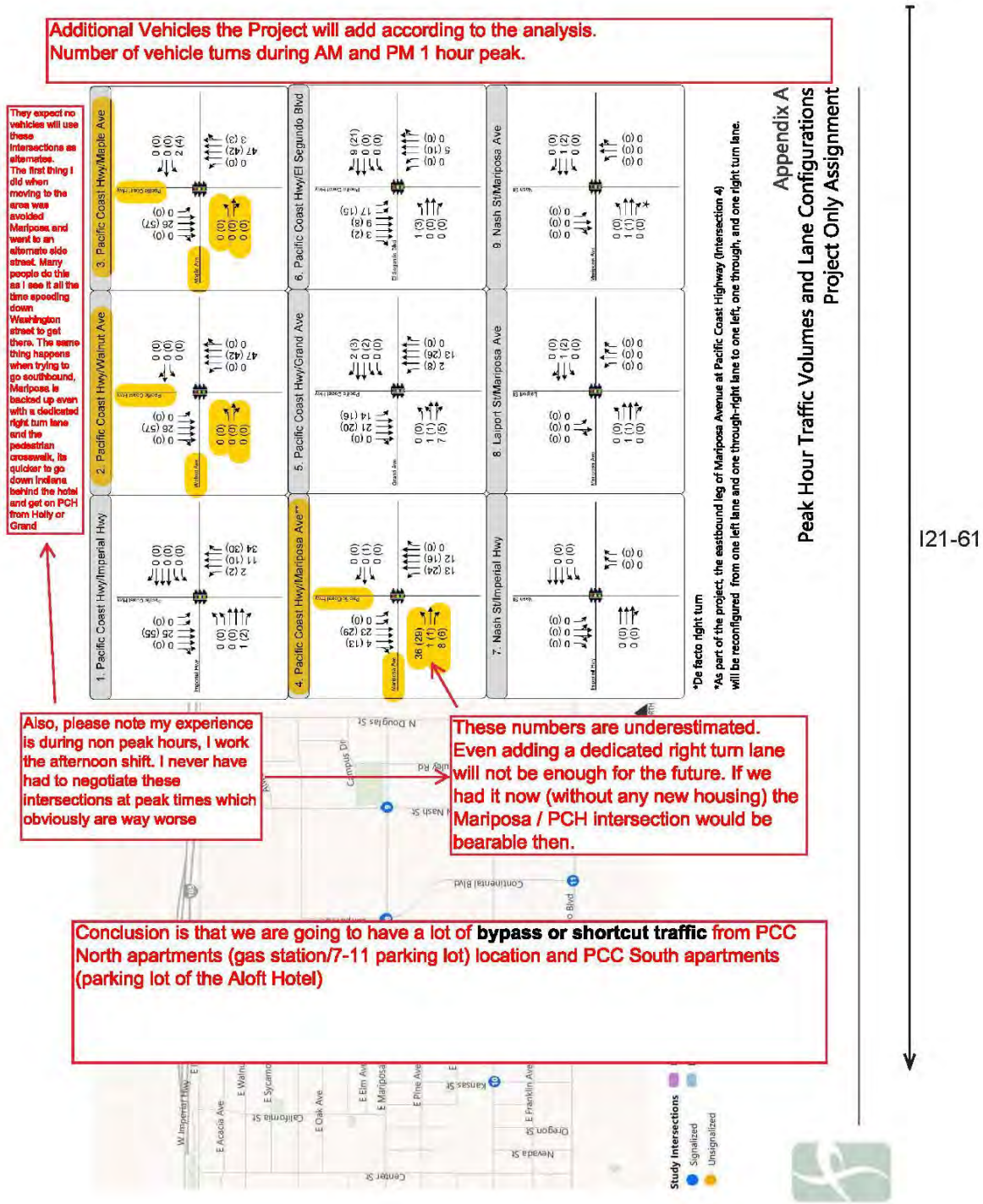



PREPARED BY
FEHR PEERS
600 Wilshire Blvd, Suite 1050
Los Angeles, CA
213.261.3050
Pacific Coast Commons
Transportation Impact Analysis
525 Pacific Coast Highway
El Segundo, CA 90245
November 2020

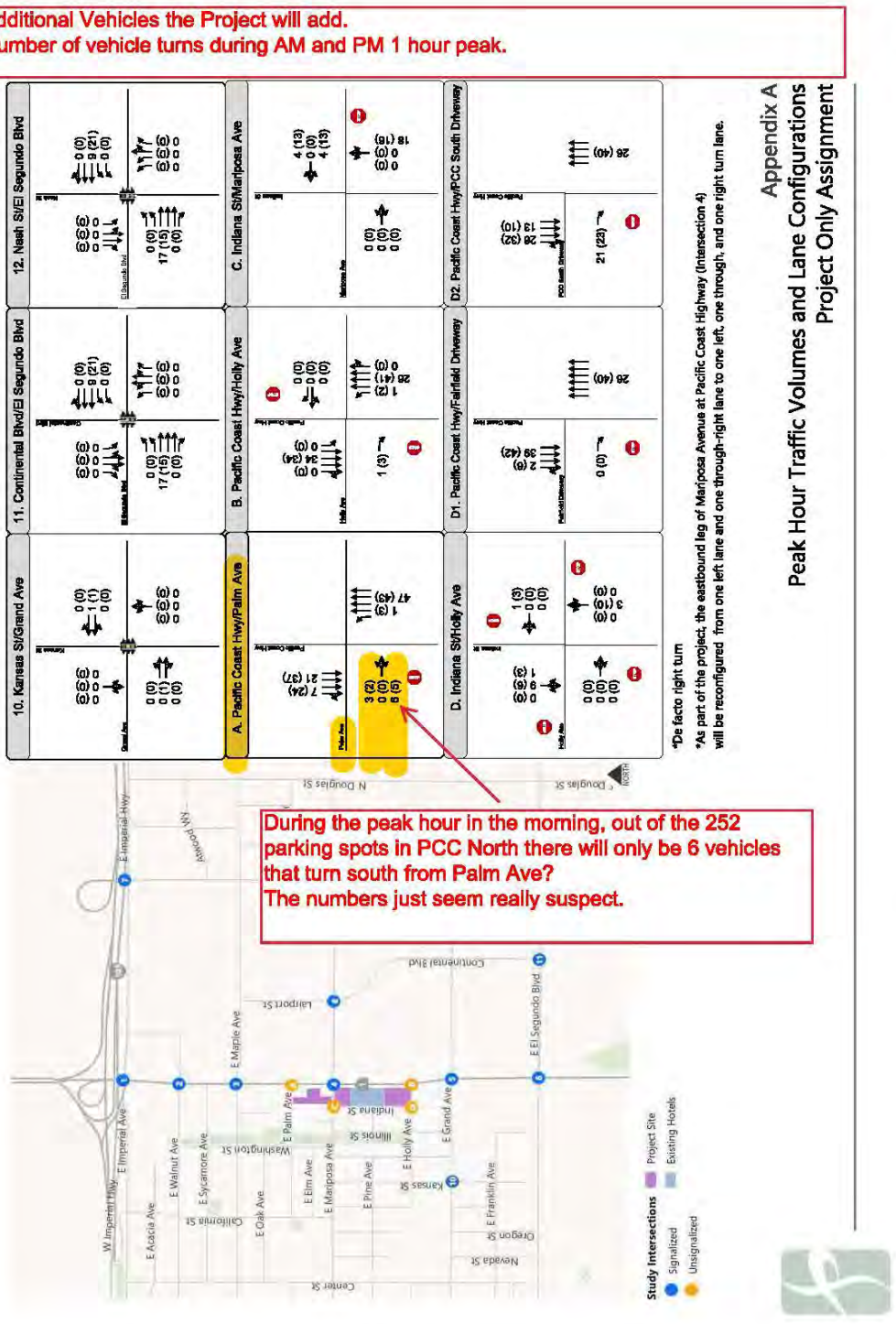
APPENDIX A:
LANE CONFIGURATIONS AND TRAFFIC VOLUMES


Existing Conditions without the Construction
Legend: Peak 1 hour - # cars making turns in the AM (# cars making turns in the PM)
ie: 101(49) 101 cars turn left off of Maple Ave onto PCH during AM rush hour and 49 cars turn left off of Maple onto PCH during PM rush
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Existing (2019) Conditions
I21-60
3. Pacific Coast Hwy/Maple Ave
6. Pacific Coast Hwy/El Segundo Blvd
9. Nash St/Mariposa Ave
2. Pacific Coast Hwy/Walnut Ave
5. Pacific Coast Hwy/Grand Ave
8. Laiport St/Mariposa Ave
1. Pacific Coast Hwy/Imperial Hwy
4. Pacific Coast Hwy/Mariposa Ave
7. Nash St/Imperial Hwy
*De facto right turn lane
Study Intersections
Signalized
Unsignalized
Project Site
Existing Hotels


Existing Conditions without the Construction
I21-60 Cont.
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Existing (2019) Conditions
12. Nash St/El Segundo Blvd
11. Continental Blvd/El Segundo Blvd
10. Kansas St/Grand Ave
C. Indiana St/Mariposa Ave
B. Pacific Coast Hwy/Holly Ave
A. Pacific Coast Hwy/Palm Ave
D. Indiana St/Holly Ave
*De facto right turn lane
Study Intersections
Signalized
Unsignalized
Project Site
Existing Hotels

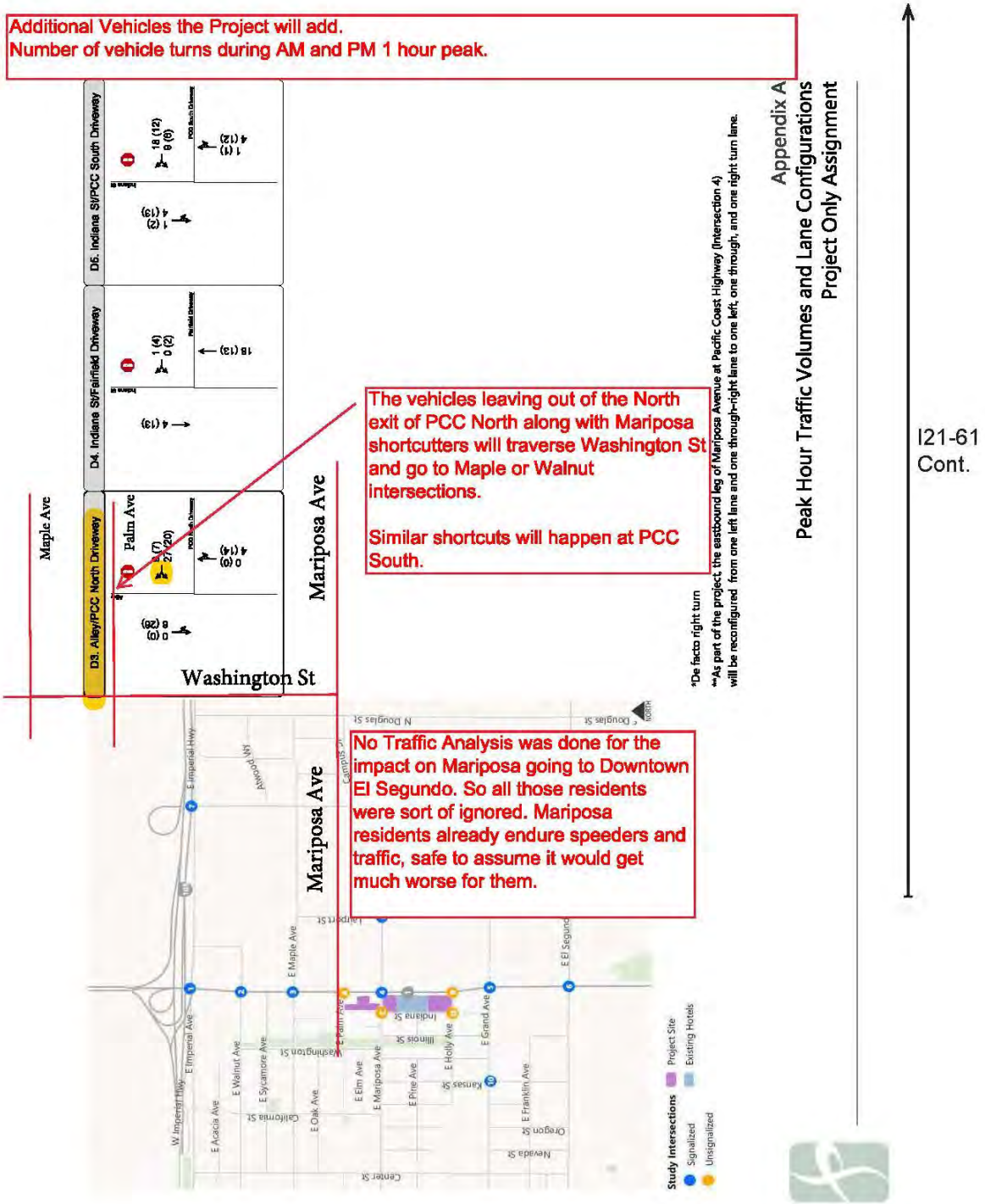

Additional Vehicles the Project will add according to the analysis.
Number of vehicle turns during AM and PM 1 hour peak.
They expect no vehicles will use these intersections as alternates. The first thing I did when moving to the area was avoided Mariposa and went to an alternate side street. Many people do this as I see it all the time speeding down Washington street to get there. The same thing happens when trying to go southbound, Mariposa is backed up even with a dedicated right turn lane and the pedestrian crosswalk, its quicker to go down Indiana behind the hotel and get on PCH from Holly or Grand
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Project Only Assignment
I21-61
1. Pacific Coast Hwy/Imperial Hwy
2. Pacific Coast Hwy/Walnut Ave
3. Pacific Coast Hwy/Maple Ave
4. Pacific Coast Hwy/Mariposa Ave*
5. Pacific Coast Hwy/Grand Ave
6. Pacific Coast Hwy/El Segundo Blvd
7. Nash St/Imperial Hwy
8. Laport St/Mariposa Ave
9. Nash St/Mariposa Ave
*De facto right turn
*As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.
Also, please note my experience is during non peak hours, I work the afternoon shift. I never have had to negotiate these intersections at peak times which obviously are way worse
These numbers are underestimated. Even adding a dedicated right turn lane will not be enough for the future. If we had it now (without any new housing) the Mariposa / PCH intersection would be bearable then.
Conclusion is that we are going to have a lot of bypass or shortcut traffic from PCC North apartments (gas station/7-11 parking lot) location and PCC South apartments (parking lot of the Aloft Hotel)
Study Intersections
Signalized
Unsignalized

Additional Vehicles the Project will add.
Number of vehicle turns during AM and PM 1 hour peak.

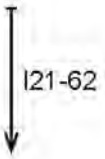


During the peak hour in the morning, out of the 252 parking spots in PCC North there will only be 6 vehicles that turn south from Palm Ave?
The numbers just seem really suspect.

I21-61
Cont.


Additional Vehicles the Project will add.
Number of vehicle turns during AM and PM 1 hour peak.
The vehicles leaving out of the North exit of PCC North along with Mariposa shortcutters will traverse Washington St and go to Maple or Walnut intersections.
Similar shortcuts will happen at PCC South.
No Traffic Analysis was done for the impact on Mariposa going to Downtown El Segundo. So all those residents were sort of ignored. Mariposa residents already endure speeders and traffic, safe to assume it would get much worse for them.
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Project Only Assignment
I21-61
Cont.
D6. Indiana St/PCC South Driveway
D4. Indiana St/Fairfield Driveway
D3. Alley/PCC North Driveway
Maple Ave
Palm Ave
Mariposa Ave
Washington St
*De facto right turn
**As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (Intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.
Project Site
Existing Hotels
Study Intersections
Signalized
Unsignalized

Parking Review



Parking Analysis Summary





- Standards used as basis are not representative (should simply used realistic standard set forth by the City of El Segundo as seen on page 5, Table 2. Also the data sampling is suspect and not representative of the immediate surrounding area.

- Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that, but we're putting the cart before the horse.

- We need a culture of fewer cars or a very high cost of vehicle ownership **before** housing ideas can capitalize on that.

    - If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.
    - We do not have well established nor mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first, and then housing will follow. **Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it? It's certainly not happening now, how will it magically happen after this proposal?**
    - The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well established historical average of 2 cars/unit.

- "Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit? LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.

- Also, please note the number of parking spots available total are shared between the 2 high density apartment buildings, 2 hotels, retail space and a restaurant. So this means that if parking runs out in PCC North then the individual will need walk to another structure and park their vehicle. Just don't see this ending well. This isn't mid town Manhattan.

I21-62
Cont.

FEHR PEERS

MEMORANDUM

Date: February 17, 2021
To: Lionel Uhry, Mar Ventures
From: Vivian Lee and Tom Gaul
Subject: Pacific Coast Commons – Shared Parking Analysis *LA19-3078*

Fehr & Peers conducted a shared parking analysis for the proposed Pacific Coast Commons (PCC) development. The objective of the shared parking analysis is to assess the potential parking demand of each of the three various sites of the project at full buildout to determine whether the proposed supply is adequate to meet peak demand. This report outlines the methodology used for the shared parking analysis, as well as the methodology used to determine the parking ratios used for the hotel and the residential land uses that is used in the shared parking analysis.

PROJECT DESCRIPTION

Pacific Coast Commons is proposed mixed-use development in the City of El Segundo consisting of 263 residential dwelling units and 11,000 square feet of commercial space. The project is just over ½-mile from the Metro Mariposa Green Line Station and is also serviced by several bus routes including two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two LADOT Commuter Express (Route 438, 574) routes. The residential buildings would provide a mix of 91 studio, 119 one-bedroom, and 47 two-bedroom units with parking provided in new parking structures. Six townhouse-style units are also proposed, each of which would provide individual garages. For the purpose of this analysis, the project is separated into three different sites, as follows:

- PCC North Site [Land Use Area 5]
  - 143 residential units (137 apartments & 6 townhomes)
    - 47 Studios
    - 67 One-Bedrooms
    - 23 Two-Bedrooms
  - 2,223 square feet of retail space
  - 253 total parking spaces
    - 241 parking spaces
    - 12 townhome parking spaces in individual garages

- PCC Fairfield Site [Land Use Area 3 & 4]
  - Fairfield Hotel (350 rooms, already in operation)
  - 3,273 square feet of retail space
  - 215 replacement parking spaces for the Fairfield Hotel

PARKING DEMAND ASSUMPTIONS

To determine the parking demand for Pacific Coast Commons, the following assumptions were made:

- Each of the three garages can be utilized as "overflow" parking if needed due to one of the other sites parking demand exceeding its on-site supply.[2]
- Peak parking demand rates for the residential units was estimated based on data from the El Segundo Municipal Code parking requirements and the Institute of Transportation Engineers' (ITE) *Parking Generation, 5th Edition*[3]; as discussed further below.
- The parking provided for residents of the townhouses in the individual garages were not included as part of the analysis, but guest parking for the townhouses were included in the shared parking calculation.
- The hotel peak parking demand rate was calculated using empirical data collected in May 2019 as part of this study at the Aloft and Fairfield hotels already operating onsite; as discussed further below.
- Peak parking demands for the retail and restaurant uses was estimated based on the El Segundo Municipal Code parking requirements for those uses.

RESIDENTIAL PARKING SUPPLY AND DEMAND RATE

Residential Parking Demand Research

To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

I21-62 Cont.

The Institute of Transportation Engineers published *Parking Generation, 5th Edition* in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas. The 5th Edition includes additional survey data from Center City Core and Dense Multi-Use Urban locations as well. The latest survey information differentiates whether the survey data was collected within close proximity (½ mile) to rail transit. While the report does not provide authoritative findings, recommendations, or standards on parking demand, it is often referenced by planners and designers in making parking supply estimations and decisions.

Table 1 summarizes the parking supply recommendations from ITE for mid-rise multifamily housing developments. The General Urban/Suburban not within ½ mile of rail transit rates are the most conservative, although it should be noted that Pacific Coast Commons is located approximately ½ mile from the Metro Green Line Mariposa Station.

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[2] Based on Conditional Use Permits approved by the El Segundo Planning Commission on October 9, 2014.
[3] *Parking Generation, 5th Edition.* Institute of Transportation Professionals. (2019). https://www.ite.org/technical-resources/topics/trip-and-parking-generation/

Lionel Uhry
February 17, 2021
Page 4 of 18

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

I lived in SF Bay Area, BART and CalTrain used way way more than here. They at least have some people doing it. Also CalTrain, runs right through Palo Alto and immediately adjacent Stanford University. Students living in apartments are more likely to use it. We are comparing apples to oranges here.

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
  - Proximity to transit can reduce the rate by approximately 25 percent

Actually, on the contrary we have no relevant studies whatsoever that match our community nor Los Angeles adoption nor infrastructure built. We have the opposite, decades of failed attempts of construction and adoption.

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different land uses allowed within the city. Section 15-15-6 presents the following requirements for multifamily developments:

- Two spaces per dwelling unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

I21-62 Cont.

Page 4

Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

This is the most reliable and realistic demand rate for the proposal. It fits with the LA standard and has already been adopted by El Segundo Municipal Codes. Also just Google it for yourself, datala.usa Los Angeles. It's no big secret or conspiracy just common sense.

I21-62 Cont.

Pacific Coast Commons Residential Parking Demand Rate

Based on the residential parking demand studies reviewed above, the following parking demand rates based on using a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used for the shared parking analysis:

- One resident space per bedroom
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

As shown in **Table 2**, this demand rate for the Pacific Coast Commons is conservative when compared to other similar projects (market rate, outside the ½ mile rail, etc.). Assuming that the demand is equal to the El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Also remember this more realistic total will drastically change the Transportation Analysis

Table 3 shows the total parking demand based on the above demand rate.

All of these cars will need to compete with the 2 hotels, new retail units and a restaurant as well.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces	
				El Segundo Std : 2 cars/dwelling unit
Residential				
Studio	1 space/ bedroom	91 bedrooms	91	182
1 Bedroom	1 space/ bedroom	119 bedrooms	119	238
2 Bedroom	1 space/ bedroom	94 bedrooms	94	94 (94 bdrms = 47 units)
Guest	1 space/ 3 units [a]	263 units	87	87
		Total	**391**	601 total

1. ITE Study not customized for LA
2. Palo Alto certainly doesn't reflect this area
3. People are not going to forgo a vehicle because they are close to transit, even if they were to use it once and a while
4. A significant number of people using transit is highly unlikely. We don't even have a study of the current population in the vicinity
5. Downtown and Transit aren't realistically walkable in any way and is not going to put a dent in the number of cars parked nor used.
6. Mass transit is aspirational, but right now hopes and dreams shouldn't be a substitute for the reality of 2 cars per dwelling unit

Page 5

Realistic vehicle estimate

I21-62 Cont.

Parking demand for residents is projected to be 304 spaces. Demand for residential guests is estimated to be 87 spaces, for a total demand of 391 parking spaces.

Pacific Coast Commons Residential Parking Supply

However, the Pacific Coast Commons project is proposing to provide parking using a modified residential parking requirement, based on unit type/number of bedrooms, which is more conservative than the demand rate. The follow parking supply is proposed:

- One space per studio unit
- 1.5 spaces per one-bedroom unit
- Two spaces per two-bedroom unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

Table 4 shows the proposed parking supply based on the above modified residential parking requirements.

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
		Total	**451**

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.

This 1/2 space is calculated in the total supply. How big actually is 1/2 space? Would a mid-size sedan fit? How wide is it? It's like when you see all those "compact" parking spaces in a parking garage. They're overtaken even by mid-size vehicles. My guess is that the majority of the 119 one bedrooms units will use it to store bikes or maybe a scooter. This 1/2 space skews the true supply which will then be lower.

I21-62
Cont.

HOTEL PARKING DEMAND RATE

Although hotel rates are available from ITE, these rates are highly variable. Since the hotels for this project are currently in operation, Fehr & Peers conducted an empirical analysis of the existing parking demands at the Fairfield and Aloft Hotels, in place of using the ITE rates.

Existing Parking Supply

A series of parking lots currently serve the Fairfield Hotel and the Aloft Hotel. The "North" parking lot, located north of Mariposa Avenue, provides 232 parking spaces. This parking lot is currently gate controlled. The on-site parking lot at the Fairfield Hotel provides 33 parking spaces. The Aloft Hotel parking lot, located north of Holly Avenue, provides 165 parking spaces. The Conditional Use Permit for the hotels allows the Fairfield and Aloft Hotels to share the parking in the North parking lot north of Mariposa Avenue; therefore, the series of parking lots is viewed in this analysis as a system containing a total of 430 parking spaces. All parking lots are utilized by hotel guests and employees.

Existing Parking Occupancy

These are not peak season numbers either. Summer obviously would be peak

Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Sunday night? Usually Saturday night is the busiest

Table 5 shows the occupied spaces at each parking lot on both nights. On Wednesday night/early Thursday morning, the North parking lot was 53% occupied, the Fairfield on-site parking lot was 58% occupied, and the Aloft parking lot was 61% occupied. In total, the three lots combined were 56% occupied. On Saturday night/early Sunday morning, the North parking lot was 69% occupied, the Fairfield on-site parking lot was 45% occupied, and the Aloft parking lot was 56% occupied. In total, the three lots combined were 62% occupied. Count sheets can be found in **Appendix A**.

I21-62 Cont.

Both hotels have a higher demand rate on the weekend than weekday, even though more rooms are occupied during the weekday. This is likely due to more families/tourists staying at the hotel during the weekends and having personal/rental cars with them. During the week, the hotel guests are more likely to be there for business and utilize ride sharing vehicles for their stay. Similarly, the flight crews which stay at the hotel often during the week do not need parking spaces.

Parking Demand at Full Hotel Occupancy

The number of spaces occupied assuming full hotel occupancy was calculated using the higher observed demand rate for the entire site, which occurred on the weekend. At the Fairfield Hotel, 207 spaces are projected to be demanded when the hotel is at full occupancy. At the Aloft Hotel, 145 spaces are projected to be demanded when the hotel is at full occupancy. This is shown in **Table 8**. The overall demand for parking is 352 spaces when both the Fairfield and Aloft are at full room capacity.

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352

This is based on non summer and non Saturday night data. I don't see this at all as "Peak Demand Rate". Now it may be demand rate during the low season, but not representative for the basis of such a large and potentially impactful development.

I21-62 Cont.

PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as "overflow" parking if needed, the project was analyzed as one combined site. While each individual site's peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B. Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	792	354	438

Summary from numbers below Table 11

Demand	Supply
Residential...514	
Shared.....462	
Total.....976	Total.....792

Total Deficit = -184 spaces

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	3
Fairfield	0	0	188	3	0	191	24
South	144	40	133	1	18	192	-21
Total	304	88	321	5	18	432	6
From Table 3, page 5 →	514	87	352	5	18	462	-24*

conservative as explained on page 10

not sure where these numbers are estimated from but we'll go with them

* reminder this is shared space only

I21-62 Cont.

PCC NORTH SITE

As shown in **Table 10**, the project proposes 241 parking spaces for the North Site, with 189 parking spaces reserved for exclusively for residential tenant use. The remaining 52 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.

PCC FAIRFIELD SITE

The Fairfield site's peak parking shared demand is estimated to be 191 spaces. As shown in **Table 11**, the project proposes 215 parking spaces, indicating sufficient supply for the anticipated demand with a surplus of 24 spaces during the peak demand period.

PCC SOUTH SITE

As shown in **Table 10**, the project proposes 336 parking spaces for the South Site, with 165 parking spaces reserved for exclusively for residential tenant use. The remaining 171 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites. As summarized in **Table 11**, The South site is estimated to have a peak residential parking demand of 144 parking spaces and a peak shared parking demand of 192 spaces. As such, the South site would have a deficit of 21 shared parking spaces during the peak demand period. The excess demand can be accommodated by the surplus of spaces at the North and Fairfield sites, which have a combined surplus of 27 spaces.

CONCLUSION

The shared parking analysis demonstrates that sufficient parking would be provided to meet the demand of the various uses on-site.

It is anticipated that retail/restaurant patrons will be provided with free validated parking in the structures, hotel guests will continue to be charged for parking, and residents will not be charged a separate parking fee from their base rental rate. A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street.

My conclusion is that we will have a shortage of parking (potentially short 184 spaces) and the subsequent Transportation Analysis will be significantly impacted.

This conclusion is based primarily on:

1. 2 cars per Dwelling Unit is a long standing average
2. The 1/2 space for 1 bedroom units is suspect to be effectively usable for cars or trucks by a significant number of residents.
3. We should be planning for at least the long standing average and reasonable foreseeable usage of parking spaces especially for a project of this magnitude for the neighborhood.

I21-62
Cont.

Alternatives Review

I21-63

Why aren't east of Sepulveda and south of Grand viable alternatives?
- They accomplish most all of the objectives much better than the current proposal
- They have minimal negatives impacts to the community especially compared to current proposal
- It would be a win-win

I21-63 Cont.

This chapter describes and evaluates alternatives to the Pacific Coast Commons Specific Plan (Specific Plan or Project). This chapter implements the requirements set forth in the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and identifies the Environmentally Superior Project Alternative, as required by CEQA Guidelines Section 15126.6(e)(2).

6.1 Introduction

CEQA requires that Environmental Impact Reports (EIRs) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]). As defined by the CEQA Guidelines (14 CCR 15126.6[f]):

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

As presented in prior sections of this Draft EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the applicable Air Quality Management Plan (AQMP). Consistent with CEQA, the analysis presented in this chapter considers a reasonable range of alternatives to the proposed Project and evaluates their comparative environmental impacts. The selection of alternatives and their discussion must "foster informed decision making and public participation" (14 CCR 15126.6[a]). Therefore, this chapter identifies potential alternatives to the proposed Project and evaluates them, as required by CEQA.

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Section 6.2, Project Objectives) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This Draft EIR includes the analysis of three alternatives to the proposed Project:

- Alternative A – No Project/Existing Development
- Alternative B – Reduced Development Alternative: Exclusion of PCC–North
- Alternative C – Reduced Development: Reduce 1 Level from PCC-South and PCC-North

6.2 Project Objectives page 6-2 (next page)

- Item 2 : this adversely will impact neighboring residents. I don't see anything in the proposal that mitigates negative impacts to neighbors:
  - **Traffic**
  - **Safety (higher traffic adjacent to numerous parks)**
  - **Parking**
  - **Noise**
  - **Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have**
  - **Schools Lower teacher to student ratio**
  - **Equates to lower quality of life and lower home values**

I21-64

- Item 4: vehicular circulation will get worse without a doubt. I will later go on to critique the EIR data but allow me to relay my personal experience. I live adjacent to Washington Park. When I first moved there it only took me a week to figure out that the Mariposa & PCH intersection is to be avoided at all costs no matter if I was headed north or southbound PCH. An aggravating factor is that I was seeing this always during **non-peak hours**. Peak hours are significantly worse. If I need to go north bound I would and will never use Mariposa, I will always bypass that intersection and head further north on Washington and get onto PCH via Maple. If I'm headed southbound I will approach Mariposa PCH and typically bypass the intersection via Indiana and pop out on Holly or Grand. These bypasses and shortcuts happened during non-peak hours, **so add to this 263 more dwelling units during peak hours**, traffic will increase significantly on these streets. Safety of park users will be at risk, not to mention numerous other negative impacts. New residents will figure this out just like I did, nothing surprising, everyone does it and will continue to do it. And in my opinion, and I will go into further detail later, the EIR data is severely underestimated both on standards used and data that is collected which ultimately results in recommendations on the top level Executive Summary. The devil is in the details and when you look at it, there are some serious flaws.

I21-65

- Item 7: please see *"ES.3.2 page ES-6 #6 comments in prior section"*

I21-66

6.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City of El Segundo (City) in developing a reasonable range of alternatives to be evaluated in the EIR. The Project's specific objectives are as follows:

1. Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses.
2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan.
3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.
4. Enhance vehicular circulation through intersection improvements and street widening.
5. Facilitate a safe and walkable community along Pacific Coast Highway by providing a mix of land uses, including commercial at the street-level with residential uses above.
6. Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.
7. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

I21-64 Cont.

I21-65 Cont.

I21-66 Cont.

6.3 Significant and Unavoidable Impacts

The proposed Project would result in a significant and unavoidable impact related to the potential for the proposed Project to conflict with an Air Quality Management Plan (AQMP). As described in Section 4.2, Air Quality, the Project site is located within the South Coast Air Basin (SCAB), under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD administers the AQMP for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards and National Ambient Air Quality Standards. The SCAQMD has established criteria for determining consistency with the currently applicable AQMP:

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

The proposed Project would not exceed the SCAQMD criteria air pollutant mass thresholds and would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations; thus, the proposed Project would not conflict with Consistency Criterion No. 1. However, the proposed Project would result in population growth that would exceed the population growth anticipated for the City in SCAG's regional growth forecast, and therefore conflict with Consistency Criterion No. 2. Although the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]) is the most recent RTP/SCS, the SCAQMD is still in the early stages of updating its AQMP (anticipated to be released in 2022). Therefore, the SCAG 2016 RTP/SCS and associated Regional Growth Forecast would be applicable in this analysis of the potential to

conflict with the SCAQMD 2016 AQMP, as required in Section 4.2, Air Quality. In the 2016 RTP/SCS, SCAG estimated 16,700 residents in the City in 2012 and 17,300 residents by 2040. The proposed Project's residential units would accommodate 618 individuals upon its occupancy in 2025. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. The proposed Project would therefore conflict with the applicable AQMP, which would result in a significant and unavoidable impact. There is no feasible mitigation measure for population growth; therefore, this impact would be significant and unavoidable.

6.4 Alternatives Considered and Eliminated During the Project Planning Process

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(I) states the following:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of Project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. One alternative for the Project was considered, but ultimately rejected from further analysis in the Draft EIR, consistent with Section 15126.6(c) of the CEQA Guidelines. A description of the potential alternative considered, but not carried forward, and the rationale for rejection is provided below.

Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the Project. As stated in Section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation, as further explained below.

The Project's proposed location is in an area of the City surrounded by a variety of land uses, including residential, recreational, office, and commercial retail uses. The adoption of a Specific Plan would allow for the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, and the redevelopment of existing surface parking

lots, as well as the Fairfield Inn and Suites Hotel Food and Beverage Building (formerly the Hacienda Restaurant), for 263 residential units, 11,252 gross square feet of commercial/retail uses, and three new parking structures. The current General Plan designation for the Project site is General Commercial and Parking. The Project would result in a General Plan Amendment and Zone Text Amendment to allow for the proposed Specific Plan. Since the City is largely built-out, few available properties of similar size as the Project site exist for the proposed Project.

Development of the proposed Project on an alternate site would result in a similar construction scenario, similar quantities of criteria air pollutant emissions during construction, similar levels of construction noise, and similar levels of energy consumption. Due to the generally built-out nature of the City, it is likely that demolition of existing buildings and paved areas would be required. Additionally, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen the air quality and noise impacts of the proposed Project during construction. Similarly, development at an alternate site would not necessarily reduce impacts to transportation and traffic, as the Project site is situated in an area surrounded by several transportation options and approximately 0.5 miles of the Metro C Line Mariposa Station.

Regardless of its location, the proposed Project would generally place similar demands on public services, utilities and services systems, and energy resources. With regard to the visibility and appearance of the Project, the aesthetic impact on the Project is largely related to its height and density, which would not substantially change at an alternative location. Additionally, the Project's commercial frontage intentionally fronts Pacific Coast Highway (PCH) while its residential uses are adjacent to existing residential uses along Indiana Street, which promotes a pedestrian-friendly interface on one of the City's most important thoroughfares.

Most sites within the City would be subject to similar geologic and geotechnical hazards. For these reasons, use of an alternative site would not likely result in a substantial reduction in the impacts of the Project. Additionally, the existing Fairfield Inn and Suites Hotel and Aloft Hotel would remain as non-conforming uses with the current General Plan and Zoning designations for the Project site if the Project is moved to an alternate location.

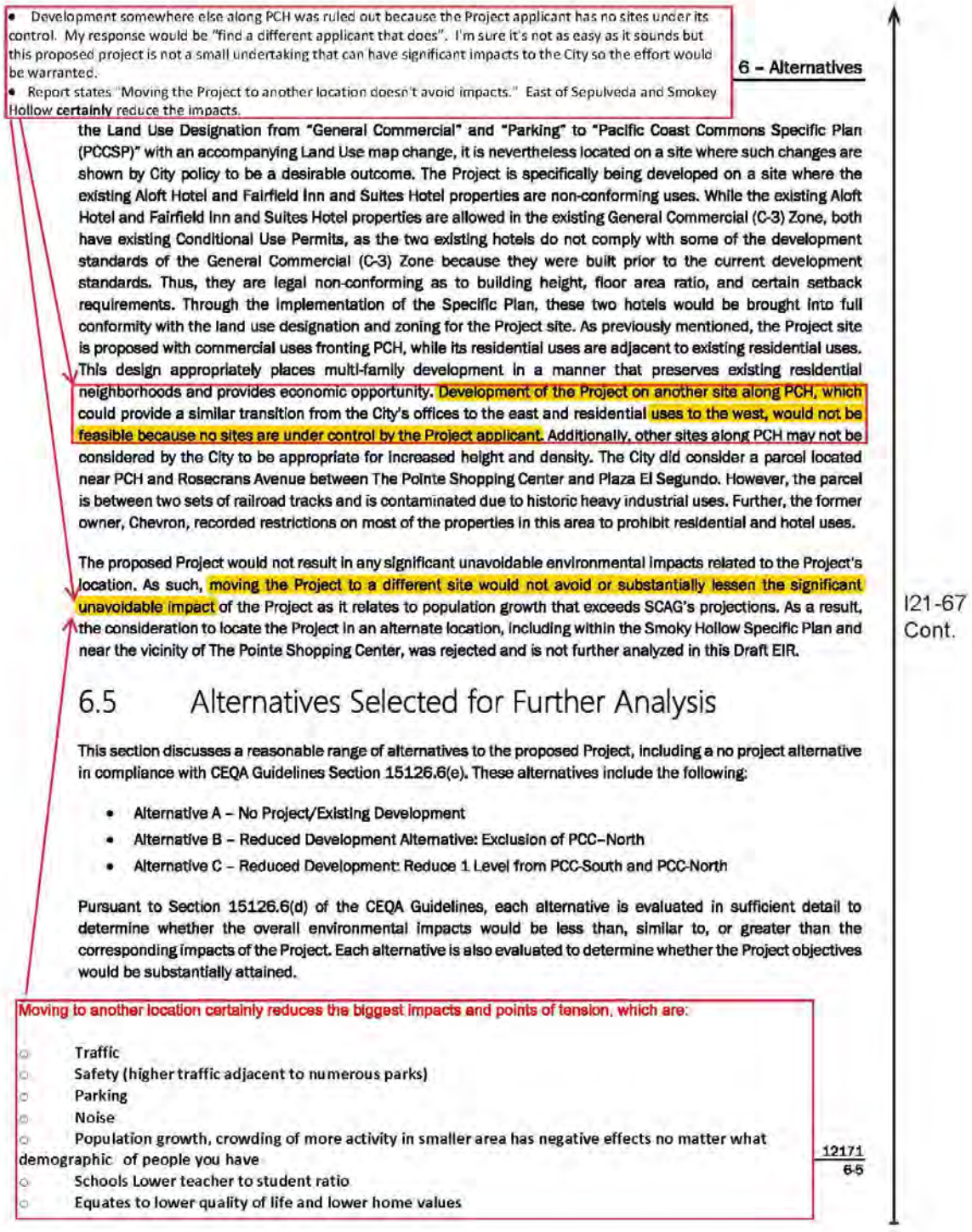
There are no known available sites within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Smoky Hollow Specific Plan area extends east to west and is bounded by Indiana Street and PCH to the east, downtown El Segundo to the west, the Chevron oil refinery to the south. In response to shrinking manufacturing demand, declining investment, and parking issues, the City adopted the first Smoky Hollow Specific Plan in 1986. The updated Smoky Hollow Specific Plan (City of El Segundo 2018) sets a regulatory and planning framework that focuses development efforts on revitalizing buildings for incubator industrial and office space. Although this Specific Plan area is intended to facilitate redevelopment, the land use regulations within the Smoky Hollow Specific Plan are focused on one- and two-story commercial and industrial development, the land parcels are small and land assemblage could be a major obstacle, and would generally be incompatible with the Project's residential uses. Additionally, slightly greater air quality, land use, and transportation (vehicle miles traveled) impacts could occur if the proposed Project was developed within the Smoky Hollow Specific Plan. For example, the proposed site is just over 0.5- mile from the Metro C Line, whereas the Smoky Hollow Specific Plan area is farther away, thereby reducing potential access to regional transit for the Project's 618 future residents (see Section 4.11, Population and Housing).

Furthermore, construction of the Project on an alternative site may not be consistent with the City's land use plans and policies. While the Project is requesting the approval of a General Plan Amendment (No. GPA 19-01) to change

I21-67

Smokey Hollow ruled out due to it being a little further away from Transit, but wasn't one of the objectives to have Downtown El Segundo Walkable? This area actually is more equidistant between the 2 "walkable" areas. I don't believe people are gonna do the walking in the first place but if someone does believe that will happen, making it more equidistant would be a better alternative.

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6-4



- Development somewhere else along PCH was ruled out because the Project applicant has no sites under its control. My response would be "find a different applicant that does". I'm sure it's not as easy as it sounds but this proposed project is not a small undertaking that can have significant impacts to the City so the effort would be warranted.
- Report states "Moving the Project to another location doesn't avoid impacts." East of Sepulveda and Smokey Hollow certainly reduce the impacts.

the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use map change, it is nevertheless located on a site where such changes are shown by City policy to be a desirable outcome. The Project is specifically being developed on a site where the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties are non-conforming uses. While the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties are allowed in the existing General Commercial (C-3) Zone, both have existing Conditional Use Permits, as the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. Through the implementation of the Specific Plan, these two hotels would be brought into full conformity with the land use designation and zoning for the Project site. As previously mentioned, the Project site is proposed with commercial uses fronting PCH, while its residential uses are adjacent to existing residential uses. This design appropriately places multi-family development in a manner that preserves existing residential neighborhoods and provides economic opportunity. Development of the Project on another site along PCH, which could provide a similar transition from the City's offices to the east and residential uses to the west, would not be feasible because no sites are under control by the Project applicant. Additionally, other sites along PCH may not be considered by the City to be appropriate for increased height and density. The City did consider a parcel located near PCH and Rosecrans Avenue between The Pointe Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses.

The proposed Project would not result in any significant unavoidable environmental impacts related to the Project's location. As such, moving the Project to a different site would not avoid or substantially lessen the significant unavoidable impact of the Project as it relates to population growth that exceeds SCAG's projections. As a result, the consideration to locate the Project in an alternate location, including within the Smoky Hollow Specific Plan and near the vicinity of The Pointe Shopping Center, was rejected and is not further analyzed in this Draft EIR.

I21-67 Cont.

6.5 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the proposed Project, including a no project alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- Alternative A – No Project/Existing Development
- Alternative B – Reduced Development Alternative: Exclusion of PCC–North
- Alternative C – Reduced Development: Reduce 1 Level from PCC-South and PCC-North

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

Moving to another location certainly reduces the biggest impacts and points of tension, which are:

- Traffic
- Safety (higher traffic adjacent to numerous parks)
- Parking
- Noise
- Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have
- Schools Lower teacher to student ratio
- Equates to lower quality of life and lower home values

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6-5

Utilities and Service Systems

The new development associated with Alternative C would result in new water service connections, sewer laterals, on-site stormwater infrastructure, and underground utility conduit systems for electricity and telecommunications, similar to the proposed Project. Minor alterations of existing on-site natural gas main/service branches may be required. Similar to the proposed Project, the construction of these new utility connections would be limited to the Project site and the immediately adjacent street frontages. As such, impacts associated with installation of utility facilities necessary for the PCC-South, PCC-Fairfield Parking, and PCC-North would be less than significant. Due to the decrease in units under Alternative C, the impacts related to construction of utilities and the demand for potable water, generation of wastewater, and generation of solid waste would be less than the proposed Project. Although the proposed Project's impacts to utilities was less than significant and no mitigation was required, impacts to utilities and service systems under Alternative C would be less than those anticipated from the proposed Project.

6.6 Summary of Alternatives to the Proposed Project

Project are considered and evaluated in this Draft EIR. To summarize these Project alternatives, as suggested in CEQA Section 15126.6(d), a matrix was prepared to summarize and compare the impacts of each Project alternative (see Table 6-3).

Table 6-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Reduced Development Alternative: Exclusion of PCC – North	Alternative C - Reduced Development: Reduce 1 Level from PCC-South and PCC-North
Aesthetics	LTS	▼	▼	▼
Air Quality:				
AQMP Consistency	SU	▼	▼	▼
Short-Term	LTS-MM	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Cultural Resources	LTS-MM	▼	—	—
Energy:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Geology and Soils	LTS-MM	▼	—	—
Greenhouse Gas Emissions:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Hazards and Hazardous Materials:				
Short-Term	LTS-MM	▼	▼	—
Long-Term	LTS	▼	—	—
Hydrology and Water Quality:				
Short-Term	LTS	▼	▼	—
Long-Term	LTS	▼	—	—
Land Use and Planning	LTS	▲	—	—

I21-68

- Alternatives A and B all have reduced impacts in virtually every category which makes them a better possibility
- Disagree with the *Land Use and Planning* and *Transportation* for Alternatives having a greater impact for reasons already stated previously

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Table 6-4. Comparison of Alternatives – Meeting the Project Objectives

Does the Project Meet the Following Project Objectives?	Alternative A	Alternative B	Alternative C
Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.	No	Yes	Yes
Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.	No	Yes	Yes
How many project objectives are met?	0	6	7

Agree, the "no build" alternative is the way to go

6.7 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As shown in Table 6-3, Alternative A would result in reduced environmental impacts to all environmental topics in the short-term because construction activity would not occur. Similarly, Alternative A would result in reduced environmental impacts to all environmental topics in the long-term, including elimination of the significant unavoidable impact related to conflicts with the AQMP, because no operational changes would occur. Although, no mitigation measures would be required for Alternative A, the two hotels would continue to be inconsistent with applicable zoning and land use regulations for the Project site. Under Alternative A, the Project site would remain in its existing condition and potential benefits of the proposed Project related to providing new living and working opportunities in close proximity to transit would not occur. Additionally, the proposed Project would redevelop surface parking lots and construct a mix of land uses including residential and commercial, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing, which would not occur under Alternative A. Nevertheless, the elimination of all construction and operational impacts associated with the proposed Project would result in a more environmentally superior alternative when compared to the proposed Project, Alternative B, or Alternative C.

I21-69

As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives

Alternative B would reduce short-term construction-related impacts when compared to the proposed Project for all environmental topics. Alternative B would eliminate the necessity of MM-HAZ-2 since no development would occur at PCC-North. For long-term operational impacts, most environmental factors would have similar, albeit reduced, impacts under Alternative B to the proposed Project. Alternative B would have similar impacts to the proposed Project in the six areas: cultural resources, geology and soils, long-term hydrology and water quality, land use and planning, short-term transportation and tribal cultural resources. Alternative B would eliminate the significant unavoidable impact related to conflicts with the AQMP.

Alternative C would not eliminate any mitigation measures required under the proposed Project. Additionally, Alternative C would have similar impacts to the proposed Project in ten areas: cultural resources, geology and soils,

- Why did the City allow it in the first place? Can it be corrected without tagging on this **impactful** proposal to the **neighboring community?**

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Response to Comment Letter I21

Matthew Klemp
April 1, 2021

I21-1 The commenter questions the applicability of assumptions and standards used in the EIR related to transit usage, walkability, parking, and traffic congestion, particularly at the intersection of Mariposa Avenue and Pacific Coast Highway.

For concerns regarding transit and walkability, see Response to Comment I21-29, which addresses these concerns in detail. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR. With regards to traffic congestion, increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA.

I21-2 The commenters states that Los Angeles does not have reliable transit, that current transit infrastructure has failed, and that the local population does not use transit. These assertions are not supported by any evidence and are in conflict with the overall intent of the applicable local and regional planning documents, including but not limited to: the Southern California Association of Governments (SCAG) Regional 2020/2045 Transportation Plan/Sustainable Communities Strategy (RTP/SCS) called "Connect SoCal", which is assessed in Section 4.9, Land Use and Planning of the Draft EIR, and the City's Climate Action Plan, which is assessed in Section 4.6, Greenhouse Gas Emissions of the Draft EIR. The proposed Project would support the goals and policies of these plans, as described in the Draft EIR sections mentioned.

I21-3 The comment states that key review areas of vehicular traffic from Mariposa Avenue to Downtown El Segundo, transit usage, and walkability have not been analyzed adequately.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This informational analysis includes an operational assessment of the Pacific Coast Highway/Mariposa Avenue intersection. Intersection improvements are proposed to the eastbound approach along Mariposa Avenue, which would improve levels of service (LOS) as well as vehicular queuing at this location during Project operations. These improvements are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios. A queuing analysis was conducted for the eastbound approach with and without the

Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1 in the Draft EIR.

Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, or required to assess any environmental impacts pursuant to CEQA.

I21-4 The comment suggests the Pacific Coast Highway (PCH) is a tunnel that may reflect Los Angeles Airport (LAX) aviation noise into the surrounding community. It also raises a question regarding the City of El Segundo's stance on LAX noise and expansion, and asserts noise will increase.

The commenter's assertion that LAX noise was not studied is not accurate. Section 4.10, Noise states that the Project site is outside of the 65 dBA CNEL aviation operation noise contour predicted in the report for 2020, and therefore would not expose workers or new occupants of the proposed Project residences or exterior uses to aviation overflight noise levels greater than 65 dBA CNEL, and impacts would be less than significant.

Further, the comment suggests that the PCH is a "tunnel" of tall buildings that are implied to produce echoes of LAX aviation traffic noise. Potential noise reflection from reflective building facades typically requires the receptor to be near the building facades—such as a listener on a highly trafficked urban roadway bounded by tall, densely-packed building facades.

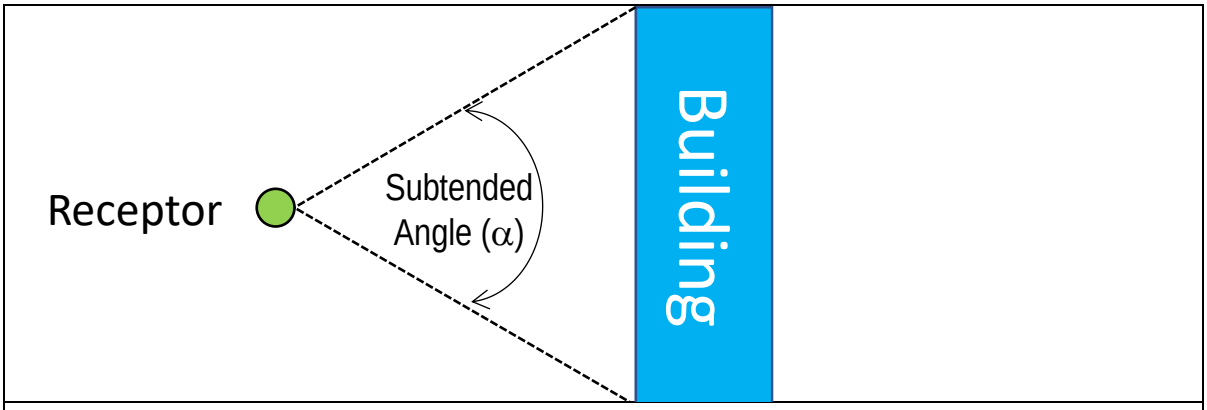
Noise from LAX aviation traffic associated with the nearest southern runways travels approximately 4,000 feet before reaching the Project vicinity, by which time it has attenuated with distance and other effects. This demonstrates why the Project vicinity is beyond the LAX aviation noise 65 dBA CNEL contour, as shown in Figure 4.10-2 of the Draft EIR. The diffuse noise from LAX aviation traffic impinging upon a proposed Project building façade would either be absorbed, diffracted, or reflected by its surface. But for a building façade that is porous (e.g., a parking garage), some sound would travel through the building unimpeded. The anticipated added sound contribution to an offsite receptor would depend on several variables that include its distance to the reflecting façade, the length of the façade, and the acoustical characteristics of the reflecting facade.

For an offsite receptor such as multi-family homes on the west side of Indiana Street, an introduced Project building façade across the street could present a surface that would reflect some LAX aviation traffic noise towards it. But the reflecting façade is not infinite in horizontal extent or height, nor would it be considered a perfect reflector, so the anticipated effect would be limited to no more than an ideal 3 dB increase of the LAX aviation noise contribution to the outdoor sound environment at this nearby receptor. This situation would be analogous to a receptor near a highway, where a noise barrier installed on the opposite side and parallel with the highway reflects the roadway noise towards the receptor and for which Caltrans expects would be a maximum 3 dB increase.[10] The proposed Project building façade surface would not be considered a perfect reflector, as it would feature some irregular geometries that would scatter or diffract sound, and the combination of window glazing and non-glazing elements would absorb noise that would then be re-transmitted to the building interior spaces.

[10] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

As described in Section 4.10, Noise of the Draft EIR, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

Per the Caltrans Technical Noise Supplement, the maximum reflection from a nearby wall is 3 dB. The actual reflection available from this 3 dB maximum, based on receptor proximity to the façade, can be approximated much in the same way that actual noise reduction from a finite-length noise barrier is can be estimated as shown in Figure 18 from Chapter 5 of the Housing and Urban Development (HUD) Noise Assessment Guidelines.[11] In summary, the more distant a receptor is to a barrier, the smaller is the angle "alpha" subtended by the endpoints of the barrier with the receptor at the vertex.



Estimated Building Façade Reflection = 3 dB – 3*COS(α/2)

Likewise, for the multi-family receptors across Indiana Street from a proposed Project building having length that would make angle "alpha" equal to approximately 45 degrees, the anticipated reflection of the incoming sound would be less than a 0.23 dB increase of the directly-received sound source. Only if the receptor were very near the façade, so that angle "alpha" approaches 180 degrees, would the estimated reflection, before application of any façade surface effects, be very close to 3 dB.

For a much more distant receptor, such as a single-family home in the neighborhood west of Washington Park, and ignoring façade surface effects and any sound path occlusion from intervening structures between it and the Project building façades, the estimated reflection would be less than 0.01 dB for any angle "alpha" less than 9 degrees. Therefore, the proposed Project would not result in substantial increases of noise at adjacent sensitive receptors due to the reflection of aviation noise from the new building structures, and no mitigation is required.

If the City has, or has demonstrated, an intent or desire to control existing and future LAX noise by supporting or encouraging airport aviation traffic noise reduction at its source and corresponding noise emissions to the community, those effects would be distinct from what the City considers with respect to land uses under its jurisdiction that may be exposed to that LAX noise. In this instance, the City is considering the proposed Project, an introduction of mixed-use development, with respect to land use

[11] U.S. Department of Housing and Urban Development (HUD). 2009. HUD Noise Guidebook. Chapter 5 - Noise Assessment Guidelines. March. https://www.hudexchange.info/sites/onecpd/assets/File/Noise-Guidebook-Chapter-5.pdf.

noise compatibility and aims to protect new occupants from that existing LAX (and roadway traffic, among other sources) noise exposure that dominates the outdoor sound environment.

Thus, and for these above reasons, the expected LAX aviation noise increase due to proposed Project building reflection would be less than 3 dB, which is a less than perceptible difference and thus considered a less than significant impact. While this information regarding aviation noise effects has been added as part of this Final EIR, this additional information does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)). Operational noise impacts would remain less than significant.

I21-5 This comment states that while the Draft EIR concluded that no impacts would occur to parks, there are three parks within proximity to the Project site. The commenter expresses the following concerns related to the nearby parks: safety of park goers and changes in the demands for, and use of, the parks.

The topic of public services and recreation, including parks, is analyzed in Section 4.12 of the Draft EIR. The impact assessment includes an analysis of the potential for increased demands for parks and recreational facilities. Impacts to parks and recreational facilities are identified but were determined to be below a level of significance under CEQA. The topics of safety within the vicinity of the Project site, including pedestrian and bicycle safety, emergency access and evacuation, and traffic safety, have been addressed and evaluated in the Draft EIR pursuant to CEQA. Specifically, Section 4.13, Transportation discusses emergency access, roadway hazards, and bicycle and pedestrian facilities, including access and safety. Section 4.7, Hazards and Hazardous Materials discusses emergency response and evacuation. Impacts in these categories were determined to be less than significant. As such, the topics of park use and safety have been evaluated in the Draft EIR as required under CEQA. While impacts have been identified in these categories, they were determined to be less than significant.

I21-6 This comment states that the “reasonably foreseeable impacts” of traffic and noise were not evaluated and that the scope of the study is too narrow. This comment also notes that bypass or shortcut traffic analysis is not analyzed and that Washington Street is “completely ignored.”

The topics of transportation and noise are both evaluated in the Draft EIR, and the evaluations have been conducted using applicable data and modeling programs, as well as a degree of specificity that is consistent with CEQA and industry standards. Significant impacts have been identified for the Project in both categories; however, feasible mitigation measures have been identified that would reduce effects to below a level of significance. Refer to Sections 4.10, Noise and 4.13, Transportation of the Draft EIR for details. Increased traffic and traffic congestion based on the level of service (LOS) metric/methodology are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This analysis goes beyond the requirements of CEQA.

Regarding the commenter’s statements about bypass/shortcut traffic and Washington Street, a segment analysis for Washington Street and other nearby residential streets was not conducted for the

Draft EIR because the analysis of intersections operations at Mariposa Avenue and Pacific Coast Highway indicates that this intersection would accommodate Project traffic heading north onto Pacific Coast Highway, thus discouraging the use of nearby residential streets, such as Washington Street, for bypasses or shortcuts. Specifically, as shown in Appendix J-1 of the Draft EIR, pre-COVID traffic counts show 120 vehicles per hour (vph) turning left in the AM peak hour and 107 vph in the PM peak hour (approximately 2 vehicles per minute) from eastbound Mariposa Avenue to northbound Pacific Coast Highway (see Appendix A of Appendix J-1, *Peak Hour Traffic Volumes and Lane Configurations Existing (2019) Conditions*). The Project is projected to add 36 vph in the AM peak hour and 29 vph in the PM peak hour (approximately 1 vehicle every 2 minutes) to this movement (see Appendix A of Appendix J-1, *Peak Hour Traffic Volumes and Lane Configurations Project Only Assignment*).

The quantitative, informational analysis provided in Appendix J-1 shows that this intersection operates at LOS C under existing conditions (acceptable according to City standards) and LOS C/D under future base conditions (i.e., future conditions without the Project) (refer to Appendix J-1, Table 3A (*Existing Intersection Levels of Service Signalized Intersections*) and Table 7A (*Future Intersection Levels of Service Signalized Intersections*)). This intersection is also projected to operate at LOS C/D with the addition of the Project (refer to Appendix J-1, Table 6A (*Existing Plus Project Intersection Levels of Service Signalized Intersections*) and Table 8A (*Future Plus Project Intersection Levels of Service Signalized Intersections*)). Importantly, the intersection's operations would be improved with the Project, as an eastbound right-turn lane would be added to the intersection as a Project feature, as explained in Appendix J-1. The improvements in this intersection's operations are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios.

A queuing analysis was conducted for the eastbound approach with and without the Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1, in the Draft EIR. More specifically, the right-turn lane that would be constructed as part of the proposed Project at the Pacific Coast Highway/Mariposa Avenue intersection is forecasted to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project (i.e., no right-turn lane) to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane.

For these reasons, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue, since the Mariposa Avenue/Pacific Coast Highway intersection is expected to function well, particularly after the proposed Project improvement at this intersection. Even if 25% of the Project traffic desiring to travel north on Pacific Coast Highway were to use Washington Street to Maple Avenue or Walnut Avenue instead, the effect on Washington Street would be minor, with less than 5 cars every half hour on average during peak hours.

I21-7 This comment expresses concerns related to the calculations used in the EIR for the number of vehicles that would be associated with the Project. The standards used in the EIR to calculate Project-related vehicles are well cited and well researched and are based on industry standards. With respect to the Shared Parking Analysis (Draft EIR, Appendix J-2), the Project's residential component would be predominately (82%) studio and 1-bedroom units, which typically have fewer residents per unit and thus lower parking demand than the housing stock as a whole. Therefore, the parking study is based on parking demand per bedroom rather than per dwelling unit. The Institute of Transportation Engineers

(ITE) data (used for parking spaces per bedroom), a nationally recognized source, are from surveys in numerous states, including California, over the past few decades. Data from Palo Alto, California, is shown for comparison only and indicated less parking demand even in areas not well served by transit (and even less near CalTrain). Additionally, census data indicates less than 2 cars per dwelling unit for apartments in the City. As such, existing data supports a parking rate in El Segundo of less than 2 cars per dwelling unit. The City of Los Angeles uses parking metrics of 1 space per dwelling unit of less than 3 habitable rooms (typically a studio), 1.5 spaces per dwelling unit to 3 habitable rooms (typically a 1-bedroom unit), and 2 spaces per dwelling unit for more than 3 habitable rooms (typically a 2-bedroom unit). The proposed Project residential parking demand rates were estimated at 1 space per bedroom, based on the ITE data. The proposed Project would supply residential parking on the following rates: 1 space per studio, 1.5 spaces per 1-bedroom unit, 2 spaces per 2-bedroom unit, and 1/3 guest space per dwelling unit, similar to what is used in the City of Los Angeles and in line with the Census data of vehicle ownership in the City. The 0.5-space rate does not mean that half-sized spaces would be provided; rather, this indicates that the parking requirement for the 1-bedroom units was calculated assuming an average of 1.5 spaces per unit. (As such, some 1-bedroom units could support a single-car household, while others could support a two-car household.) The shared parking analysis (Draft EIR, Appendix J-2) shows that there would be sufficient parking for all uses that are part of the Project and therefore, overflow parking is not anticipated.

With respect to commenter's concerns about the traffic, noise, and safety analyses, Project traffic volume estimates (i.e., vehicular trips) are not based on the number of parking spaces in the parking study. Rather, the number of vehicles trips associated with the Project are based on ITE trip generation rates, which are industry standards that are widely used for transportation analyses. Therefore, the shared parking analysis and the parking rates have not affected estimates of the Project's vehicular trip generation or related analyses, such as noise.

Regarding the commenter's concerns for quality of life effects, see Response to Comment I21-12.

I21-8 The comment suggests that single-family homes to the west of the Project were "excluded" as studied receptors, and that the height of the Project buildings may introduce new noise sources (e.g., parking garage–related sounds) and may lead to LAX aviation noise reflection.

As noted on pages 4.10-5 and 4.10-6 of Section 4.10, Noise of the Draft EIR, "Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary), those receptors would be less impacted by noise and vibration levels than the above-listed sensitive receptors." As such, single-family homes were not excluded from the Draft EIR as noise-sensitive receptors; the nearest sensitive receptors are analyzed to provide the most conservative analysis. Nevertheless, additional information regarding noise impacts to the single-family residential neighborhood west of Washington Street has been added to this response, for informational purposes.

Off-site receptors closer to the proposed Project parking garage would likely experience the same types and magnitudes of low-speed automotive traffic and parking-related noises that are already present from the existing grade-level open parking lots currently on the Project site that are part of the existing outdoor ambient sound environment. The proposed Project parking garage may elevate the position of some of these sources to heights above the roofs of the multi-family homes along Indiana Street, so that the structures of these multi-family homes no longer occlude the direction sound paths from these

parking lot sources. But while intermittent sounds from the new Project parking garage may travel over the top of pre-existing multi-family residential buildings, this sound would be greatly attenuated by distance for the single-family residences. By way of example, a sound level at 50 feet from a parking garage source would be 20 dB less at a receptor 500 feet away, which is sufficient to reduce the new parking noise emissions to levels that would not be considered substantial increases to the exterior noise environment of the single-family home neighborhoods.

Potential perceptible (i.e., at least 3 dB) noise amplification due to sound-reflecting building facades is addressed in Response to I21-4.

Addition of the proposed buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the neighborhoods to the west, which is demonstrated in Table 4.10-6 of the Draft EIR. This table is emulated below as Table 2-5, and ST7, has been added. ST7 is a representative receptor on Washington Street (west side, mid-block between East Palm Avenue and East Elm Avenue) to demonstrate consideration of the single-family neighborhood west of Washington Park.

Table 2-5. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (west of Indiana Street)	59	56.1	59.5	55.5	-4
ST2 (northwestern Project boundary)	55	55.9	55.2	55.7	0.9
ST3 (eastern Project Boundary approximately 50 feet from PCH)	69.5	68.2	70.3	68.7	-1.6
ST4 (northeast corner of E. Mariposa Avenue and Illinois Court)	63	62.7	63.4	62.9	-0.5
ST5 (northern Project Boundary approximately 30 feet from E. Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6 and LT1 (eastern Project Boundary approximately 50 feet from PCH)	69.5	69.6	70.2	70.2	0.1
ST7 (west of Washington Street)[1]	54.5	54.6	55.2	55.1	0.1

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel

[1] Added assessment location—see Response to Comment I21-22 for a figure showing the location of ST7

As shown in the table above, the anticipated change in traffic noise level at ST7 is no greater than 0.1 dB, which is much less than a 3 dB change and hence a less than significant impact. This additional information that has been included herein does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)).

I21-9 Issues raised in Response to Comment I21-9 are also raised in Response to Comment I21-7. As such, see Response to Comment I21-7.

I21-10 This comment raises four points of concern. The first point is that the number of vehicles estimated for the Project is underestimated and thus traffic would be an issue in the surrounding neighborhoods. The second point is that traffic would increase on Mariposa Avenue heading to and from Downtown El Segundo. The third point is that the Project would contribute to increased traffic in the neighborhood streets surrounding the Project site by Project vehicles bypassing congested intersections. Finally, the comment brings up concerns that the addition of the right-turn lane on Mariposa Avenue at Pacific Coast Highway would not be enough to alleviate the increased vehicle volumes associated with the Project.

Regarding the estimation of Project-generated vehicle trips, these estimates are based on ITE trip generation rates, which is a nationally recognized source. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. The vehicle traffic analyzed is for the AM and PM peak hours on weekdays. As such, Project traffic volume estimates are not based on the number of parking spaces in the parking study but rather are based on the ITE trip generation rates.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This analysis addresses traffic on Mariposa Avenue heading to and from Downtown El Segundo. The traffic study estimates that the Project would add 16 vehicles during the AM peak hour and 20 vehicles during the PM peak hour along Mariposa Avenue (see Draft EIR, Appendix J-1). As such, traffic would increase to/from downtown along Mariposa Avenue; however, such increases would be relatively minor. Furthermore, automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

Regarding increased traffic on neighborhood streets, intersection congestion (particularly at Pacific Coast Highway and Mariposa Avenue), and the efficacy of the proposed Project intersection improvement at Pacific Coast Highway and Mariposa Avenue, please see Response to Comment I21-6. As stated in Response to Comment I21-6, the improvements in this intersection's operations are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios. A queuing analysis was conducted for the eastbound approach with and without the Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1, in the Draft EIR. More specifically, the new right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane. Therefore, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue, since the Mariposa Avenue/Pacific Coast Highway intersection is expected to function well, particularly after the proposed Project improvement at this intersection.

I21-11 This comment states that high-density housing is impactful. The proposed Project, including its residential component, has been evaluated for environmental impacts under CEQA throughout the EIR. While some impacts on the environment have been identified in association with the proposed Project, almost all impacts can be mitigated to below a level of significance. (The one exception is an impact associated with consistency with the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[12] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.) As such, while impacts would be associated with the Project (including its residential component), impacts have been disclosed to the public and decision makers and all direct physical impacts on the environment can be mitigated to levels less than significant.

I21-12 This comment consists of suggestions for alternative locations to the Project and states that alternate locations seem to be viable. The suggested alternate locations are as follows: (1) east of Pacific Coast Highway or south of Grand Avenue; and (2) standard-density housing across multiple areas, including east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area. The commenter suggests rezoning areas east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area to accommodate mixed-use residential land uses. The commenter also points out that approximately 75% of the City's land area does not have any residents.

Alternatives to the proposed Project, including alternate locations, are evaluated in Chapter 6 of the Draft EIR. Alternate locations to the proposed Project site were ultimately rejected as infeasible. The reasons for this conclusion are summarized below, followed by a description as to why the commenter's specific suggestions for alternate locations are determined to be infeasible.

Infeasibility of Alternate Locations

(1) Alternate locations would not avoid or reduce the Project's environmental impacts. As stated in Section 15126.6(f)(2)(A) of the CEQA Guidelines, the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that require mitigation. Rationale for this determination is provided in Section 6.4 of the Draft EIR.

(2) No known sites are available within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative, as defined in the CEQA Guidelines, is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The City evaluated the possibility for other sites, and this evaluation is summarized in Section 6.4 of the Draft EIR. The City determined that potential alternate locations were not suitable due to a variety of factors (land use designations, hazardous site conditions, and/or property ownership.)

[12] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Suggested Alternate Locations

The commenter's specific suggestions for alternate locations are addressed as follows:

- **East of Pacific Coast Highway or south of Grand Avenue.** The commenter suggests developing the proposed Project on the east side of Pacific Coast Highway and/or to the south of Grand Avenue. The commenter presents the option of rezoning a site on the east side of Pacific Coast Highway to accommodate mixed-use residential. As stated in Section 6.4 of the Draft EIR, development of the Project on another site along Pacific Coast Highway could provide a transition from the City's offices to the east and residential uses to the west, similar to the proposed Project site. However, other sites along Pacific Coast Highway were determined to be infeasible because no such sites are under control by the Project applicant, which is a factor for feasibility under CEQA. Additionally, other sites along Pacific Coast Highway may not be considered by the City to be appropriate for the increased height and density that is proposed for the Project. Furthermore, locating residential uses east of Pacific Coast Highway would place new residents farther away from services and amenities, such as parks, City Hall, the police station, and schools. This may result in increased vehicle trips within the City and/or increased development impacts, in the event that new public services and amenities need to be developed elsewhere in the City. Residents would also be required to cross Pacific Coast Highway to access public services, which could present increased traffic safety effects. The City did consider a parcel located near Pacific Coast Highway and Rosecrans Avenue, between The Point Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses. In general, the areas south of Grand Avenue are highly industrialized, and adding residences to this area would likely introduce an incompatible land use.
- **Smoky Hollow Specific Plan Area.** The commenter suggests use of the Smoky Hollow Specific Plan area as an alternate location for the proposed Project. The Smoky Hollow Specific Plan area extends east to west and is bounded by Indiana Street and Pacific Coast Highway to the east, downtown El Segundo to the west, and the Chevron oil refinery to the south. In response to shrinking manufacturing demand, declining investment, and parking issues, the City adopted the first Smoky Hollow Specific Plan in 1986. The updated Smoky Hollow Specific Plan (City of El Segundo 2018) sets a regulatory and planning framework that focuses development efforts on revitalizing buildings for incubator industrial and office space. Although the Smoky Hollow Specific Plan is intended to facilitate redevelopment, the land use regulations within the Smoky Hollow Specific Plan are focused on one- and two-story commercial and industrial development, the land parcels are small and land assemblage could be a major obstacle, and would generally be incompatible with the Project's residential uses. Moreover, according to Table 2-1, Allowed Land Uses Table, of the Smoky Hollow Specific Plan, only "caretaker units" are permitted as accessory uses within the Specific Plan boundaries. Additionally, slightly greater air quality, land use, and transportation (vehicle miles traveled) impacts could occur if the proposed Project was developed within the Smoky Hollow Specific Plan area. For example, the proposed site is just over 0.5 miles from the Metro C Line Mariposa Station, whereas most areas within the Smoky Hollow Specific Plan area are farther away from a Metro C Line station, thereby reducing potential access to regional transit for the Project's 618 future residents. For

these reasons, use of the Smoky Hollow Specific Plan area as an alternate Project location was rejected as infeasible.

- **Standard-Density Housing in Multiple Areas.** The commenter suggests building housing in multiple areas by rezoning property to the east of Pacific Coast Highway and/or in the Smoky Hollow Specific Plan area in order to spread out new housing and associated impacts. Use of areas to the east of Pacific Coast Highway and use of the Smoky Hollow Specific Plan area as alternate locations for the proposed Project were rejected as infeasible for the reasons described above. Additionally, using more land area to develop the proposed Project would increase environmental impacts in many categories. Use of additional land area, which would be required for reduced density development, would increase grading and ground disturbance during construction, which would likely lead to increased air quality impacts and greenhouse gas emissions. Construction traffic would affect more roadways within the City and construction noise would affect additional sensitive receptors. The potential to affect cultural resources during ground disturbing activities could increase, as would the potential for biological resources to be encountered and disturbed. The demands on public services and utilities within the City would be similar and may even increase, in the event that the dispersed housing allowed for larger dwelling unit sizes and/or more landscaped areas per unit. Vehicular trip generation would be the same or similar, and while the added vehicles may be spread out, similar thoroughfares that are used by many residents in the area may be similarly affected, since the total number of vehicles being added to the roadway network would not change. Furthermore, the applicant would need to control multiple, dispersed sites throughout the areas east of Pacific Coast Highway and/or within Smoky Hollow, and these properties would also need to be suitable for residential development. The applicant does not have control of any such properties that would allow for the dispersal of the proposed Project across larger land areas. For these reasons, development of the proposed Project across multiple areas is not considered feasible.

  In support of their third suggestion ("standard-density housing in multiple areas"), the commenter states that the proposed Project would be "forcing a few people to bear the brunt of reasonably foreseeable impacts" and provides the examples of lower quality of life and devaluing of property. The commenter suggests that spreading out the proposed housing could alleviate these concerns.

  While quality of life is not a topic that is specifically addressed under CEQA, effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[13] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). Economic effects such as property values are not discussed in the EIR, since these are not issues related to environmental impacts under CEQA. (See CEQA

[13] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Guidelines, Section 15131.) However, the commenter's concerns regarding property values and quality of life and their suggestions for, and support of, alternative locations will be provided to decision makers for their review and consideration as part of this Final EIR.

I21-13 The commenter notes that COVID-19 prevented the study/EIR from verifying the data in field. The transportation impact analysis for the proposed Project includes operational analysis of 12 intersections included in the traffic study area. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). The AM and PM peak hour traffic counts at these intersections were collected in 2019 during the months of May and October. The COVID-19 shelter at home restrictions were imposed in March 2020 and therefore did not affect the field data collected for the traffic analysis of study area intersections. The existing conditions described for roadways, transit, bike, and pedestrian facilities were verified using most recent data and documents available, including Google Earth imagery.

Please see the response to I21-22 that provides a summary of measured samples of the existing outdoor ambient sound environment in the vicinity of the Project. These measurements were performed in May 2021, and the collected data was used to compare with previous estimates and to verify the appropriateness and accuracy of traffic noise modeling presented in the Draft EIR.

I21-14 The commenter states that the Project objective of improving the jobs/housing balance, contributing to a response to the regional housing shortage, and supporting existing businesses in the area could be achieved through building the Project in an alternate location. Specifically, the commenter suggests that building the Project south of Grand or east of Sepulveda Boulevard would alleviate effects on residents near the proposed Project site. The commenter also states that telecommuting allows many people to work from any location and that the largest employer in the area (LAX) employs people who already live in close proximity.

As described in Response to Comment I21-12, alternate locations for the proposed Project to the south of Grand Avenue and/or east of Sepulveda Boulevard (i.e., Pacific Coast Highway) have been rejected as infeasible. (Note that Sepulveda Boulevard becomes Pacific Coast Highway south of LAX.) At a different location in the City, the proposed Project would still achieve the objective that the commenter cites (improving the jobs/housing balance, providing housing, and supporting existing businesses in the area). However, alternate locations were rejected as infeasible for more reasons than consistency with only the Project objectives, such as property ownership, land use compatibility, land use designations, and failure to avoid or lessen the Project's significant effects.

The commenter further states that the Project's objective of reducing single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and City's Downtown is "not a reality." The commenter lists several concerns related to this objective: no study was done of current residents' use of transit; well-established mass transit has not worked in the Los Angeles area; downtown is not within walking distance of the Project site; reliance on walking to justify dense housing is not realistic; and, the infrastructure and widespread adoption of transit use is not in place to support this objective.

For concerns regarding transit and walkability, see Responses to Comments I18-4 and I18-5. These responses specifically address concerns regarding the distance between the proposed Project site and nearby transit facilities, with respect to walkability. Regarding the Project's proximity to downtown El Segundo, the distance is approximately 1.5 miles, which equates to an approximately 30-minute walk. While the potential for walking to downtown is mentioned in the EIR and is set forth as part of one of the Project objectives, the analysis in the EIR is not based on the potential for future Project residents to walk to downtown El Segundo. Rather, as explained in Response to Comment I18-4, a conservative trip credit for alternative transport modes was taken for the purposes of the Project's vehicle trip calculations. The trip credit is minimal (5% of the Project's total vehicle trips) and is based on the mixed-use nature of the Project and Project area, combined with proximity to transit.

The EIR evaluates the environmental impacts of the proposed Project based on the existing conditions of the Project site and area; applicable standards that are in place at the local, regional, state, and national levels; and, conservative assumptions based on default data from similar project types. While the availability of transit and the mixed-use nature of the Project and its surroundings may present a potential environmental benefit and are features discussed in the EIR, the environmental conclusions in the EIR do not hinge upon widespread use of alternative transport modes amongst the future residents, employees, guests, and visitors of the proposed Project. Rather, the analysis assumes that a majority of the future residents, employees, guests, and visitors would use single-occupancy vehicles. Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, or required to assess any environmental impacts pursuant to CEQA.

It is ultimately the decision of the City's elected officials to approve or deny the proposed Project. CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits. As such, Project approval would likely be based on a variety of considerations, not just the potential walkability of the Project. Rather, walkability and reduced use of single-occupancy vehicles would be considered a potential benefit amongst several, to be weighed against the Project's impacts.

I21-15 The comment suggests that there would be a permanent increase in noise due to the Project and lists human activity, population growth, high density, and roadway traffic noise as potential noise-related concerns.

Permanent increases in noise associated with the proposed Project are addressed pursuant to CEQA in Section 4.10, Noise of the Draft EIR. The analysis therein considers increased roadway traffic noise associated with the Project, as well as noise from outdoor uses associated with the Project (e.g., pools, outdoor amenities, and mechanical equipment). Operational (i.e., permanent) noise impacts were determined to be less than significant. Roadway traffic noise increases attributed to the Project have been assessed in the Draft EIR, and Response to Comment to I21-8 includes a reproduced version of Table 4.10-6 from the Draft EIR (identified as Table 2-5 in this section), which includes consideration of an additional representative receptor, ST7, within the single-family residential neighborhoods west of Washington Park that are over 500 feet west of the Project site. While some outdoor areas near the Project are expected to experience an increase in outdoor ambient noise where it is already dominated by roadway traffic, the increases are expected to be less than significant, as demonstrated in the Draft EIR.

Regarding the commenter's statements about alternative sites south of Grand Avenue or east of Pacific Coast Highway, refer to Responses to Comments I21-12 and I21-31. As described above, the proposed Project would not result in significant traffic noise impacts to existing residents. As such, no potentially significant traffic noise impacts have been identified requiring the identification of mitigation measures or alternatives to avoid or reduce the impact pursuant to CEQA.

Regarding the commenter's graphical depiction of the high-density nature of the proposed Project, the graphic compares the density of two-story, multi-family residential units located approximately 0.75 miles north of the Project site to the density of the proposed Project. This density comparison does not pertain to the adequacy of the environmental analysis in the EIR. For a response to concerns regarding the Project's density, refer to Response to Comment I21-11.

I21-16 This comment features a "LAX Noise Pollution Propagation" diagram, which illustrates a concern regarding potential aviation traffic noise reflecting upon three structures that include the proposed PCC North building. The rendering in the comment suggests that aircraft noise from LAX traffic would beam directly towards PCC North and then would reflect west towards existing neighborhoods. Please refer to Response to Comment I21-4 related to potential noise reflection from proposed Project buildings.

I21-17 This comment states that the Project's impacts with respect to unplanned population growth should be considered substantial. The commenter further states that high-density housing is impactful to a community and region that has never had this type of development. The commenter states that the infrastructure to support "this drastic change" is not yet available and the population has not given up vehicles. The commenter suggests that spreading out housing would make more sense and would put new residents closer to transit.

The proposed Project's impacts related to population and housing are evaluated in Section 4.11 of the Draft EIR. Impacts in the category of population and housing are identified; however, impacts were determined to be below a level of significance, based on the substantiation and evidence provide in Section 4.11. Under CEQA, a population growth impact occurs when a project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). In order to determine whether the Project would induce substantial unplanned population growth, the number of residents, households, and employees that may be generated by the Project were estimated and then compared to growth forecasts for the City and region. As described in Section 4.11, the number of housing units that would be developed as part of the proposed Project would not exceed projections for housing growth within the City, as set forth by SCAG in the 2020–2045 RTP/SCS. The proposed Project's 263 new residential units would assist the City in meeting the mandated RHNA allocation and would be consistent with and supportive of the City's 2021-2029 Housing Element projections for new residential units within the City. As such, the number of housing units associated with the proposed Project would fall within growth projections and would assist the City in meeting state mandates for the provision of new housing.

As further described in Section 4.11, the proposed Project would accommodate an expected 618 residents, which would exceed SCAG population growth forecasts for the City. However, as demonstrated in the City's General Plan growth projections, the City anticipated more robust residential growth than was able to be realized. The proposed Project would thus fulfill prior population projections that were formulated when the City's General Plan was written. Furthermore, the proposed Project

would support SCAG's goals and strategies for growth in the region, as detailed in Sections 4.9 and 4.11 of the Draft EIR. Because the proposed Project would support SCAG's goals and strategies, and because the proposed Project would assist the development of new housing that would improve the City's job/housing balance, impacts related to population growth were determined to be less than significant. Although the proposed Project would provide a resident population that exceeds SCAG's projections, this growth is not considered substantial and it would further attainment of local and regional goals. For these reasons, and as further detailed throughout Section 4.11 of the Draft EIR, the proposed Project's population growth was determined to be less than significant, based on the thresholds established under CEQA.

Regarding availability of infrastructure, the proposed Project's potential effects on utilities, service systems, and public services are evaluated in Sections 4.12 and 4.15 of the Draft EIR. No significant impacts were identified, which indicates that the proposed Project would not require new off-site infrastructure or substantial expansions to existing infrastructure. Moreover, the Project applicant would pay all applicable development impact fees pursuant to Chapter 27A of the El Segundo Municipal Code. Concerns regarding the availability and use of transit are addressed in Responses to Comments I18-4, I18-5, and I21-14. The commenter's suggestion to develop the proposed Project across a larger area of land is addressed in Response to Comment I21-12. As stated therein, spreading the proposed housing units across a larger area of land would increase environmental impacts in multiple categories. Furthermore, spreading new housing units across a larger area of land in the City would be expected to place some residents further away from transit services.

I21-18 This comment describes the parks that are within proximity to the Project site that states that the EIR's determination that the Project would not impact parks requires additional explanation. The comment further states that traffic would impact the nearby parks and could be a safety hazard.

The topic of public services and recreation, including parks, is analyzed in Section 4.12 of the Draft EIR. As discussed in Section 4.12, the significance criteria used to evaluate impacts to recreation and parks are based on Appendix G of the CEQA Guidelines. Under CEQA, impacts to recreation would occur if a project would result in physical deterioration of a recreational facility due to increased use of recreational facilities; if the construction or expansion of recreational facilities associated with the Project would result in an adverse physical effect on the environment; or if a project were to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities (including parks), the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

The proposed Project was evaluated using these significance criteria to determine whether a potentially significant impact to parks and recreation could occur. The Draft EIR analysis concluded that the additional residents associated with the proposed Project would likely use the nearby public parks and recreation facilities. However, based on the City's current ratio of residents to park acreage and the number of new residents associated with the proposed Project, the analysis determined that the proposed Project would not cause an exceedance in the existing standards of service for parks. Additionally, the El Segundo Recreation and Parks Department was contacted as part of the data gathering for the EIR. The department indicated that no new/expanded public parks or recreational facilities would be required as part of the proposed Project. Further, the Project would include common open space areas, including rooftop pools and community rooms. These on-site amenities would

provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. Finally, the Project applicant would pay all applicable development impact fees pursuant to Chapter 27A of the El Segundo Municipal Code. For these reasons and as further demonstrated in Section 4.12 of the Draft EIR, the Project's impacts to parks and recreational facilities were determined to be less than significant. For concerns regarding traffic-related safety and nearby parks, see Response to Comment I21-5.

I21-19 This comment states that Alternative B would be a viable alternative. The commenter notes that some of the Project objectives would not be met but that it would lessen the overall impact to the community. City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative B). As such, the commenter's support for Alternative B will be included in this Final EIR for review and consideration by decision makers.

I21-20 This comment outlines the topics to be addressed in the forthcoming portions of the commenter's letter. Please refer to Responses I21-21 through I21-31, below.

I21-21 It is assumed that these comments refer to single-family home neighborhoods west of Washington Park. Please refer to Response to Comment I21-16. While the Draft EIR noted that such noise-sensitive receptors are over 500 feet from the Project site boundary, a representative receptor "ST7" has been added to the roadway traffic noise assessment and appears in the reproduced Table 4.10-6 (identified as Table 2-5 herein) appearing in Response to Comment I21-8. Increases in roadway traffic noise at this newly considered representative receptor show that the neighborhood west of Washington Park would be expected to experience a less than significant traffic noise impact for both sets of modeled with-Project scenarios.

I21-22 The comment makes remarks with respect to traffic in the Project vicinity, and includes an observation implying that existing outdoor ambient sound levels were not measured. As the Draft EIR notes, such existing outdoor noise levels were estimated at the time of the Draft EIR preparation because of COVID-19 response conditions that were in place and likely suppressed otherwise typical roadway traffic flows and volumes.

However, as COVID-19 response conditions have relaxed or otherwise resulted in an apparent return-to-normalcy setting for the existing sound environment in the vicinity of the Project at the time of the preparation of this Final EIR, short-duration (approximately 15 minutes each) investigator-attended sound pressure level (SPL) measurements were performed during daytime hours on May 18, 2021 and are summarized in the following table, with approximate measurement locations appearing in the subsequent map figure. An unattended long-duration SPL monitor was also deployed and collected successive five-minute duration SPL interval data that are displayed in Figure N-2 following the SPL survey location map (Figure N-1). Consistent with expectations, the plot of L_{eq} values at LT1 rises and falls with varying levels of roadway traffic on Pacific Coast Highway over the course of the sampled diurnal cycle from May 18-19, 2021.

This collected measurement data, appearing in Table 2-6 and Figure N-2, was used to check estimates of existing noise levels in support of the traffic noise modeling effort. For example, the measured L_{eq} value of 58.9 dBA at ST1 during the indicated late-afternoon sample period primarily represents acoustic contribution from outdoor sound sources such as nearby and distant traffic from a variety of

vicinity roadways. The modeled 59 dBA CNEL shown in Table 2-5 for "Existing (2019)" noise level at this location very closely agrees with this measured L_{eq} daytime sample, and is consistent with expectations. As exemplified by the long-term (24-hour) measurement sample plot in Figure N-2, traffic noise L_{eq} at night would be less than the L_{eq} during the day and would tend to offset the CNEL-related upward decibel adjustments during the nighttime period, thus resulting in daytime L_{eq} being comparable to the calculated CNEL value. Aside from the introduction of a new receptor "ST7" to represent the more distant single-family residential community west of Washington Park, the presented predicted traffic noise levels for the modeled scenarios shown in the new Table 2-5 (see response to I21-8) are the same as those presented in the Draft EIR.

Table 2-6. Measured Existing Outdoor Ambient Sound Pressure Levels (SPL) in Project Vicinity

Measurement Location Tag and Summarized Description	Date (mm/dd/yy) and Approx. Start Time (hh:mm) to End Time (hh:mm)	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	L_{90} (dBA)
ST1 (west of Indiana Street)	05/18/21 15:59 to 16:14	58.9	68.7	54.2	55.3
ST2 (northwestern Project boundary)	05/18/21 17:53 to 18:08	64.3	83.4	55.3	55.9
ST3 (eastern Project Boundary approximately 50 feet from PCH)	05/18/21 16:21 to 16:36	78.0	86.6	61.4	69.0
ST4 (northeast corner of E. Mariposa Avenue and Illinois Court)	05/18/21 17:35 to 17:50	63.9	82.0	54.0	56.3
ST5 (northern Project Boundary approximately 30 feet from E. Palm Avenue)	05/18/21 17:12 to 17:27	64.0	90.0	53.7	55.3
ST6 and LT1 (eastern Project Boundary approximately 50 feet from PCH)	05/18/21 16:52 to 17:06	76.7	89.5	58.6	66.6
ST7 (west of Washington Street)	05/18/21 15:04 to 15:19	61.1	72.5	55.0	55.9

dBA = A-weighted decibel; Leq = energy-equivalent sound level; Lmax = maximum measured sound level; Lmin = minimum measured sound level; L90 = sound level exceeded ninety percent (90%) of the cumulative intervals during the measurement period

The comment also inquires if traffic noise was modeled on "Mariposa and back streets." The reproduced Table 2-5 includes both ST4 and newly added ST7, which are the same measurement locations appearing in the above data table.



Figure N-1: Project Vicinity in El Segundo, California, with displayed approximate outdoor sound pressure level (SPL) survey locations

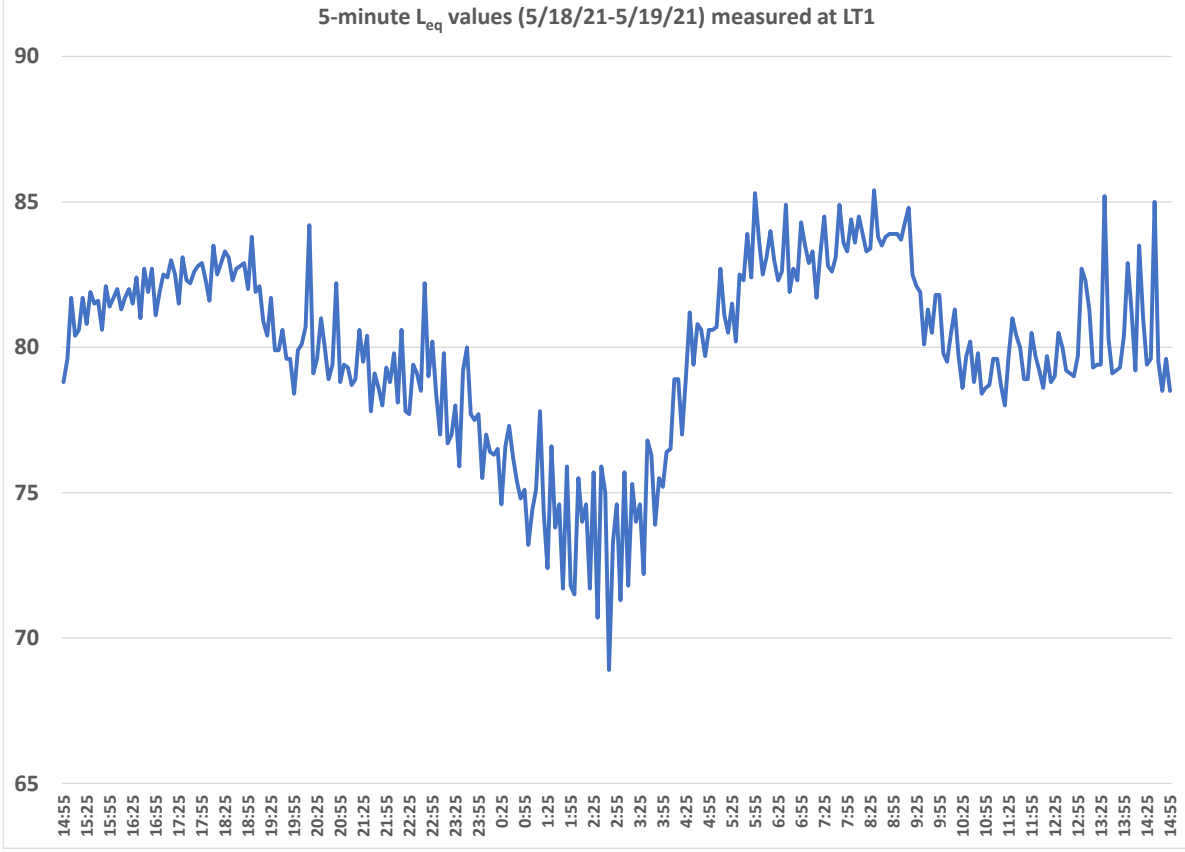


Figure N-2: Plot of successive 5-minute A-weighted L_{eq} intervals measured and recorded at field survey position LT1 (see preceding map illustration [Figure N-1] for location)

I21-23 The comment refers to sampled City of El Segundo General Plan content shown on Page 4.10-9 of the Draft EIR. Pages 4.10-16 through 4.10-19 of the Draft EIR present and discuss potential exterior noise intrusion to future residents anticipated due to the Project. For existing off-site receptors, please refer to Response to Comments I21-8 and I21-22, above.

I21-24 The comment observes that the property lines of nearest multi-family residences to the west of the Project are "as close as 15 feet to the PCC North" and suggests the planned Project parking garage will have "significant impact on Illinois Ct. residences." These residences are currently exposed to low-speed vehicle traffic on existing parking lots occupying the area of PCC North and unobstructed bi-directional roadway traffic on Pacific Coast Highway. The planned structures of PCC North would eliminate much of the former (leaving only the portion of the existing parking lot north of E. Mariposa to become a gated private drive and thus remain a low-volume, low-speed vehicle area) and substantially obstruct the latter, which is anticipated to contribute to an overall net noise-reducing benefit for existing multi-family residences on Illinois Court, as the traffic noise prediction results for ST4 in Draft EIR Table 4.10-6 (and in the Response to Comment I21-8) also indicates.

I21-25 Please see Response to I21-22, which includes both added consideration of ST7, a representative receptor for the single-family home neighborhood west of Washington Park, and a report of newly-

collected outdoor ambient SPL data at the now seven representative assessment locations. As indicated in the response to I21-13, the collected samples of existing outdoor sound level were used to help validate the existing scenario for the traffic noise modeling effort and its results presented in the Draft EIR.

Regarding the commenter's statements about Project-related trip generation, see Response to Comment I21-7.

I21-26 Cumulative off-site traffic noise has been evaluated in Section 4.10.5 of the Draft EIR. This analysis references a quantitative assessment of off-site traffic noise and concludes that noise level increases of less than 3 dBA would occur along the studied sample roadways in the vicinity of the Project under the cumulative scenario. As such, the anticipated increases would be below significance thresholds (as further discussed in Section 4.10, Noise in the Draft EIR). As such, the EIR has addressed cumulative off-site traffic noise and demonstrates that impacts would be below a level of significance.

Regarding the commenter's concerns for property values and quality of life, these are not topics that are specifically addressed under CEQA. Refer to Response to Comment I21-12, which addresses the topics of quality of life and property values.

I21-27 The issues raised in this comment were also raised in Response to Comments I21-6, I21-7 and I21-10. Refer to Responses to Comments I21-6 and I21-10.

I21-28 Many of the issues raised in this comment were raised in Comments I21-6 and I21-10. Please see Responses to Comments I21-6 and I21-10.

This comment also points out that there are no Project-generated vehicles assigned to use the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections, as depicted in the transportation study (Draft EIR, Appendix J-1). The commenter expresses concerns that this trip assignment is not accurate.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). The informational transportation analysis assigns 0 trips to the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections because the analysis (Draft EIR, Section 4.13 and Appendix J-1) shows that the intersection of Pacific Coast Highway/Mariposa Avenue operates at LOS C under existing conditions (acceptable according to City standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a Project feature. This right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane. Therefore, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue and, as such, no turning vehicles were assigned to the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections.

This comment also points out that 9 vehicles were assigned to use the Pacific Coast Highway/Palm Avenue intersection during the AM peak hour. This comment also infers that 9 vehicles using Pacific Coast Highway and Palm Avenue seems low compared to the 252 parking spaces that would be provided at PCC North. The vehicular trip estimates associated with the Project are based on ITE trip generation rates, which is a nationally recognized source. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. The vehicle traffic analyzed is for the AM and PM peak hours and not based on the number of parking spaces provided. Based on these rates, PCC North is projected to generate 48 trips during the AM peak hour. Of these trips, most were assumed to use Mariposa Avenue and Pacific Coast Highway. The limited assignment of Project trips to the Palm Avenue at Pacific Coast Highway is intentional, due to the difficulty of making an eastbound left-turn across Pacific Coast Highway at this stop-controlled intersection.

I21-29 This comment states that the traffic study does not reflect the congestion in the area. However, the traffic conditions described and shown the Draft EIR are based on empirical data collected in the Project area prior to the COVID-19 pandemic. See Section 4.13.1 of the Draft EIR and Appendix J-1. As such, the existing traffic conditions in the Project area are accurately reflected in the Draft EIR's transportation analysis.

This comment questions the methodology in which the number of vehicle trips generated by the Project was determined. This comment states that the Project-generated vehicle trips are determined by the Shared Parking Analysis. This is not correct; the Project traffic estimates are not based on the number of parking spaces but rather on standard ITE trip generation rates. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. Please see the Response to Comment I21-30 for more detail regarding the parking analysis.

This comment also states that the analysis overestimates transit use and walking and that no survey was done of local residents regarding transit use or walking. This comment also points out that Downtown El Segundo is not a walkable distance from the Project site.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. However, U.S. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. As such, data collected in the Project area indicates that the assumptions in the EIR analysis for use of alternative transportation modes are conservative in nature and that the EIR assumes reduced use of alternative transportation modes relative to current rates of use in the surrounding community. While the EIR describes the transit-oriented nature of the proposed Project and its proximity to existing businesses and services, the quantitative analyses (e.g., traffic generation, traffic-related noise generation) remain conservative with respect to vehicle use versus alternative transportation use. Furthermore, no additional walk/bike/transit trip generation credit was taken in the Draft EIR for the Project's proximity to Downtown El Segundo.

The comment also states that there is a lack of reliable transit in the Los Angeles area. However, the Metro C Line Mariposa Station is 0.51-mile from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 also run along Pacific Coast Highway with stops

near the Project site. Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR). The distance between the Project site and the Mariposa Station equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours. Nevertheless, as described above, the trip credits taken in the EIR analysis for transit use are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, and is also not required to assess any environmental impacts pursuant to CEQA. As described above, the assumptions used in the EIR are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Furthermore, the Project site is adjacent to a transit-priority area, which is an area delineated by SCAG to identify locations where transit use is practical and where transit-oriented development is encouraged. Plans and policies are in place at the local, regional, and state level to encourage increased use of alternative modes of transportation and to support mixed-used and higher density housing near transit. The proposed Project is supportive of these policies, as it would locate higher density housing and mixed-use development in proximity to transit. As these plans and policies are carried out, the use of alternative modes of transportation is also expected to increase over time, particularly in urbanized areas.

Please see Responses to Comments I21-6 and I21-10 regarding the Pacific Coast Highway and Mariposa intersection and residential streets.

I21-30 This comment provides an extensive review of the Shared Parking Analysis (Appendix J-2 of the Draft EIR). Responses to points raised in the comment are provided below:

- For concerns regarding transit in the Los Angeles area, see Response to Comment I21-29, above.
- The ITE data (used for parking spaces per bedroom in Table 1), a nationally recognized source, are from surveys in numerous states, including California, over the past few decades. They are not specific to New York or Chicago. Although Table 1 in the Shared Parking Analysis showed the whole range of parking rates provided by ITE for multifamily apartments, only the data in the final row of the table (general urban/suburban not within 0.5 mile of rail transit) was used in this study.
- The Palo Alto data is shown for comparison purposes only and indicates less parking demand even in areas that are not well served by transit.
- Two parking spaces per dwelling unit is the current code parking requirement in the City, as described in Table 2 of the Shared Parking Analysis. A Los Angeles standard for parking spaces does not actually exist; the City of Los Angeles, for example, uses 1 space per dwelling unit of less than 3 habitable rooms (typically a studio), 1.5 spaces per dwelling unit of 3 habitable rooms (typically a 1-bedroom unit), and 2 spaces per dwelling unit of more than 3 habitable

rooms (typically a 2-bedroom unit). Census data indicates less than 2 cars per dwelling unit for apartments in the City.

- Project traffic volume estimates used in the transportation analysis (Draft EIR, Section 4.13 and Appendix J-1) are not based on the number of parking spaces in the parking study but rather are based on ITE trip generation rates. The number of parking spaces shown in the shared parking analysis does not affect the trip generation or trip distribution shown in the traffic analysis.
- While ITE rates may not be customized for the Los Angeles area, the Project is predominately (82%) studio and 1-bedroom units, which typically have fewer people living in each unit and lower parking demand than the housing stock as a whole. Therefore, the parking analysis considered sources for parking demand per bedroom rather than per dwelling unit. To be conservative, the per bedroom rate for the General Urban/Suburban not within 0.5 mile of rail transit is used. The Palo Alto data is shown as a point of comparison. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. For more details regarding transit in the Project area and a response to the commenter's concerns about the transit use of the existing community, refer to Response to Comment I21-29, above.
- The half space in the "1.5 space per unit" rate used for the 1-bedroom apartments does not mean that half-sized spaces would be provided. Rather, this indicates that the parking requirement for the 1-bedroom units was calculated assuming an average of 1.5 spaces per unit. For example, these 1-bedroom units could be occupied by a single person with 1 vehicle or by a couple with 2 vehicles, which would average to 1.5 vehicles per unit.
- Overnight hotel parking counts were conducted on a Saturday night. Since the surveys were done overnight (when hotel demand is highest) at 2 AM, they were technically done early Sunday morning. Regarding seasonality, the hotels were 75% and 76% occupied on the nights of the surveys. Therefore, the rates were factored up to represent 100% occupancy when the hotel parking demands were estimated.
- The retail and restaurant parking demand numbers shown on Table 11 in the Shared Parking Analysis are from the shared parking spreadsheets shown in Appendix B of the Shared Parking Analysis.
- The assigned parking for residents is not part of the shared pool of parking and therefore would not be shared with the hotels and commercial uses. The shared parking analysis shows that there would be a deficit of 21 spaces at the South Site at 10 PM, which can be accommodated at the Fairfield parking structure or PCC North (combined surplus of 27 spaces). The comment brings up the concern that individuals would need to walk to another structure to park their vehicles. The hotel would provide valet parking so guests would not have to walk to another structure to park their vehicles.

I21-31 This comment presents comments/concerns related to a number of topics: (1) suggestions for alternatives to the proposed Project; (2) concerns regarding the proposed Project, based on the Project's objectives; and (3) comments regarding the alternatives analysis in the Draft EIR. These topics are addressed as follows:

Suggested Alternatives

The commenter mentions the following suggested alternatives in this comment: alternative locations east of Sepulveda Boulevard (i.e., Pacific Coast Highway) and south of Grand Avenue; and, lower-

density housing in multiple areas, involving rezoning areas east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area. Refer to Response to Comment I21-12 for responses to these suggested alternatives.

The commenter further states that an estimated 99% of City residents live in 25% of the City's land area. The commenter presents a diagram outlining the residential area of the City, with arrows pointing to non-residential areas, to depict the concept of developing residential land uses in areas of the City that are not currently used for that purpose. For the reasons enumerated in Response to Comment I21-12, dispersing the proposed Project across a larger area of land and constructing the proposed housing at a lower density would increase environmental impacts in multiple categories. Furthermore, the City is generally built out under current conditions. As such, building residences throughout areas of the City that are currently commercial or industrial in character would require redevelopment. While some of the City's industrial areas are currently being contemplated for redevelopment (e.g., the Smoky Hollow Specific Plan area), such areas may not be suitable for residential land uses, due to contamination concerns and/or land use incompatibility with industrial uses that may still be operational. Additionally, the non-residential areas are not well-served by existing public services and facilities, including schools and parks that are currently located within the existing residential areas of the City. Therefore, constructing new public services and amenities farther from existing residential areas to accommodate dispersed residential developments within commercial/industrial areas of the City could increase environmental impacts. Nevertheless, the commenter's suggestion to spread out residential land uses within the currently nonresidential areas of the City will be included in this Final EIR for review and consideration by decision makers.

Comments on Project Objectives

This comment presents concerns regarding the proposed Project's objectives. The commenter states that the Project's objective of creating additional housing will adversely impact neighboring residents and states that the proposed Project will not mitigate negative impacts to neighbors, such as traffic, safety (higher traffic adjacent to neighborhood parks), parking, noise, population growth (crowding of more activity in a smaller area), decreased teacher-to-student ratio, lower quality of life, lower home values, and increased congestion and neighborhood traffic. These concerns and topics are addressed in other responses herein. For concerns regarding neighborhood impacts, see Response to Comment I18-1. For concerns regarding traffic in neighborhoods, see Responses to Comments I6-3, I18-3, and I21-6. For concerns regarding traffic near local parks, see Response to Comment I21-5. For concerns regarding parking in neighborhoods, see Responses to Comments I6-2 and I18-2. For concerns regarding neighborhood noise, see Response to Comment I21-8. For concerns reading population growth, see Response to Comment I21-17. For concerns regarding quality of life, see Response to Comment I21-12. For concerns regarding home values, see Response to Comment I7-1.

Regarding the commenter's concerns about decreased teacher-to-student ratios, Section 4.12 of the Draft EIR addresses the Project's effects to schools. The analysis therein demonstrates that the proposed Project would not adversely affect local schools. Furthermore, communication with El Segundo Unified School District (conducted as part of the data gathering process for the EIR) indicates that existing schools are sufficient to accommodate increases in students associated with the Project.

The commenter also references a prior comment (categorized herein as Comment I21-14). Refer to Response to Comment I21-14 for a response to concerns expressed therein.

Alternatives Analysis

The commenter states that the Smoky Hollow Specific Plan area, which is among the alternative locations that were rejected as infeasible in the EIR, should not have been rejected due to the area's distance from transit. The commenter further states that the Smoky Hollow Specific Plan area appears to be more equidistant between the downtown El Segundo area and transit.

Proximity to transit is important for reducing environmental impacts such as VMT. As such, locating the Project site further from a Metro C line station could increase environmental impacts in some categories. (Most sites within the Smoky Hollow Specific Plan area would be situated further from a Metro station than the proposed Project site). Furthermore, alternative sites within the Smoky Hollow Specific Plan area were rejected for a variety of reasons (not solely on the basis of transit proximity); see Response to Comment I21-12.

The commenter further states that development elsewhere along Pacific Coast Highway was ruled out because the Project applicant does not control another site in this area. The commenter suggests that the City should find a different applicant who does control another property elsewhere along Pacific Coast Highway. Under CEQA, an alternative site can be rejected on the basis of applicant ownership. With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(l) states the following: among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site. As such, rejection of an alternate location for a Project on the basis of property ownership is allowable under CEQA.

The commenter also states that an alternate location east of Sepulveda Boulevard / Pacific Coast Highway and/or within the Smoky Hollow Specific Plan area would reduce impacts; however, the EIR states that impacts would not be reduced at these alternative locations.

The commenter does not present substantial evidence that the impacts of the proposed Project would be reduced at an alternate location. As stated in Section 6.4 of the Draft EIR, development of the proposed Project on an alternate site would result in a similar construction scenario, similar quantities of criteria air pollutant emissions during construction, similar levels of construction noise, and similar levels of energy consumption. Due to the generally built-out nature of the City, it is likely that demolition of existing buildings and paved areas would be required at an alternate location. Additionally, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen the air quality and noise impacts of the proposed Project during construction. Similarly, development at an alternate site would not necessarily reduce impacts to transportation and traffic. Regardless of its location, the proposed Project would generally place similar demands on public services, utilities and services systems, and energy resources. With regard to the visibility and appearance of the Project, the aesthetic impact of the Project is largely related to its height and density, which would not substantially change at an alternative location. For these reasons, placing the Project at an alternative location would not be expected to reduce its impacts.

The comment notes that Alternatives A and B have reduced impacts in most categories, which would make them "a better possibility." The commenter also notes disagreement with the EIR's determination

that impacts in the categories of Land Use and Planning and Transportation would increase for these alternatives.

City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternatives A or B). As such, the commenter's support of Alternatives A and B will be included in this Final EIR for review and consideration by decision makers. Those alternatives' impacts in the categories of Land Use and Planning and Transportation are substantiated in Sections 6.5.1 and 6.5.2 of the Draft EIR.

The comment concludes by expressing support for the "no project alternative" (Alternative A), which is identified in the Draft EIR as the environmentally superior alternative. As stated above, City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative A). As such, the commenter's support for Alternative A will be included in this Final EIR for review and consideration by decision makers.

I21-32 This comment consists of cover letter. This comment is introductory in nature, and no specific comments are raised regarding the environmental analysis in the EIR. No response is necessary.

I21-33 This comment is the same as I21-2; refer to Response to Comment I21-2.

I21-34 This comment is the same as I21-3; refer to Response to Comment I21-3.

I21-35 This comment raises the same concerns as I21-4; refer to Response to Comment I21-4.

I21-36 This comment is the same as I21-5; refer to Response to Comment I21-5.

I21-37 This comment is the same as I21-6; refer to Response to Comment I21-6.

I21-38 This comment is the same as I21-7; refer to Response to Comment I21-7.

I21-39 This comment is the same as I21-8; refer to Response to Comment I21-8.

I21-40 This comment is the same as I21-9; refer to Response to Comment I21-9.

I21-41 This comment is the same as I21-10; refer to Response to Comment I21-10.

I21-42 This comment is the same as I21-11; refer to Response to Comment I21-11.

I21-43 This comment raises the same concerns as I21-12; refer to Response to Comment I21-12.

I21-44 This comment is the same as I21-13; refer to Response to Comment I21-13.

I21-45 This comment is the same as I21-14; refer to Response to Comment I21-14.

I21-46 This comment is the same as I21-15; refer to Response to Comment I21-15.

I21-47 This comment is the same as I21-16; refer to Response to Comment I21-16.

I21-48 This comment raises the same concerns as I21-17; refer to Response to Comment I21-17.

I21-49 This comment is the same as I21-18; refer to Response to Comment I21-18.

I21-50 This comment is the same as I21-19; refer to Response to Comment I21-19.

I21-51 This comment is the same as I21-26, and disagrees with the Draft EIR finding that cumulative off-site traffic noise impacts would be less than significant, and remarks that property values and quality of life would be lowered "even if the traffic was silent."

As indicated on page 4.10-22 of Section 4.10, Noise of the Draft EIR, the traffic noise analysis already considered future-year (2025) scenarios that include estimates of cumulative roadway traffic volumes and thus inclusion of other projects in the vicinity. The predicted traffic noise changes, as shown in Table 4.10-6 of the Draft EIR and reproduced in the response to I21-8, are either reductions or increases that are considered less than significant.

I21-52 This comment is expressed as part of I21-21; refer to Response to Comment I21-21.

I21-53 The first portion of this comment is the same as I21-22; refer to Response to Comment I21-22. The second portion of this comment is expressed as part of I21-21; refer to Response to Comment I21-21. The third portion of this comment is expressed as part of I21-23; refer to Response to Comment I21-23.

I21-54 This comment is expressed as part of I21-23; refer to Response to Comment I21-23.

I21-55 This comment is the same as I21-24; refer to Response to Comment I21-24.

I21-56 This comment raises the same concerns as I21-25; refer to Response to Comment I21-25. This comment additionally states that the scope of the noise modeling location is "too tight" and does not address neighboring areas. As shown in the response to I21-8, a new offsite receptor, ST7, was added to the traffic noise modeling to represent the single-family home community west of Washington Park. As shown, impacts would be less than significant.

I21-57 This comment is the same as I21-26; refer to Response to Comment I21-26.

I21-58 This comment is the same as I21-27; refer to Response to Comment I21-27.

I21-59 This comment is the same as I21-29; refer to Response to Comment I21-29.

I21-60 In this comment, the commenter has highlighted existing AM and PM peak hour traffic volumes at the Pacific Coast Highway/Maple Avenue, Pacific Coast Highway/Mariposa Avenue, and Pacific Coast Highway/Palm Avenue intersections on a figure from the EIR. However, no comments are raised regarding the environmental analysis in the EIR. No response is required.

I21-61 The commenter expresses concern regarding estimation of Project traffic at the study area intersections and elaborates that the traffic congestion and delays at the Pacific Coast Highway/Mariposa Avenue cause drivers to use alternate streets instead of Mariposa Avenue.

Refer to Responses to Comments I21-6, I21-10, and I21-28 for responses to these concerns.

I21-62 A portion of this comment is expressed as part of I21-29 and I21-30; refer to Responses to Comments I21-29 and I21-30.

I21-63 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-64 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-65 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-66 This comment references a prior comment (categorized herein as Comment I21-14). Refer to Response to Comment I21-14.

I21-67 This comment is expressed as part of I21-31; refer to Response to Comment I21-31. This comment additionally lists impacts that the commenter states would be reduced by an alternate project location: traffic, safety (such as more traffic near parks), parking, noise, population growth, reduced teacher-to-student ratios, lower quality of life, and reduced home values.

The commenter speculates that an alternate location would reduce impacts in the categories listed above. No substantial evidence is provided in support of the commenter's contentions. Constructing the Project elsewhere in the City would be expected to result in similar traffic impacts at different locations throughout the City. Additionally, effects at major thoroughfares (e.g., Pacific Coast Highway and intersections along Pacific Coast Highway) that are used by many City residents may remain the same. As explained in Response to Comment I21-31, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the areas of the City that would be suitable for residential development, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen impacts on sensitive receptors, such as noise impacts. Regarding population growth and effects to schools, the Project would lead to the same amount of growth and the same student generation regardless of its location in the City. Quality of life and home values are not topics addressed under CEQA. However, due to the largely built-out nature of the City, and the industrialized nature of large portions of the City, it is likely that a suitable alternate location would also be situated near other residential areas.

I21-68 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-69 This comment is expressed as part of I21-31; refer to Response to Comment I21-31. This comment additionally includes a question regarding the non-conforming nature of the two hotels that currently exist on the Project site. The commenter asks why the City allowed non-conforming uses and asks whether this can be corrected without the proposed Project and its associated effects.

The comment regarding non-conforming uses does not pertain to the adequacy of the environmental analysis in the EIR; no response is required. However, for informational purposes, it is noted that the existing hotels are permitted uses in the current zoning (C-3). As such, the existing use itself is not non-conforming, but the hotel buildings are non-conforming with regard to height. The buildings exceed the current height limit. The proposed Specific Plan would bring the hotel buildings into conformance with the zoning standards for height.

Comment Letter I22

From: venugopal joshi [redacted]
Sent: Monday, April 5, 2021 1:15 AM
To: Samaras, Paul; Planning
Subject: Comments for Draft EIR for Pacific Coast Commons
Attachments: Appendix1_El Segundo Profile - Mapping L.A. - Los Angeles Times.pdf; Appendix2_1_LAX Airfield and Terminal Modernization Project DEIR_page2.pdf; Appendix2_2_LAX Airfield and Terminal Modernization Project DEIR_page17-18.pdf; Appendix3_Hotels in El Segundo _ El Segundo Hospitality and Tourism.pdf; Appendix4_CityOfElSegundo-SmokyHollow-EIR.jpg; Appendix5_El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze.Oct30_2018.pdf; Comments to DEIR for PCC.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Please find attached. Kindly acknowledge receipt of this email

I22-1

Thanks
Joshi

Venu Joshi
605 Washington Street,
El Segundo – 90245.

April 4, 2021

Via: Email to psamaras@elsegundo.org and planning@elsegundo.org

To:
Paul Samaras, Planning Department
City of El Segundo,
350, Main Street
El Segundo - 90245

Re: Public Comments for Pacific Coast Commons Specific Plan Draft Environmental Impact Report

Dear Mr. Samaras and The Planning Department,

I22-2

Please accept the following comments on the Pacific Coast Commons ("PCC") Specific Plan Draft Environmental Impact Report ("DEIR"). These comments are submitted on my behalf, a resident of El Segundo and being directly impacted by the proposed project. This include attachments and reports from publicly available documents.

The proposed construction of the 6-story mixed-use apartment building (total 263 units) with maximum height of 90ft. The DEIR seems to have willfully neglected impact to key areas and specifically around my street (600 Block of Washington Street).

This project under the guise of development of underutilized land and affordable housing would cause a major impact to the residents in the immediate neighborhood and the City of El Segundo in general. While we should recognize providing more housing opportunities and land development, we should be cognizant of the character of the city, which is "Mayberry by the Sea" and refuse to allow any super high density residential construction and move towards building low-density apartments/single/multifamily homes across the city.

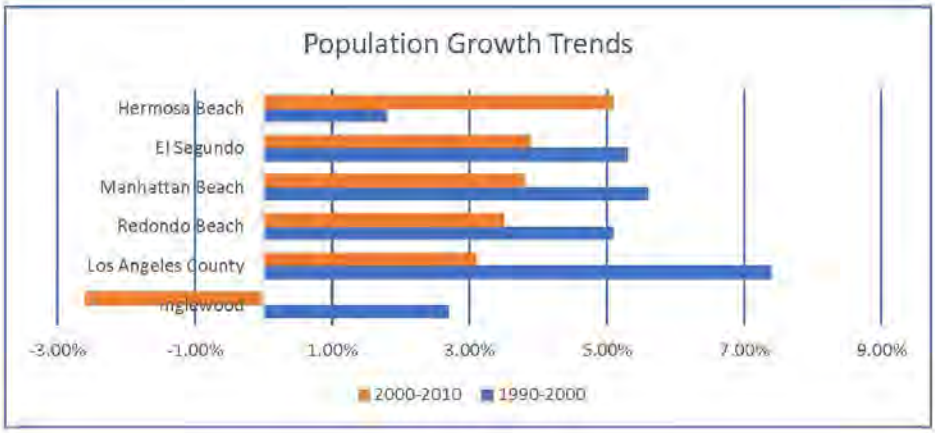
I22-2 Cont.

The following are the various areas that DEIR fails to properly report the short term and the long term impact.

- **Density**: The DEIR fails to explore options that can reduce the density to alleviate the impact of packing a lot of residents in a small area. Alternatives to spread the development in a larger area and around El Segundo, weren't sufficiently considered. Smoky Hollow and East of PCH as additional areas of residential development weren't studied. El Segundo Residential Housing zone exists only in the northwest quadrant of the city (~25% of area). Rest of the area is occupied by Chevron and Commercial Developments. From https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ (attached : Appendix 1) El Segundo is indeed #199 in 272 neighborhoods in Los Angeles. However, if we consider only ~25% of the residential land area, then our density is far bigger than our neighboring cities (we can jump to the top #65 of 272). Adding more density to this area is not the right approach.

I22-3

The population growth trends (2010 census) indicates we are in line with our sister cities (like Manhattan Beach and Redondo Beach).



I22-3 Cont.

Figure 1: Population Growth Trends

- **Not-In-My-Backyard:** I am all in favor of development of my underutilized 'backyard' and vacant lands in my city, without any doubt. But this type of high-density residential development doesn't bode well for our city. We recently submitted a 116-page comments (and exhibits over several hundred pages) to strongly oppose the development of LAX Airfield and Terminal Modernization Project DEIR in our backyard (Attached: Appendix 2). So, it would be more than logical to oppose the same occurring anywhere in our city. We should be able to fend off as being obstructionist and nimby by the proponents of these developments by offering valid and rational reasoning for such opposition.

I22-4

- **Economic Development Element:** Building more retail on the underutilized surface parking lots in along the PCH would be a great solution and generate more jobs/revenue to the city. However, we should not be blinded by the revenue aspect to change the commercial/hotel zone into a high-density residential zone. Since Los Angeles is hosting the 2028 Summer Olympics and Paralympic Games, we would be needing more hotel rooms for this and future events. We should study the benefit of building a new hotel along East and West of PCH.

I22-5

We have 2600 hotel rooms in El Segundo today (Attached; Appendix: 3), but with large events occurring in the future, we may need more otherwise, this revenue would go to other South Bay Cities or to other areas of Los Angeles County. I22-5 Cont.

- **Land Use Element:** There are swaths of vacant and underutilized lands in El Segundo. The zoning of these lands could be changed to build low density apartment complexes to aid in 2021-2029 Regional Housing Needs Assessment that commits building 492 new units during this period. Additionally, the Smokey Hollow area could be rezoned into a mixed-use for office/retail/residential (retail/office on the lower floor and residential on the higher floor). The DEIR for Smokey Hollow (2018: Attached: Appendix 4) should be revisited as alternative solution for increasing the availability of housing. We should also consider building residential housing East of PCH for the thousands of office/commercial employees working in this quadrant of the city. In the past, there was opposition to housing East of PCH (News report: 2018 Attached: Appendix 5) including some due to the property tax portion not reaching the El Segundo School District but to Wiseburn School District. These can be re-negotiated to provide equitable and fair share of the property tax collection to both the school districts. A recent example of such collaboration is the "City of El Segundo Wiseburn Unified School District Aquatics Center". I22-6

- **Circulation and Arterial Road Element:** The EIR completely ignores traffic on Washington Street and Mariposa Avenue while reporting that there is no impact, which is grossly incorrect. The go-around-the-block traffic for PCC North will need to traverse through Washington Street as the adjoining street Illinois Ct. (Cul-de-sac) is not a through street. The Grand Avenue/Holly Ave street will also be clogged by the new high-density traffic. The assumption that building an extra right-lane on Mariposa going south to solve all the traffic problems is a gross misrepresentation, since it ignores the other surrounding streets (Palm/maple) which may need additional lanes to handle the new traffic. Some portion of the DEIR study was done during the pandemic without adjusting for increased numbers pre-pandemic (COVID-19) and pent-up demand that would occur post pandemic. I22-7

- **Open Space and Recreational Element:** The new development lacks any recreational facility for its residents and will lead to strain on the existing City Parks and Recreational Facilities. The DEIR reports no significant impact to the nearby parks which is highly misrepresented, including the main Rec Park on Sheldon Street (with limited Tennis/Volleyball/Basketball courts that we currently have). I22-8

- **Air Quality Element:** The DEIR neglects and underrepresents the air quality deterioration of the nearby environments when 267 residentials units and several retail spaces bring in cars and their emissions in a small confined area. I22-9

- **Noise Element:** The DEIR underplays the permanent increase in the noise to the surroundings blocks due to the new development. Additional noise intensification due to the new 90 feet and 85 feet buildings bouncing the airport noise back into the adjacent neighborhood, wasn't correctly studied and reported. I22-10

- **Parking:** Insufficient guidelines were used for build parking for the new development. The DEIR assumes that new residents will be highly favoring public transportation, which is factually incorrect. It is wrongly implied that most of affordable housing residents do not own a car and uses public transportation. The public transportation in Los Angeles is severely limited, the DEIR relies on other cities with highly developed public transportation (like Bay Area etc.,) to justify the lack of sufficient parking spots. The DEIR fails to note that on special events when the hotel is at full capacity the residence parking would be limited and would overflow into the surrounding neighborhood, exacerbating a worsening parking situation. The proposal to introduce permit parking program to newer streets like Indiana Street is forcing unnecessary and unwanted hassle on the current residents of these streets. Again, there is no mention of Washington Street as an impacted street, while listing Illinois Ct., which is cul-de-sac and not a through street, already having very limited free parking spaces. Expansion of the permit parking program should be entirely avoided by building sufficient parking in any new retail/residential developments. The overflowing parking from this new development would cause inconvenience to visitors to Freedom Park, Washington Park and Constitution Park and would incur a massive drop in active users of these very fine parks. I22-11

- **Public Safety Element:** The DEIR doesn't properly document the impact to public safety element and need for additional city staff (fire/police/paramedics etc.,) to handle almost 1000 additional residents in these 267 dwelling units and the several retail spaces. I22-12

Conclusion:

For the reasons set forth above, I respectfully request that no further consideration be given to the proposed project without incorporating these comments and is fully compliant. I22-13

I thank you for the opportunity to comment on the DEIR.

Very truly yours,



Venu Joshi
605 Washington Street
El Segundo, CA-90245

Appendix

Appendix 1 : Los Angeles Times Neighborhood report

Appendix 2 : El Segundo Comments for LAX Airfield and Terminal Modernization Project

DEIR_page 2, 17 and 18.

Appendix 3 : Hotel Rooms in El Segundo (destinationelsegundo.com)

Appendix 4 : 2018 DEIR for Smokey Hollow

Appendix 5 : Housing east of PCH (Daily Breeze 2018)



4/4/2021 El Segundo Profile - Mapping L.A. - Los Angeles Times

- Member Center
- Alerts & Newsletters
- Jobs
- Cars
- Real Estate
- Rentals
- Weekly Circulars
- Local Directory
- Place Ad

Los Angeles Times

Local

- HOME
- LOCAL
  - L.A. Now
  - Politics
  - Crime
  - Education
  - O.C.
  - Westside
  - Neighborhoods
  - Environment
  - Data & Maps
  - Local Plus
- U.S.
  - Politics
  - Nation Now
  - Politics Now
  - Top of the Ticket
  - Science
  - Science Now
  - Obituaries
- World
  - World Now
  - Afghanistan war
  - Africa
  - Americas
  - Asia
  - Europe
  - Middle East
- Business
  - Money & Co.
  - Technology
  - Autos
  - Highway 1
  - Company Town
  - Personal Finance
  - Jobs
  - Real Estate
  - Business Plus
- Sports
  - Sports Now
  - Lakers
  - Clippers
  - Dodgers
  - Angels
  - NFL
  - Kings
  - NHL/Ducks
  - USC
  - UCLA
  - Preps
  - Scores
- Entertainment
  - Awards: The Envelope

https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ 1/6

I22-14



4/4/2021 El Segundo Profile - Mapping L.A. - Los Angeles Times

- Movies
- TV
- Music
- Celebrity
- Arts & Culture
- Industry
- Critics' Picks
- Entertainment Plus

- Health
  - Science Now
  - Medicine
  - Fitness & Nutrition
  - Mental Health
  - Healthcare
  - Mind & Body
  - Health Plus
- Style
  - Home
  - Food
  - California Cookbook
  - Fashion
  - Books
  - L.A. Affairs
  - Comics
  - Reader photos
  - Living Plus
- Travel
  - California
  - Mexico
  - Hawaii
  - Las Vegas
  - Europe
  - Asia
  - Australia
  - Travel & Deal Blog
  - Travel Plus
- Opinion
  - Editorials
  - Op-Ed
  - Letters
  - Opinion L.A.
  - Top of the Ticket
  - Readers' Rep
- Shop
  - Daily Deals
  - Travel Offers
  - Weekly Circulars
  - Offers & Deals
  - Sports Gear
  - L.A. Times Product
  - See More

MAPPING L.A. > SOUTH BAY

El Segundo

PROFILE CRIME SCHOOLS COMMENTS

https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ 2/6

I22-14
Cont.

4/4/2021 El Segundo Profile - Mapping L.A. - Los Angeles Times

Sections: Population Ethnicity Income Education Age Housing Families Military Ancestry

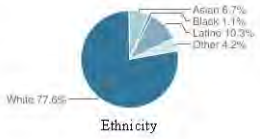
Source: Census 2000, SCAG, Los Angeles Department of City Planning

Population

- **15,970** population in 2000, according to the U.S. Census
- **5.46** square miles
- **2,925** people per square mile, **among the lowest densities** for **South Bay** and **among the lowest densities** for the county

Ethnicity

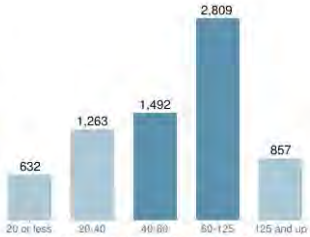
- The percentage of **white** people is high for the county.
- **Not especially diverse** for **South Bay** and **not especially diverse** for the county



Ethnicity

Income

- **$83,925** median household income (2008 dollars), **about average** for **South Bay** but **high** for the county
- In Los Angeles County, **Mission Hills**, **Arcadia** and **Elizabeth Lake** have the most similar household incomes.
- The percentages of households that earn **$60,000 to $125,000** and **$40,000 to $60,000** are high for the county.



Household income in thousands of 2000 dollars

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Coastline Pilot |
Daily Pilot |
Huntington Beach Independent |
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https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ 3/6

I22-14 Cont.

Education

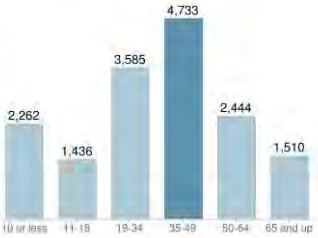
- **40.8%** of residents 25 and older have a four-year degree, **about average** for **South Bay** but **high** for the county
- In Los Angeles County, **Rowland Heights**, **Northridge** and **Palms** have the nearest percentage of residents 25 and older with a four-year degree.
- The percentages of residents 25 and older with **some college education**, **a bachelor's degree** and **a master's degree or higher** are high for the county.



Education level

Age

- The median age is **36**, **about average** for **South Bay** and **about average** for the county
- In Los Angeles County, **Alhambra**, **Del Rey** and **Eagle Rock** have similar median ages.
- The percentage of residents ages **35 to 49** is among the county's highest.



Age

Housing

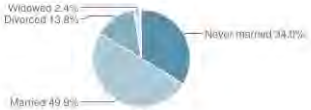
- Average household size of **2.3** people, **low** for **South Bay** and **low** for the county
- **Gardena**, **Hancock Park** and **Lynwood** have the most similar percentage of homeowners in Los Angeles County.



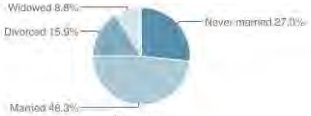
Occupied housing units

Families

- The percentages of **divorced males** and **divorced females** are among the county's highest.
- There are **512** families headed by single parents. The rate is **13.0%**, **about average** for **South Bay** and **about average** for the county



Males



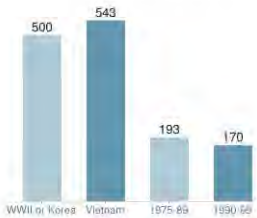
Females

Military

- There are **1,406** veterans, or **11.4%** of the population, **high** for **South Bay** and **high** for the county overall

I22-14
Cont.

- The percentages of veterans who served during Vietnam and 1990-99 are among the county's highest.



Ancestry and immigration

- **German** (13.5%) and **Irish** (11.5%) are the most common ancestries.
- **1,973** (12.4%) of residents are foreign born, low for South Bay and low for the county. **Canada** (12.4%) and **India** (9.2%) are the most common foreign places of birth.

El Segundo is a city in the South Bay region of Los Angeles County.

The neighboring communities are Del Aire, Hawthorne, Manhattan Beach, Playa del Rey and Westchester.

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CRIME ALERTS

VIOLENT CRIME PROPERTY CRIME

- Sherman Oaks
- Tarzana
- Green Meadows

I22-14 Cont.



4/4/2021 El Segundo Profile - Mapping L.A. - Los Angeles Times

- Arlington Heights

CRIME RANKINGS

VIOLENT CRIME

1. Chesterfield Square
2. Vermont Vista
3. Vermont Knolls
4. Harvard Park
5. Broadway-Manchester

PROPERTY CRIME

1. Elysian Park
2. Fairfax
3. Beverly Grove
4. Playa Vista
5. Rancho Park

About This Project

El Segundo is one of the 272 neighborhoods in Mapping L.A., The Times' resource for crime, neighborhoods, demographics and schools.

More about Mapping L.A. »

About The Data Desk

This page was created by the Data Desk, a team of reporters and Web developers in downtown L.A.

- Track our latest projects »
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https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ 6/6

I22-14
Cont.

taking any action on the proposed Project.

The ATMP will add a new Terminal 9 and a new Concourse 0, together containing up to twenty-nine new "contact" gates for passenger loading. These new facilities would create substantial noise, transportation, and air pollution impacts affecting El Segundo residents, who already deal with the impacts from one of the busiest airports in the world. The DEIR also includes a variety of safety and "efficiency" improvements on the north and south airfields, including lengthened and reconfigured taxiways. Despite these airfield improvements, the Project does not provide for the lengthening of any north airfield runways or further separate the current runways on the north side. Thus, the Project would exacerbate the existing operations imbalance between the north and south airfields, which places the impacts of the bulk of operations—involving the largest, heaviest, noisiest, and dirtiest aircraft—on El Segundo's residents, thereby sparing City of Los Angeles residents such impacts.

The Project also includes major roadway demolition and reconstruction, including a consolidation of eastern access to the Central Terminal Area ("CTA") from Century Boulevard, and direct vehicle access to the proposed Terminal 9 curbside area from Sepulveda Boulevard. Considered together with ongoing construction from other current and future LAX projects, the ATMP would subject residents of El Segundo and nearby communities to nearly a decade of intense construction activity. In addition, the expansion would exacerbate a growing problem of travelers and LAX workers using and parking on El Segundo streets. This letter explains the legal inadequacies of the DEIR under the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 et seq. As we explain below, the DEIR is woefully deficient in numerous respects, and must be substantially revised and recirculated before decisionmakers can consider the Project.[2]

I22-15

It is important to note that El Segundo is mindful of the fact that it entered into a 2017 settlement agreement with LAWA regarding the LAX Landside Access

[2] We appreciate that LAWA responded to El Segundo's request for an extension of the 45-day deadline for public comment on the DEIR, ultimately extending the comment due date to March 15, 2021 from December 14, 2020. LAWA unnecessarily made the process of commenting on the DEIR more difficult, however, by rejecting El Segundo's request for an "unlocked" copy of the DEIR such that text may be copied and pasted into commenters' written comments. LAWA's "policy" not to unlock EIRs that are circulated for public comment makes the public's right to comment more difficult, particularly when dealing with a document of this DEIR's size and density.

II. The DEIR Is Fatally Flawed Due to Its Failure to Analyze Project Impacts Beyond the Aspirational Buildout Year of 2028.

Unlike in previous EIRs for airport expansion projects, in which LAWA has claimed that the project would have no effect on passenger/operational capacity and thus the project would effectively have no operational impacts, here LAWA has taken a new, but still troubling, approach. Once again, LAWA claims that passenger/operational capacity would be essentially unaffected by any of the Project's improvements, and future demand/capacity with the Project would be the same as future demand/capacity without the Project. DEIR at pp. 6-4 and 6-5; *see generally* DEIR, Appendix B.1. In prior EIRs, LAWA used this reasoning to justify concluding that projects' impacts were less than significant or nonexistent. Here, however, for all impacts that LAWA concludes would be significant and unavoidable in the Project completion year (2028) even if the Project were not built—i.e., for impacts which LAWA claims are not the direct or even indirect result of the Project, but would occur anyway—LAWA nonetheless concludes that these impacts are significant and unavoidable *Project* impacts. Effectively, LAWA is hedging its bets that the BOAC, and the City of Los Angeles, will approve this much-touted, long anticipated Project regardless of its impact on the environment and communities surrounding the airport, which for decades have shouldered the burden of LAX's negative externalities. I22-15

As explained in the following pages, however, LAWA would be wrong to assume this approach is a prophylactic against a CEQA challenge. First, as a general matter, CEQA requires lead agencies to use "best efforts" to estimate all "reasonably foreseeable" impacts. CEQA Guidelines §§ 15144, 15064(d). Second, LAWA's claim that the Project would have no effect on LAX's passenger/operational capacity is undercut by the forecast data included in the DEIR. Third, it is simply common sense that the Project would expand LAX's operational capacity. Fourth, the DEIR is part of a sustained pattern and practice of thwarting CEQA's requirements by claiming that the Project will have no effect on aviation growth, and therefore no impacts associated with growth. Fifth, the DEIR lacks evidence for its claims that the airport without the Project could accommodate the same operations/year as with the Project in 2028, 2033 and 2045. Each of these is a reason that the DEIR's analysis is fatally flawed and is independent of the others, and thus a separate ground for finding the analysis legally inadequate.

A. CEQA Requires Lead Agencies to Use "Best Efforts" to Estimate All "Reasonably Foreseeable" Impacts.

While the DEIR analyzes impacts for the Project completion year of 2028, except

in limited instances discussed in the relevant impact discussions below, the document does not analyze impacts beyond 2028. Thus, even though the Project represents an enormous, unprecedented expansion of the airport, including for the first time putting passenger facilities on the east side of Sepulveda Boulevard (18 new passenger gates at the proposed new Terminal 9), the DEIR analyzes the Project's impacts only until the aspirational Project buildout year. In effect, the DEIR just focuses on construction impacts for this huge Project, and ignores the fact that the Project will be a permanent capital improvement to the airport, with added capacity for daily operations continuing indefinitely into the future. The DEIR rationalizes this approach by claiming, through its aviation growth forecast, that operations would be the same with or without the Project, yet the DEIR lacks evidence for this claim and in fact shows that the Project would enable LAX to continue operating at capacity for longer than if the Project were not built. LAWA therefore has not justified truncating its CEQA analysis at the Project buildout year and ignoring the noise, air quality, greenhouse gas ("GHG") and other impacts of the Project's operations.

LAWA cannot claim that analyzing operational impacts out to 2045 would be "speculative" because here no speculation is required: LAWA has provided detailed forecasts of anticipated passenger and aircraft operations out to 2045, 17 years beyond the aspirational buildout year and 26 years beyond the baseline year. DEIR, Appendices B.1 and B.2. The DEIR provides no rationale for concluding that impacts in 2028 would be significant and unavoidable based on forecasted future operations through 2045, while failing to make significance conclusions for impacts beyond 2028. As El Segundo's expert consultants note in their attached reports, LAWA's approach here of truncating its analysis of the Project's operational impacts to a buildout year less than 10 years away is not the norm, especially given the size and scope of the Project. Specifically, it is "surpris[ing] that the future analysis study year is only 10 years from the baseline year (2028), whereas many large projects include study years which are 20 years in the future so as to avoid a future year too close to the current year once the project is implemented." Svinth Report at p. 3 (noting that the EIR for San Jose International Airport's 2017 Master Plan analyzed noise impacts 20 years into the future). *See also* Kanafani Report at p. 2 ("The DEIR fails to assess the effect of the improvements on traffic growth and on the resulting environmental impact of this growth.").

CEQA requires lead agencies to use "best efforts" to estimate all "reasonably foreseeable" impacts. CEQA Guidelines §§ 15144, 15064(d). Because LAWA claims to know the level of passengers/operations at LAX each year through 2045, and has used these growth forecasts to evaluate the Project's impacts in 2028, the DEIR violates this

I22-15
Cont.



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If you're visiting the area for business, skip the usual airport-adjacent hotels and book your room in El Segundo instead. Just a short drive from Los Angeles International Airport (LAX), El Segundo feels like a world away with its well-appointed hotel rooms, trendy shops and friendly vibe. An easy commute gets you anywhere you need to go, so you'll be able to breeze through your work-day without wasting time in traffic. Once you're done for the day, come back to El Segundo for dinner and drinks at one of the many award-winning restaurants. Who says you can't mix business and pleasure?

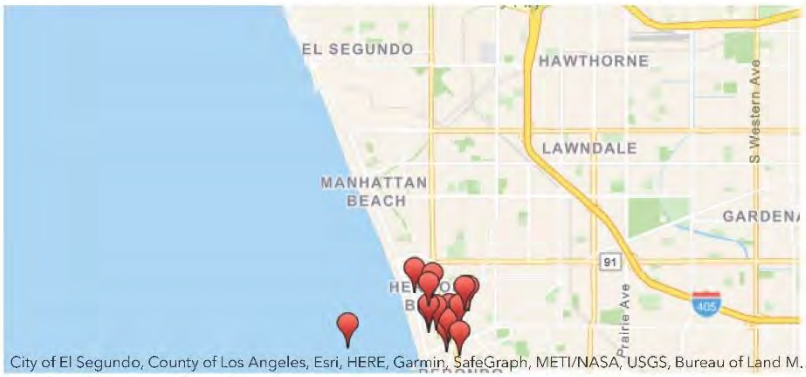
Consider yourself lucky if you're among the travelers visiting Southern California on vacation, because El Segundo is the region's hidden gem. Its central location makes it easy to hit all the must-see spots in the area, including many of SoCal's most famous beaches. The numerous hotels are refreshingly affordable, which means more money in your pocket for L.A. favorites like green juice, bike rentals on the beach or a night out on the town. It's also a great spot for families, with the nearby Pacific Coast Highway offering a scenic and convenient route to anywhere you could want to go, including Santa Monica Pier, Disneyland, Universal Studios and more.

Looking for a comfortable, stylish and convenient place to call home while visiting Southern California? El Segundo is everything you want and more.



I22-16

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism



Total 15 locations found.

AC Hotel



ADDRESS:
2130 East Maple Avenue
El Segundo, CA 90245

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Modern Meeting Spaces

Aloft



ADDRESS:
475 North PCH
El Segundo, CA 90245

PHONE:
(424) 290-5555

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Parking
- Pet-friendly
- Pool
- Restaurant
- Room Service

https://www.destinationelsegundo.com/hotels/all-hotels 2/12

I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

- Smoke-free

Cambria Hotel LAX



ADDRESS:
199 Continental Boulevard
El Segundo, CA 90245

PHONE:
(310) 965-0555

AMENITIES:

- Bar
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Outdoor Pool
- Pet-friendly
- Restaurant
- Smoke-free
- Spa-inspired Bathrooms with Bluetooth Mirrors

Courtyard



ADDRESS:
2000 East Mariposa Avenue
El Segundo, CA 90245

PHONE:
(310) 322-0700

AMENITIES:

- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Pool
- Restaurant
- Room Service
- Smoke-free

DoubleTree

https://www.destinationelsegundo.com/hotels/all-hotels 3/12

I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism



ADDRESS:
1985 East Grand Avenue
El Segundo, CA 90245

PHONE:
(310) 322-0999

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Parking
- Pool
- Restaurant
- Room Service
- Smoke-free

Embassy Suites



ADDRESS:
1440 East Imperial Avenue
El Segundo, CA 90245

PHONE:
(310) 640-3600

AMENITIES:
- Airport Shuttle
- Bar
- Fitness Center
- Free Breakfast
- Parking
- Pet-friendly
- Pool
- Restaurant
- Room Service

Extended Stay Hotels



ADDRESS:
1910 East Mariposa Avenue
El Segundo, CA 90245

PHONE:
(800) 804-3724

AMENITIES:
- Free Breakfast
- Kid-friendly
- Pet-friendly

Fairfield Inn

https://www.destinationelsegundo.com/hotels/all-hotels 4/12

I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism



ADDRESS:
525 Pacific Coast Highway
El Segundo, CA 90245
PHONE:
(424) 290-5000

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Breakfast
- Kid-friendly
- Pool
- Restaurant
- Room Service
- Smoke-free

Hampton Inn & Suites



ADDRESS:
888 North Pacific Coast Highway
El Segundo, CA 90245
PHONE:
(310) 322-2900

AMENITIES:
- Airport Shuttle
- Bar
- Fitness Center
- Free Breakfast
- Free Wi-Fi
- Kid-friendly
- Pool

Hilton Garden Inn



ADDRESS:
2100 East Mariposa Avenue
El Segundo, CA 90245
PHONE:
(310) 726-0100

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
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- Smoke-free

https://www.destinationelsegundo.com/hotels/all-hotels 5/12

I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

Hotel 2Twentyone



ADDRESS:
221 Concord Street
El Segundo, CA 90245

PHONE:
(310) 322-6116

AMENITIES:
- Free Wi-Fi

Hyatt House



ADDRESS:
810 South Douglas
El Segundo, CA 90245

PHONE:
(310) 725-0100

AMENITIES:
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Smoke-free

Hyatt Place



ADDRESS:
750 North Nash Street
El Segundo, CA 90245

PHONE:
(310) 322-2880

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Restaurant
- Room Service
- Smoke-free

Residence Inn

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I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism



ADDRESS:
2135 East El Segundo Boulevard
El Segundo, CA 90245

PHONE:
(310) 333-0888

AMENITIES:
- Airport Shuttle
- Business Center
- Fitness Center
- Free Breakfast
- Kid-friendly
- Parking
- Pet-friendly
- Pool
- Smoke-free

Travelodge



ADDRESS:
1804 East Sycamore
El Segundo, CA 90245

PHONE:
(800) 760-6483

AMENITIES:
- Business Center
- Fitness Center
- Free Breakfast
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Pool
- Smoke-free

AC Hotel



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I22-16 Cont.

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I22-16 Cont.

4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

Hyatt Place

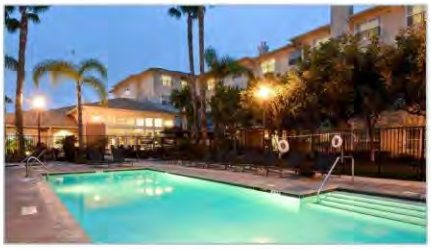


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Travelodge



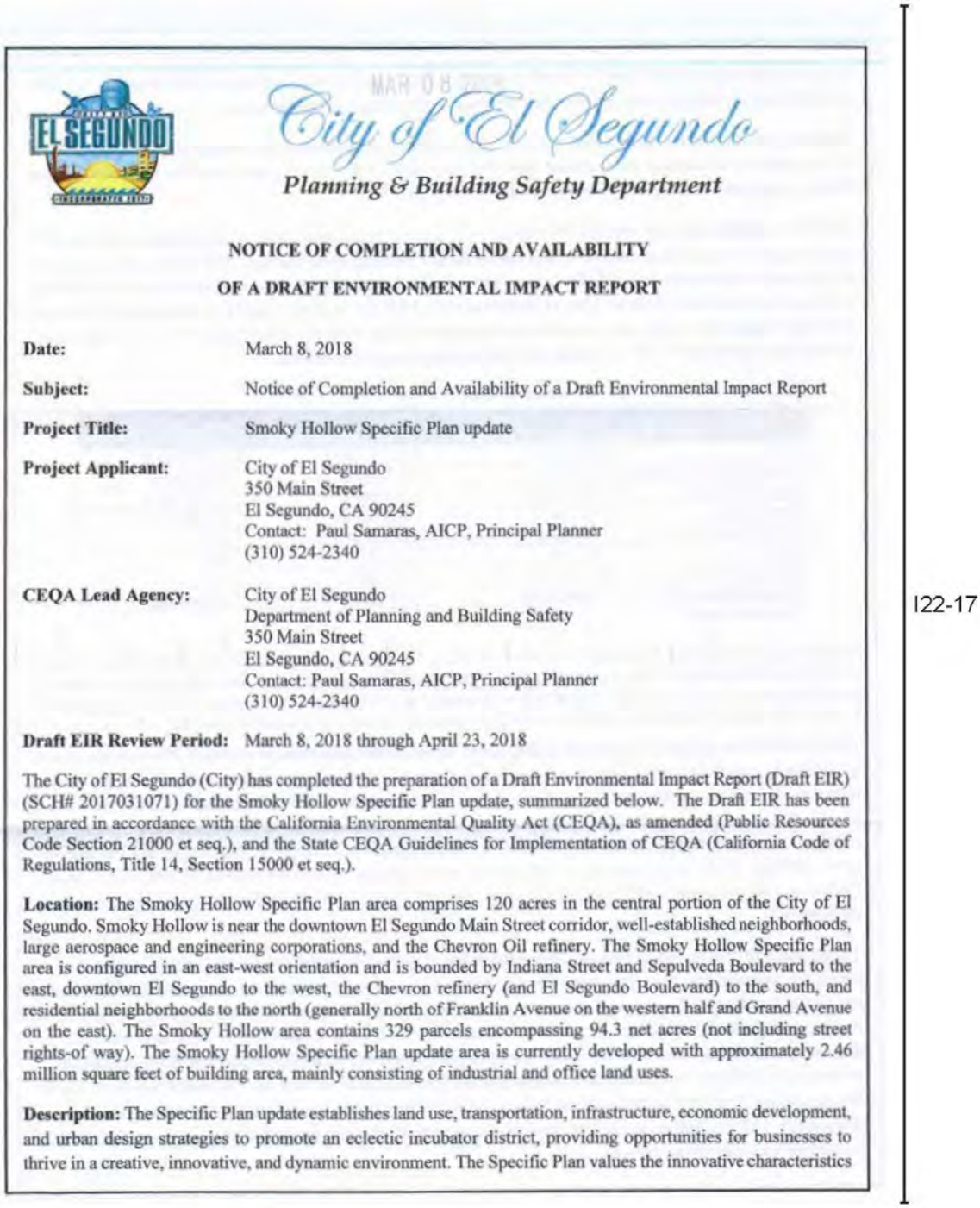
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- Smoke-free

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I22-16
Cont.



MAR 08

City of El Segundo

Planning & Building Safety Department

NOTICE OF COMPLETION AND AVAILABILITY

OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date:	March 8, 2018
Subject:	Notice of Completion and Availability of a Draft Environmental Impact Report
Project Title:	Smoky Hollow Specific Plan update
Project Applicant:	City of El Segundo 350 Main Street El Segundo, CA 90245 Contact: Paul Samaras, AICP, Principal Planner (310) 524-2340
CEQA Lead Agency:	City of El Segundo Department of Planning and Building Safety 350 Main Street El Segundo, CA 90245 Contact: Paul Samaras, AICP, Principal Planner (310) 524-2340
Draft EIR Review Period:	March 8, 2018 through April 23, 2018

The City of El Segundo (City) has completed the preparation of a Draft Environmental Impact Report (Draft EIR) (SCH# 2017031071) for the Smoky Hollow Specific Plan update, summarized below. The Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended (Public Resources Code Section 21000 et seq.), and the State CEQA Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Section 15000 et seq.).

Location: The Smoky Hollow Specific Plan area comprises 120 acres in the central portion of the City of El Segundo. Smoky Hollow is near the downtown El Segundo Main Street corridor, well-established neighborhoods, large aerospace and engineering corporations, and the Chevron Oil refinery. The Smoky Hollow Specific Plan area is configured in an east-west orientation and is bounded by Indiana Street and Sepulveda Boulevard to the east, downtown El Segundo to the west, the Chevron refinery (and El Segundo Boulevard) to the south, and residential neighborhoods to the north (generally north of Franklin Avenue on the western half and Grand Avenue on the east). The Smoky Hollow area contains 329 parcels encompassing 94.3 net acres (not including street rights-of way). The Smoky Hollow Specific Plan update area is currently developed with approximately 2.46 million square feet of building area, mainly consisting of industrial and office land uses.

Description: The Specific Plan update establishes land use, transportation, infrastructure, economic development, and urban design strategies to promote an eclectic incubator district, providing opportunities for businesses to thrive in a creative, innovative, and dynamic environment. The Specific Plan values the innovative characteristics

I22-17



4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

LOCAL NEWS

El Segundo may study building housing east of Sepulveda for the first time

By MEGAN BARNES | mbarnes@scng.com | Long Beach Press-Telegram
PUBLISHED: March 7, 2018 at 6:13 p.m. | UPDATED: October 30, 2018 at 2:39 p.m.

https://www.dailybreeze.com/2018/03/07/el-segundo-may-study-building-housing-east-of-sepulveda-for-the-first-time/?fbclid=IwAR3J740z4v... 1/5

I22-18

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

Housing in El Segundo

El Segundo is considering using a $650,000 Metro grant to study future development on the east side of the city, including the possibility of high-density housing. Housing has only existed in the northwest quadrant of the city.



Source: City of El Segundo

PAUL PENZELLA — SCNG

El Segundo is considering using a $650,000 Metro grant to study future development on the east side of the city, including high-density housing.

But city officials don't seem open to the idea of adding first-ever housing to the area, let alone affordable or low-income units.

At Tuesday's council meeting, city staff presented the Transit-Oriented Development Planning Grant as a way to fund a major piece of the first update in 26 years of the city's General Plan, a document that guides future development.

A special fund created in 2009 for the long overdue overhaul has accumulated $600,000, about half of the estimated $1.5 million to $2 million needed for the effort.

With a phased approach, the city could use $370,000 in matching funds from the account combined with the Metro grant to cover a specific plan for the east side, which is a major component of the General Plan update.

https://www.dailybreeze.com/2018/03/07/el-segundo-may-study-building-housing-east-of-sepulveda-for-the-first-time/?fbclid=IwAR3J740z4v... 2/6

I22-18 Cont.

The Metro grant, which was OK'd by the agency's board of directors last week and would need approval next from the City Council, would explore both commercial and residential development opportunities near the city's three Metro stations. That includes studying the feasibility of building high-density affordable or low-income housing.

Hot topic

Building housing east of Sepulveda Boulevard is something the city's influential Economic Development Advisory Council has begun to explore separately.

But in the tight-knit, uniquely configured community known as "Mayberry by the Sea," it's a touchy subject.

Residential development has only existed in the northwest quadrant of town north of the Chevron Oil Refinery. The east side, divided by Sepulveda Boulevard, consists of industrial and commercial development, from shopping centers and creative offices, to the skyscrapers of major corporations, from Raytheon Co. to toymaker Mattel.

EDAC's plans to study eastside housing were met with an attempt late last year to put an initiative on the April ballot that would require voter approval for zoning changes to allow such development. But Councilwoman Carol Pirsztuk failed to win the support of her council colleagues for the measure.

Gregg McClain, a planning manager for the city, said the Metro study primarily would focus on increasing and reconfiguring commercial development, which today is largely made up of buildings sprinkled on vast parking lots.

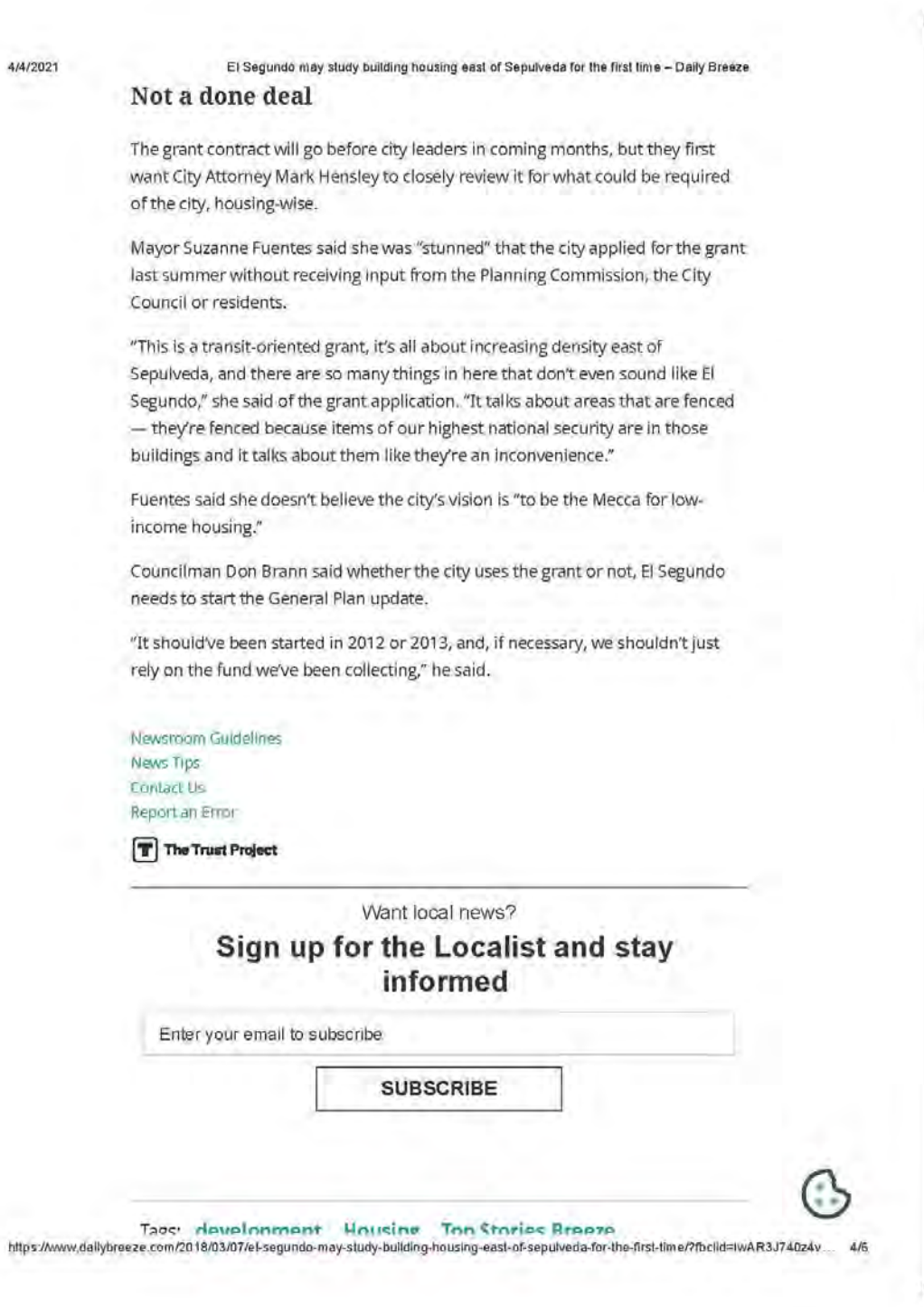
"One thing we we note is that back in '80s and early '90s when the Green Line was planned, the reason it goes through El Segundo is because El Segundo had an employment base at the time that was pushing up toward 100,000," he said.

The east side was never intended to be a residential area and planners knew that when they built the transit stations, McClain said.

"We personally don't support pursuing housing, but we want to study it, we want to study why. We have to look at this issue anyway, whether we take the grant or not," he said. "This is a good opportunity to study that question with someone else's funding, and it does take us a step closer to getting our General Plan done."

If the council agrees to use the Metro grant, the study would take about three years and involve the community. The General Plan could be completed in about five years, according to city staff.

I22-18 Cont.



4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

Not a done deal

The grant contract will go before city leaders in coming months, but they first want City Attorney Mark Hensley to closely review it for what could be required of the city, housing-wise.

Mayor Suzanne Fuentes said she was "stunned" that the city applied for the grant last summer without receiving input from the Planning Commission, the City Council or residents.

"This is a transit-oriented grant, it's all about increasing density east of Sepulveda, and there are so many things in here that don't even sound like El Segundo," she said of the grant application. "It talks about areas that are fenced — they're fenced because items of our highest national security are in those buildings and it talks about them like they're an inconvenience."

Fuentes said she doesn't believe the city's vision is "to be the Mecca for low-income housing."

Councilman Don Brann said whether the city uses the grant or not, El Segundo needs to start the General Plan update.

"It should've been started in 2012 or 2013, and, if necessary, we shouldn't just rely on the fund we've been collecting," he said.

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I22-18 Cont.

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

Megan Barnes | reporter

Megan Barnes covers crime and public safety for the Press-Telegram. She was previously a city reporter at the Daily Breeze, where she covered the South Bay beach cities and the Palos Verdes Peninsula. Before that, she was a freelancer writing about LGBT news and her hometown of San Pedro, where she probably made your latte at Starbucks. She loves iced Americanos and Radiohead and finally got to see them live on the A Moon Shaped Pool tour. It was magical.

mbarnes@scng.com

Follow Megan Barnes @meg_barnes



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I22-18 Cont.



4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

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I22-18 Cont.

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Response to Comment Letter I22

Venu Joshi
April 4, 2021

I22-1 This comment is introductory in nature; no response is required.

I22-2 This comment states that the Draft EIR has "neglected impacts to key areas," specifically within the vicinity of the commenter's residence, which is along Washington Street. The comment further states that the proposed Project would cause a "major impact" to nearby residents and to the City in general. The commenter notes that the City should consider the character of the area and "refuse to allow any super high-density residential construction" and should instead build low-density residential uses across the City.

Regarding the comment on neighborhood impacts, the Project's effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[14] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.). As such, the potential environmental effects of the Project on its surroundings (including the surrounding neighborhood) have been evaluated and disclosed in the Draft EIR, and any identified significant impacts would be mitigated to the extent feasible. The commenter's concerns regarding negative impacts to their neighborhood will be included as part of this Final EIR for City decision makers' review and consideration.

The commenter's suggestion for the City to develop lower-density residential uses is addressed in Responses to Comments I21-12 and I21-31. As explained in those responses, spreading out the proposed Project's land uses across wider areas of land would increase environmental impacts in multiple categories. Nevertheless, the commenter's suggestions regarding land use in City will be included in this Final EIR for review and consideration by decision makers.

Additionally, while community character is not a topic that is specifically addressed under CEQA, effects related to the proposed Project's consistency with policies governing scenic quality and with the City's land use plans and goals have been analyzed in the Draft EIR in Sections 4.1 and 4.9, respectively. Significant impacts were not identified in these categories.

I22-3 This comment expresses similar concerns and suggestions as Comments I21-12 and I21-31. As such, refer to Responses to Comments I21-12 and I21-31. Additionally, the commenter attaches an excerpt from the Los Angeles Times website and states that the City would be considered more dense if density calculations were limited to the residential portions of the City. The commenter further states that adding more density to the existing residential area of the City is not the right approach. The commenter

[14] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

also notes that population growth trends in the City are similar to those of nearby cities such as Manhattan Beach and Redondo Beach.

As described in Responses to Comments I21-12 and I21-31, dispersing the proposed Project across a larger area of land and constructing the proposed housing at a lower density would increase environmental impacts in multiple categories. Furthermore, the City is generally built out under current conditions. As such, building residences throughout areas of the City that are currently commercial or industrial would require redevelopment. While some of the City's industrial areas are currently being contemplated for redevelopment (e.g., the Smoky Hollow Specific Plan area), such areas may not be suitable for residential land uses, due to contamination concerns and/or land use incompatibility. Nevertheless, the commenter's suggestion to spread out residential land uses will be included in this Final EIR for review and consideration by decision makers.

I22-4 This comment expresses general opposition to the Project and to increased density. The comment does not raise any specific concerns regarding the environmental analysis in the EIR. No response is required; however, the commenter's objection to the Project and to high-density housing in the City will be included in this Final EIR for review and consideration by decision makers.

I22-5 This comment recommends studying the benefits of building a new hotel along the east and west sides of PCH. The commenter states that the City has 2,600 hotel rooms but that more may be needed in the future to accommodate large events. This comment does not pertain to the adequacy of the environmental analysis in the EIR. However, the commenter's recommendation for the City to study the benefits of additional hotels will be included in this Final EIR for review and consideration by decision makers.

I22-6 This comment consists of recommendations for alternative locations for new housing in the City. The commenter recommends the following: rezoning areas of the City that are vacant and underutilized for redevelopment with low-density apartment complexes; rezoning the Smoky Hollow Specific Plan area for redevelopment with mixed-use residential developments; and/or, building residential uses east of Pacific Coast Highway.

The suggestion for alternative locations to the proposed Project site, including new housing east of Pacific Coast Highway, is addressed in Response to Comment I21-12. The topic of building the proposed Project and/or new residences in the Smoky Hollow Specific Plan area is also addressed in Response to Comment I21-12. The suggestion of constructing lower-density housing in other areas of the City is also addressed in Response to Comment I21-12. As noted therein, spreading out the proposed Project's residential component across a larger land area would likely increase impacts in multiple environmental categories. Furthermore, the portions of the City that are not currently used for residential purposes are generally industrial or commercial in nature. While some properties may be vacant or underutilized, sites that were formerly used for industrial purposes may not be suitable for residential development, due to prior use of hazardous materials. Additionally, construction of residences within industrial and/or commercial areas, particularly where some industrial uses are still operational, may introduce an incompatible land use to the area. While the commenter's suggested alternate locations have been rejected as infeasible (as further enumerated in Section 6.4 of the Draft EIR and Responses to Comments I21-12 and I21-31), the suggestion for constructing lower-density housing elsewhere in the City will be included in this Final EIR for review and consideration by decision makers.

I22-7 This comment expresses concerns regarding increased traffic on Washington Street and Mariposa Avenue and states that the draft EIR concluded that no impact would occur. The commenter also states that Grand Avenue and Holly Avenue would be clogged by traffic associated with the proposed Project. The commenter further states that the proposed improvement on Mariposa Avenue would not address all traffic issues, because it would not address effects to other surrounding streets, such as Palm Avenue and Maple Avenue, which may need additional lanes to accommodate the new traffic. The comment concludes by stating that portions of the Draft EIR studies were conducted during COVID-19, and the EIR did not adjust for the increased traffic that would occur once COVID-19 closures are over.

Refer to Response to Comment I21-13, which addresses concerns regarding COVID-19 conditions and its effects on EIR data. Refer to Responses to Comments I6-3, I18-3, I21-6, and I21-10, which all address concerns regarding increased traffic on neighboring streets. Furthermore, it is noted that increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As such, the EIR does not identify any environmental impacts pertaining to increased traffic.

I22-8 This comment pertains to the EIR's impact determination for parks and recreation and states that the EIR's determination that no significant impacts would occur is "highly misrepresented." The comment also states that the Project does not include recreational facilities for residents.

Refer to Responses to Comments I21-5 and I21-18, which also address concerns regarding the Project's impacts to parks and recreational facilities and the EIR's analysis of this topic. The Project would include common open space areas, including rooftop pools and community rooms. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities.

I22-9 This comment states that the Draft EIR "neglects and underrepresents" the air quality impacts that would be caused by the proposed development, including associated traffic and emissions.

The topic of air quality is addressed and analyzed in Section 4.2 of the Draft EIR. The air quality analysis includes quantitative modeling that takes into consideration Project-related traffic on nearby roadways. Emissions from Project-generated vehicle trips are referred to as "mobile source" emissions in the air quality analysis. The air emissions modeling also takes into consideration "area source" emissions that would be associated with Project operations (e.g., emissions from consumer product use, architectural coatings, and landscape maintenance equipment), as well as energy-related emissions (e.g., emissions associated with natural gas usage in space heating, water heating, and stoves). As demonstrated in Section 4.2.4 of the Draft EIR, the Project's estimated maximum daily operational air emissions, including mobile source emissions (i.e., traffic-related emissions), would not exceed the applicable thresholds. As such, the Draft EIR contains a detailed analysis of the Project's effects on air quality, which includes modeling based on the proposed land uses and expected traffic generation. No significant impacts were identified based on this analysis.

I22-10 The comment asserts the Draft EIR "underplays" the permanent increase in noise to the offsite environment, and claims LAX aviation traffic noise was incorrectly studied.

As answered in Response to Comment I21-8, potential perceptible (i.e., at least 3 dB) noise amplification due to sound-reflecting building facades typically requires the receptor to be near the building facades—such as a listener on a highly trafficked urban roadway bounded by tall, densely-packed building facades. But when the perpendicular distance between a receptor and the façade is large, such as the approximate 500 feet between the single-family homes adjoining Washington Park and the nearest proposed PCC structural facades, the additional received sound energy due to that reflection is greatly diminished. Furthermore, addition of the proposed PCC buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the neighborhoods to the west, which was reflected in Table 4.10-6 of the Draft EIR and is reproduced to include addition of "ST7", a representative receptor on Washington Street (west side, mid-block between E. Palm Avenue and E. Elm Avenue) to demonstrate consideration of the single-family home neighborhood west of Washington Park.

I22-11 This comment raises concerns regarding the Shared Parking Analysis (Appendix J-2 in the Draft EIR) and the assumptions made in the analysis. This comment also states that the analysis overestimates transit use and that there is a lack of reliable transit in the Los Angeles area. The commenter also states that the analysis in the EIR relies on data from other cities with highly developed public transportation, such as cities in the Bay Area.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. The Metro C Line Mariposa Station is 0.5 miles from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 run along Pacific Coast Highway with stops near the Project site. The Palo Alto data referenced in the Shared Parking Analysis is shown as a point of comparison and indicated less parking demand even in areas not well served by transit (and even less near CalTrain).

The comment states that it is wrongly implied in the EIR that most of affordable housing residents do not own a car and use public transportation instead. This is not stated anywhere in the EIR. The proposed Specific Plan in Appendix B of the Draft EIR does, however, provide for less parking per unit for affordable units than for market rate units (0.5 spaces per studio unit, 1 space per 1-bedroom unit, and 1.5 spaces per 2-bedroom unit). A reduced parking requirement for affordable units is supported by research including empirical surveys conducted at affordable family units in Los Angeles, which found an average parking demand rate of 0.84 spaces per unit.

This comment also states that when the hotel is at full capacity, residents would be forced to park on the streets. Overnight hotel parking counts were conducted on a Saturday night. Since the surveys were done overnight (when hotel demand is highest) at 2 AM, they were technically done early Sunday morning. Regarding seasonality, the hotels were 75% and 76% occupied on the nights of the surveys. Therefore, the rates were factored up to represent 100% occupancy when the hotel parking demands were estimated. In addition, the assigned parking for residents is not part of the shared pool of parking and therefore will not be shared with the hotels and commercial uses.

This comment also expresses concerns regarding the potential permit parking district. If desired by the neighborhood, the applicant plans to work with residents to suggest the boundaries of this potential

permit parking district. A permit parking district would be implemented by the City at the request and approval of the residents and would allow potentially only residents to park on the street.

The shared parking analysis indicates that there would be sufficient parking for all uses that are part of the Project and therefore the need for overflow parking is not anticipated.

I22-12 This comment states that the Draft EIR does not address potential impacts to the General Plan Public Safety Element or the need for additional City staff (fire, police, paramedics, etc.) to accommodate the proposed additional residents and the retail spaces.

The Project's consistency with the goals, objectives, policies, and programs set forth in the City's Public Safety Element is discussed in Section 4.9 of the Draft EIR. Based on the analysis presented therein, the proposed Project was determined to be consistent with the applicable goals, objectives, policies, and programs from the Safety Element. As such, this topic has been addressed and discussed in the Draft EIR. While public safety itself is not a discreet environmental topic under CEQA, the topics of emergency access, traffic safety, and pedestrian and bicycle safety are addressed in several sections throughout the Draft EIR. Specifically, Section 4.13 discusses emergency access, roadway hazards, and bicycle and pedestrian facilities, including access and safety. Section 4.7 discusses emergency response and evacuation. Impacts in these categories were determined to be less than significant. Additionally, the ability of existing public services to accommodate the proposed Project is addressed in Section 4.12 of the Draft EIR. This section discusses the capacities of fire protection services, emergency medical services, police protection, schools, library services, and City administrative services. No significant impacts were identified for these categories as a result of the proposed Project.

I22-13 This comment concludes the comment letter and requests that the Project not be considered until the comments in the letter have been incorporated.

The commenter's concerns pertaining to the environmental analysis in the EIR have been addressed by the City in the responses above. This comment letter and associated responses will be provided to City decision makers for review and consideration as part of this Final EIR, prior to the decision hearing for the Project.

I22-14 The commenter has attached an excerpt from the Los Angeles Times Neighborhood Report, in support of Comment I22-3. The comment associated with this attachment pertains to residential density in the City and is addressed in Response to Comment I22-3.

I22-15 The commenter has attached an excerpt from the City's comments on the LAX Airfield and Terminal Modernization Project Draft EIR, in support of Comment I22-4. The comment associated with this attachment pertains to opposition to high-density residential development. The commenter states that since the City opposes development at LAX, it should also oppose high-density residential developments within the City, such as the proposed Project. Refer to Response to Comment I22-4, which addresses the commenter's concerns regarding high-density residential development.

I22-16 The commenter has attached a webpage listing hotels in the City, in support of Comment I22-5. This comment recommends that the City study the possibility of building new hotels along Pacific Coast Highway. Refer to Response to Comment I22-5, which addresses this comment.

I22-17 The commenter has attached the notice of availability associated with the 2018 Draft EIR for the Smoky Hollow Specific Plan update, in support of Comment I22-6, which presents suggestions for alternate locations for the proposed Project and new residences in the City. One of the suggested alternate locations is the Smoky Hollow Specific Plan area. Refer to Response to Comment I22-6, which addresses the commenter's suggestions for alternate locations.

I22-18 The commenter has attached a news article from 2018 about the potential for the City to study housing on the east side of Sepulveda Boulevard, to support statements regarding past opposition to housing on the east side of Pacific Coast Highway as part of a larger comment (Comment I22-6) that suggests an alternate location for the Project and new housing on the east side of Pacific Coast Highway. Refer to Response to Comment I22-6, which addresses the commenter's suggestions for alternate locations.

Comment Letter I23

From: James Decordova [redacted]
Sent: Thursday, April 8, 2021 1:40 PM
To: Samaras, Paul
Cc: ic.ccurry@gmail.com; Boyles,Drew (Mayor); Pimentel, Chris (Mayor Pro Tem); Pirsztuk, Carol (Council Member); Giroux, Lance (Council Member); Nicol, Scot (Council Member)
Subject: Pacific Commons Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Mr Samaras, I am a 40 year El Segundo resident. My home is in the 400 block of Washington St. Is it possible to see a map of the proposed development with specific detail showing where is planned housing, where is planned retail, and where are the proposed rental units? Perhaps an overlay of the current buildings, and their proposed replacements. This would be greatly appreciated. I23-1

Myself and many of my neighbors on Washington St never received the invite to the Zoom meeting held on March 31 until after the meeting was held. Suffice to say we are concerned, especially with the development of the International Rectifier site and its impact on traffic, and quality of life issues. I23-2

Thank You
Jim deCordova

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Response to Comment Letter I23

Jim deCordova
April 8, 2021

I23-1 This comment asks if there is a map of the proposed Project specifying where housing (townhomes), rental units, and retail is planned. The comment further requests an overlay of current buildings with the proposed Project. Figure 3-1, Conceptual Site Plan, within Chapter 3 of the Draft EIR includes the requested items. Figure 3-1 provides the conceptual site plan on the Project site with labels indicating existing structures surrounding the proposed development. Please see Figure 2-1, Regional Location and Vicinity Map, within Chapter 2 of the Draft EIR for the Project site's footprint overlaid onto existing conditions.

I23-2 This comment states the commenter and their neighbors did not receive an invite to the meeting held on March 31st, 2021. The meeting referenced was not a City-organized meeting or related to the CEQA documentation. This meeting was hosted by the Project Applicant and there were no specific notification requirements for the Applicant's outreach meeting. The comment further states concern for the proposed Project and cites a recent project at the former International Rectifier site and its impacts on traffic and quality of life. For discussion regarding an additional related project, see Topical Response No. 1 – Cumulative Impacts, above. In addition, please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation.

Additionally, while quality of life is not a topic that is specifically addressed under CEQA, effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[15] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details).

[15] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

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Comment Letter I24

From: Julia Withee [redacted]
Sent: Friday, April 9, 2021 12:23 PM
To: Samaras, Paul
Subject: Support of Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning Paul,

Happy Friday! I wanted to reach out to you in support of your Pacific Coast Commons project located in El Segundo, CA.

My husband and I moved to El Segundo three years ago as a newly married couple. We desperately wanted to live in the South Bay to remain close to our family and my husband's local office. However, it was a difficult process due to the lack of quality and well-priced apartment options. We finally found an amazing apartment in El Segundo where we had our first child. Eventually we outgrew our apartment and after seven months of searching for homes, placing offers, getting rejected, etc, we bought our first home in El Segundo! We were exceptionally lucky to be able to find and purchase a home in this incredible town. We have many friends who have been searching for a quality apartment or home in El Segundo and have had no luck.

As you know, a huge part of what makes this town exceptional is the people. The teachers, engineers, dog groomers, waiters, entrepreneurs and many more community members make this town the town that it is! These workers deserve to live close to their jobs. The addition of this mixed-use housing project will not only improve the lives of El Segundo workers, but also improve the aesthetics, accessibility, and utility of that section of PCH. This project will add so much value to the city of El Segundo. Thank you for your commitment to improving the lives of current and future El Segundo residents!

I24-1

Sincerely,
Julia Riboli

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Response to Comment Letter I24

Julia Riboli
April 9, 2021

I24-1 This comment expresses support for the proposed Project and cites the housing component, mixed-use proposal, aesthetics, accessibility, and utility of Pacific Coast Highway as reasons. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I25

From: Bianca Mendoza [redacted]
Sent: Sunday, April 11, 2021 1:59 PM
To: Samaras, Paul; Planning
Subject: Pacific Coast Commons Development Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras:

Please see my comments and questions with regard to the Pacific Coast Commons Development proposal:

1. Developer Lionel Uhry said it himself in the first few minutes of the ZOOM meeting on 3/31/2021 1730hrs: "PCC is being built in this location so as not to DISTURB the bulk of El Segundo population." So, what about the population that **is** being **DISTURBED**, what is being done for them? If housing were spread out to various other locations in El Segundo or moved East of PCH (rezoned, just like current site was to allow PCC to build) or in Smokey Hollow, the "DISTURBED" weight is spread out across a broader segment of our City. I25-1

2. There are many reasons why a municipality would want to develop and why people would support it: financial gain, benefit for the community, benefit for additional housing (questionable since we have tons for rent now at a 25% discount from before) or some mix of all. Question is, this proposal may have benefits but what is being done for those that stand to lose from this?

3. If a large contributing factor for development is a state requirement, then we, as for housing, need to spread out. We have 99% of our population in less than 25% of city limits.

   a. Why exacerbate some issues and create negative impacts for your population when you can achieve the goals by building east of PCH which solves or avoids almost all negatives and puts those new residents closer to **transit** which is one of the primary goals?
   b. If the City fears losing out of some type of money then it is quite unfair that the City gains on the shoulders of those largely impacted. It would be dubious to have issue with this because it is the same argument the City has made to LAX for decades and most recently a few weeks ago. Also, the airport has made numerous adjustments in how they operate over the years, provided funding to the City to mitigate impacts, and is quite sensitive to El Segundo. I know this from personal experience before and after working for Los Angeles World Airports (LAWA). If adopted, is the City prepared to do the same for its OWN impacted citizens or is that just an issue if someone ELSE wants to expand? I25-2

4. Building east of PCH is a win-win. It's closer to **transit**, doesn't disturb nor disrupt existing community, and it's possible via rezoning just like this proposal had leading up to it. Also, we know the City is considering it, as it is one of the "Housing Element's" survey choices for where to expand. Please see: https://www.elsegundo.org/government/departments/development-services/planning-division/housing-element-update-2021-2029 I25-3

5. How much money does El Segundo expect to receive if proposal adopted?

6. What percentage of money is the City going to use to mitigate negative impacts? I25-4

7. What percentage of money is being required of developer to mitigate negative impacts?

8. Why are so many units needed? We currently have more "For Rent" availability than has been seen in decades all over El Segundo. Additionally, the average monthly rent is down approx. 25%. Therefore, supply is I25-5

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up, price is down which is a strong argument against a high density development or at least a scaled down version of it.
Why fix a problem that is, at least in part, fixing itself?

I25-5 Cont.

9. The most environmentally friendly option is a "no build", which should be done. We have numerous environmentally friendly programs in place and continuing.

I25-6

Respectfully,

Bianca Mendoza

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Response to Comment Letter I25

Bianca Mendoza
April 11, 2021

I25-1 In this comment, the commenter asks what is being done for residences that are affected by the Project. The commenter further suggests that new housing be spread out to other locations in the City or built to the east of Pacific Coast Highway or within the Smoky Hollow Specific Plan area.

The proposed Project has been assessed for its impacts on the environment as part of the Draft EIR. Effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. Mitigation measures have been set forth to address the significant impacts that were identified in these categories (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[16] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). If the Project were approved by the City, the City would be required to adopt and enforce the mitigation measures.

For a response to the commenter's recommended alternate locations, see Responses to Comments I21-12 and I21-31.

I25-2 This comment states that the proposed Project may have benefits; however, the commenter asks "what is being done" for people who "stand to lose." The comment further states that most of the City's residents live within 25% of the City's land area. The commenter suggests building housing on the east side of Pacific Coast Highway. The commenter also states that the City opposes development within LAX and that the City should do the same for development within the City that affects its own citizens.

CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits. As such, City decision makers will consider the potential impacts of the Project, together with its benefits, when making a decision on whether to approve or deny the Project. As explained in Response to Comment I25-1, mitigation measures would also be enforced to minimize the Project's potentially significant impacts, if the Project were to be approved.

For responses to the commenter's suggestions for spreading new housing across other areas of the City and/or developing housing on the east side of Pacific Coast Highway, refer to Responses to Comments I21-12 and I21-31.

I25-3 This comment lists potential benefits of constructing housing on the east side of Pacific Coast Highway, such as proximity to transit and reduced disturbance to the existing community, and states that this would be possible through rezoning, similar to the rezoning that is associated with the proposed Project.

[16] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

For a response to the suggestion for alternate locations on the east side of Pacific Coast Highway, see Responses to Comments I21-12 and I21-31.

The comment further states that the City is considering housing on the east side of Pacific Coast Highway and cites the City's Housing Element update. The commenter states that the east side of Pacific Coast Highway is one of the Housing Element survey choices for where housing could expand.

The Housing Element update is anticipated to be adopted by the City in the fourth quarter of 2021. As such, the Housing Element update is currently in draft form and is not available for review at the time of this writing. The City's future plans regarding locations for future housing are therefore speculative at this time. Nevertheless, the commenter's support for expanded housing east of Pacific Coast Highway will be included as part of this Final EIR for review and consideration by decision makers.

I25-4 This comment presents questions for the City regarding financial aspects of the proposed Project, such as the amount of money the City expects to receive as a result of the Project, the percentage of funds to be used for mitigation, and the percentage of the applicant's funds to be used for mitigation.

These questions and comments regarding the Project's finances do not pertain to the environmental analysis in the EIR. As such, no response is required. However, these questions will be included as part of this Final EIR for review and consideration by City decision makers. If the Project were approved, the City and applicant would be required to adhere to the mitigation monitoring and reporting program that must be adopted along with the Project (see Chapter 4 of this Final EIR). The mitigation monitoring and reporting program identifies the party responsible for implementing each mitigation measure, as well as the agency responsible for monitoring implementation.

I25-5 This comment asks why "so many units" are needed. The comment further states that the availability of rental units has increased in the City and that rental costs are decreasing. The commenter states that the increased supply and decreased prices provide a strong argument against a high-density development. The commenter recommends a scaled-down version of the Project and states that the housing supply issue is "fixing itself."

The proposed Project's 263 new residential units would assist the City in meeting the mandated RHNA allocation of 492 housing units. The proposed Project would also help address the regional housing shortage by providing housing in close proximity to existing job opportunities. However, it is ultimately the decision of the City's elected officials to approve or deny the proposed Project and to weigh the Project's benefits (including the benefits of additional housing in the City) against its potential impacts (including potential impacts to neighboring residents).

The Draft EIR presents and analyzes two reduced versions of the proposed Project in Section 6.5. City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including the reduced project alternatives, which are identified as Alternatives B and C). The commenter's support for reduced versions of the proposed Project will be included in this Final EIR for review and consideration by decision makers.

I25-6 This comment states that the most environmentally friendly option would be a "no build" option. The comment also states that the City has numerous environmentally friendly programs in place.

The Draft EIR presents and analyzes a “no build” alternative to the proposed Project, which is identified in Section 6.5 as Alternative A. The analysis identifies Alternative A as the environmentally superior alternative. As stated above, City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative A). As such, the commenter’s support for Alternative A will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I26

From: paul morrison [redacted]
Sent: Sunday, April 11, 2021 3:24 PM
To: Samaras, Paul
Subject: ENVIRONMENTAL REVIEW PUBLIC COMMENT

Follow Up Flag: Follow up
Flag Status: Flagged

Paul Morrison
421 Indiana St. Apt #4
El Segundo, Ca
90245

exmudshark@yahoo.com
310-283-0301

I appreciate this opportunity to comment on the Environment Review for the PCC construction project.

I have been a resident of El Segundo for 25 years, residing in the same apartment for this duration. I am grateful for the opportunities that life in El Segundo has afforded me. I have been a law abiding member of the community during this time, save for one traffic citation: a seatbelt violation 1 1/2 blocks from my apartment.

I moved to El Segundo after a transfer from the City of Los Angeles Survey Division to work on the C-117 Hyperion Phase 2 Construction Project. As a member of that group of surveyors, I helped to complete the various projects assigned to us; eight of the reactors, twenty of the clarifiers, the TSF building and assorted projects to bring the Hyperion Waste Water Treatment Center up to World Class Standards. I26-1

I was the last surveyor to leave our permanent office at the plant. Before I left, I surveyed the entire site, leaving survey control at every intersection, both horizontal and vertical. This control network is the basis for every improvement on the plant. It will be forever used by the engineers, the contractors and the surveyors for the life of this plant.

I would like to address the ES-1 Summary of Project Impacts, page ES-23: Population and Housing. Specifically: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? The impact is recorded as "Less than Significant Impact".

The basis for my response is predicated on my 33 years of survey experience, the last 16 years of which I was employed as a City of Los Angeles Survey Party Chief, specializing in construction work. I fear this project will doom the two apartment building on Indiana Street, #403 and #421 (my residence), situated directly West of the parking structure. I am one of the working class tenants that I believe will be displaced due to this construction project, which makes me, in essence, an "UNsubstantial number of existing people" per the draft report. The prospect of finding alternative housing at my current rental rate appears extremely dim. Those of us that live and work in the area will not qualify for the "affordable housing" units due to our incomes, yet we will find ourselves unable to procure similar rental units in El Segundo. Once again, those that work for you are unable to live with you. I find this extremely bitter, considering that I will retire on May 8th of this year with a much reduced income. I26-2

I have worked around construction projects similar to this one. The level of disruption to those in the immediate vicinity will be intense and prolonged. The excavation required for the subsurface parking structure will require "I" beams, lagging and pile drivers. Such noise levels and vibration will not be modified by any type of "temporary noise barriers". It is a deafening, grueling procedure, considering the number of "I" beams required for the excavation. The truck traffic, noise and dust will be constant until this phase is completed. After that, the actual construction will take on the appearance of a sky scrapper being built. There will have to be an on site, permanent crane to move construction materials around the site. It will take on the appearance of a major construction site, which it will be, and this will take place ADJACENT to a zoned residential area - in such close proximity I have never witnessed before in my career. I26-3

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I expect a certain number of existing tenants in the two aforementioned apartments to eventually move out because of this project. As they leave, I view, dimly, any prospects of new renters willing to live next to this site, considering it's two plus years of construction. As the apartments lose tenants and become less and less profitable for the owners, what choice will they have but to sell out to another developer and replace affordable housing units with condominiums and their associated exorbitant price. To conclude that the project will have "Less than significant Impact" on the surrounding area seems to me a gross miscalculation, at the expense of an existing working class tenant population. I am appalled at the callus attitude the City of El Segundo has taken in regards to this Environmental Review. Lives will be negatively impacted and disrupted due to this ill thought out project. Never has there been a project of this scope built in El Segundo west of PCH. It is an encroachment on basic human rights for those of us that have lived decent, honorable lives in this city. I take great offense at being dismissed as a "Less than Significant Impact" in this review. I26-4

A final thought. It was interesting to note the absence of an "artistical conceptional drawing" of this project from the perspective of Indiana St, looking North of Holly Ave. What you would have seen was an object the size of the Queen Mary, towering over the existing residential area to the west. But then again, why would this matter since we are an "unsubstantial number or residents" that will be displaced. I26-5

Paul Morrison
421 Indiana St.
Apt 4
El Segundo, Ca
90245

2

Response to Comment Letter I26

Paul Morrison
April 11, 2021

I26-1 This comment is introductory in nature and does not pertain to the adequacy of the environmental analysis in the EIR; no response is required.

I26-2 This comment expresses concerns that proposed Project construction would displace nearby residents. The commenter resides in an apartment building adjacent to the proposed Project. The commenter references the CEQA threshold question from the population and housing analysis, which states "would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?" Because the EIR concluded that impacts would be less than significant in this category, the commenter states that they are considered an "unsubstantial number of existing people." The commenter also expresses concerns with finding replacement housing that is consistent with their current rental rates.

The EIR includes an evaluation of the potential effects of Project construction, including its effects on nearby sensitive receptors (which include adjacent residents). Specifically, impacts of construction air emissions on nearby sensitive receptors are addressed in Section 4.2.4 and were determined to be less than significant after implementation of MM-AQ-1. The impacts of construction noise on nearby sensitive receptors are addressed in Section 4.10.4. As stated therein, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level. As such, mitigation measures have been set forth to address the potentially significant effects of Project construction on residential sensitive receptors.

The commenter references the EIR's population and housing analysis, as it relates to displacement of substantial numbers of existing people or housing. The analysis in the EIR concludes that impacts would be less than significant, because no housing uses are located on the Project site, and Project implementation would not require demolition of existing housing or displace people or housing. The proposed Project would include the construction of a mixed-use development that would add approximately 263 housing units to the City. This threshold does not pertain to construction effects on adjacent residences but rather to environmental effects caused by construction of replacement housing elsewhere. While the commenter expresses concerns regarding the effects of Project construction to adjacent residences, those effects would be mitigated through the mitigation measures set forth in the EIR, as explained in the paragraph above. Furthermore, such effects are temporary and would not necessitate the construction of replacement housing elsewhere. As such, the EIR's conclusion of a less than significant impact is appropriate. Once construction of the Project is complete, construction noise and other temporary effects would no longer occur. Nevertheless, the commenter's concerns regarding construction effects to nearby residents, including the potential for displacement resulting from construction, will be included as part of this Final EIR for review and consideration by decision makers.

I26-3 The received comment expresses opinions and speculations about noise and vibration producing activities associated with Project construction.

The Draft EIR Section 4.10, Noise evaluated construction noise and found it to be a temporary but significant impact at some offsite receptors with respect to construction of some Project elements and thus requiring mitigation that is detailed in MM-NOI-1, which necessitates installation of what will likely be industry-proven sound blanket barriers (or comparably-performing materials) as part of an implemented Construction Noise Mitigation Plan (CNMP) that the City must first review and approve prior to issuance of a demolition or grading permit for the Project. With incorporation of MM-NOI-1, impacts would be less than significant.

I26-4 This comment expresses concerns that tenants in apartment complexes near the Project site will move out during Project construction. The commenter states that these vacancies would then lead to redevelopment of the existing apartments with high-end condominiums. The commenter further states that concluding a "less than significant impact" on the surrounding area seems inaccurate. The commenters states that the proposed Project would negatively impact and disrupt lives.

While the EIR concludes that impacts in the category of population and housing would be below a level of significance, potentially significant impacts are identified to nearby sensitive receptors in other sections of the EIR. For example, the Draft EIR demonstrates that potentially significant impacts to sensitive receptors would occur during construction in the categories of air quality and noise. However, the EIR presents feasible mitigation measures (MM-AQ-1 and MM-NOI-1) for these impacts. Based on the air quality and noise analyses, implementation of these mitigation measures would reduce construction air quality and noise impacts on sensitive receptors to below a level of significance. As such, the EIR considers the impacts of the Project on nearby residential sensitive receptors and has identified mitigation to address these effects.

The commenter's statements regarding potential future apartment vacancies near the Project site are speculative in nature. The Project site and nearby land uses are situated in an urbanized area, within the vicinity of a major roadway (Pacific Coast Highway). Construction impacts to nearby sensitive receptors would be mitigated, as described above. Furthermore, the potential for vacancies is not an environmental topic that is evaluated under CEQA. According to the CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Nevertheless, the commenter's concerns regarding the future of apartment buildings near the Project site will be included in the Final EIR for review and consideration by decision makers.

I26-5 The commenter notes that a rendering of the Project as viewed from Indiana Street (looking north of Holly Avenue) has not been provided. The commenter states that the Project would appear to be "towering" over the existing residential area to the west.

The west elevations of the proposed Project, as provided in Chapter 2 of the Draft EIR, depict the proposed Project as viewed from Indiana Street. Additionally, the topic of aesthetics and visual effects is analyzed in Section 4.1 of the Draft EIR. This analysis includes a discussion of the Project's potential to adversely affect scenic vistas and a discussion of the Project's consistency with applicable zoning and other regulations governing scenic quality. (It should be noted that effects on private views are not considered impacts on the environment generally under CEQA.) The analysis in Section 4.1 concluded that the proposed Project would not have a substantial, adverse effect to scenic vistas. The analysis also concluded that the Project would be consistent with applicable regulations governing scenic quality. Other topics addressed in the category of aesthetics consist of impacts to scenic resources within a state scenic highway and increased light/glare. Impacts in these categories were determined

to be below a level of significance. Overall, impacts to aesthetics were determined to be less than significant. The appearance of the proposed Project from certain streets within the vicinity of the Project site is not specifically addressed under CEQA, particularly in urban areas. Nevertheless, the commenter's concern regarding the height and massing of the proposed Project as viewed from Indiana Street will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I27

From: David Poepoe [redacted]
Sent: Sunday, April 11, 2021 9:00 PM
To: Planning; Samaras, Paul
Subject: Regarding the Pacific Coast Commons Development

Follow Up Flag: Follow up
Flag Status: Flagged

April 11th, 2021

To the El Segundo General Planning Committee and City Planner,

We am writing to lodge our vigorous opposition to the planned high density apartment complex on Pacific Coast Highway known as Pacific Coast Commons (PCC). We am not opposed to the construction of affordable housing in El Segundo since we have been encumbered to do so by the State Legislature. We consider that PCC is too large as current proposed to the City and will list our points against it below. I27-1

We will limit our opposition only to the two residential towers under consideration at PCH and Mariposa and PCH and Holly. The construction of the parking structure in place of the shuttered banquet facilities is a reasonable concession. I27-2

1. Both residential towers are too large for the sites. It would be reasonable to limit construction to four stories.

2. Both residential towers have direct access to streets, Indiana and Palm Streets, that are current overtaxed with street parking. The streets are virtually one lane. Adding additional vehicles to either street would be inviting congestion, even if future No Parking restrictions were added to Indiana.

3. Holly and Palm Streets are virtually useless to any individual needing to drive north. Left turns across southbound traffic to go north are impossible and dangerous most times of the day. I27-3

4. Traffic along Washington Street north of Mariposa appears to have not been taken into consideration. Any resident of the north tower not able to turn left onto Mariposa will most likely turn right in order to access Washington Street north to Maple Avenue. This is a route favored by residents and there is no reason to expect it will not be used by others.

5. It is doubtful that consideration was given to traffic that will enter Mariposa from either Kansas or Washington Streets with the development of the former International Rectifier property at Kansas Street and Grand Ave. That is a larger development with only the lighted intersection at Kansas and Grand providing a route out to PCH that does not go thru a residential area. It should be expected that traffic will increase in the morning and afternoons along Kansas and Washington Streets as Mariposa is readily used. In the years before the Pandemic when returning home I frequently saw a line of cars leaving residential El Segundo stretching from PCH to Illinois Street. I27-4

6. Withee Malcom Architects can be thanked with the foresight of widening Mariposa Ave by providing space for a right turn lane from Mariposa onto southbound PCH. However, they should have done the same with providing a dedicated right turn lane from Mariposa into the northern residential tower in order to expedite westbound traffic. I27-5

8. Mariposa Avenue is a major artery for eastern residential El Segundo. The north and south residential towers will only serve to constrict traffic. They will serve as a bottleneck and adversely impact residents across town.

9. The presence of commercial retail space along PCH is quixotic given that it is unlikely that any business would be frequented by El Segundo citizens without public parking. The idea that PCH would become a 'destination place' and 'walkability' is highly questionable. We live on Washington Street and we regularly drive to Ralph's like most of our neighbors. The only people likely to be within a 'walkable' distance are those living on Indiana and Illinois Streets. I27-6

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10. Mar Ventures should be excoriated for their facetious claims on their PCC website of "**We have consistently** heard from El Segundo teachers to people working in our office buildings, all saying the same thing: "**We need new housing close to where we work.**" One thing is to "have heard", another thing would be to commit oneself to doing. There is only a 'proposing' of 13 low income and 13 moderate income dwellings. It is to be expected that should the project be scaled back that the first offerings to be cut would be low- and moderate- income units – or practically anything that would be 'affordable'. The city should extract an irrevocable ironclad commitment from Mar Ventures and Continental Development for a set number of affordable units no matter the eventual size of the housing complex. Affordable housing should be kept no matter the claims of 'hardship' by the developers.
It is not the responsibility of the city government nor should it be the care of the El Segundo community to guarantee that the development be profitable. I27-7

11. It is still too early to clearly foresee where the future of telecommuting will go in the United States. For many companies the request of the continuation of telecommuting has come with cuts in worker pay. How would units at PCC be filled then? Should telecommuting become more widespread why would one need to move into PCC? I27-8

In closing, our recommendation is strictly for a paring down of the proposed scale of the Pacific Coast Commons residential towers. The limitation to four stories is fair and keeps the buildings more in scale with residential El Segundo. Traffic may be manageable with a smaller development. I27-9

Sincerely,

David S. Poepoe
521 Washington Street
El Segundo, CA 90245
dspoepoe@pacbell.net

Stephanie Young
525 Washington Street
El Segundo, CA 90245

Response to Comment Letter I27

David S. Poepoe and Stephanie Young
April 11, 2021

I27-1 This comment expresses opposition to the proposed Project, cites the housing component as the reason, further specifies the size of the proposed development as reason for concern. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

The comment further states detailed reasons for opposition are listed, and, as such, Response to Comments I27-2 through I27-9 are outlined, below.

I27-2 The comment states the two residential towers (PCC-South and PCC-North) are too large for each respective site and suggests the Project should be limited to four stories. In addition, the comment states support for the proposed Project's parking structure to be constructed and replace existing meeting room/event space (banquet rooms) associated with the Fairfield Inn and Suites Hotel. The commenter's support for this provision of the proposed Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

Section 4.1, Aesthetics, of the Draft EIR evaluated the proposed Project's impacts related to aesthetics. As further detailed in Table 4.1-1, Aesthetics Consistency Table, the Project was found to be consistent with the City's General Plan goals and policies regarding density and height. For example, under Policy LU1-1, the Draft EIR stated the proposed Project would increase the height and density of the Project site; however, the Project would not encroach into existing residential areas and thus, would preserve and maintain the City's low medium-density nature in residentially zoned areas. Furthermore, the proposed Specific Plan describes development standards, including proposed heights of the buildings.

Under Chapter 6, Alternatives, of the Draft EIR, three alternatives were considered. Alternative B is proposed with no development north of Mariposa Avenue (PCC-North). Additionally, Alternative C would reduce the proposed height of PCC-South and PCC-North by 10 feet, which is equivalent to one residential level, and would result in each residential building being limited to five stories. Under Alternative C, Level L-5 would not be included in PCC-South and PCC-North, which would remove 25 units and 29 units, respectively. In addition, Level L-5 contains 34 spaces on PCC-South and 39 parking spaces on PCC-North. Thus, parking would be reduced from 336 to 302. Although the commenter's suggestion is to reduce the height of PCC-North and PCC-South to four stories, Chapter 6 of the Draft EIR demonstrates analysis for a reduction in building height.

Therefore, the commenter's suggestion for a reduced height was analyzed in the Draft EIR. The commenter's suggestion to reduce the building height will be provided to City decision makers for their review and consideration as part of this Final EIR.

I27-3 This comment cites existing street parking concerns for surrounding streets (Indiana Street and Palm Avenue). Furthermore, the comment states both streets are limited in lane capacity and raises concern for additional vehicles on the roadway. Additionally, the comment cites Holly Avenue and Palm Streets as surrounding streets with existing traffic congestion on northbound lanes. Lastly, the comment states traffic along Washington Street and Mariposa Avenue were not considered in the environmental

analysis. In particular, the comment raises concern for left-turns from PCC-North and suggests vehicle trip distribution would turn right to access Washington Street and Maple Avenue.

The topic of transportation is evaluated and discussed in Section 4.13, Transportation, of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation.

Figure 4.13-5 details Project site access, including access points designated at Indiana Street and Palm Avenue. Figure 4.13-6 provides details on distribution of traffic from the proposed Project and approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Indiana Street, Palm Avenue, Washington Street, and Mariposa Avenue. As such, a minor amount of Project-related traffic is expected to use local streets such as Washington Street. For more information on Project trip generation, please see Figures 4.13-7A through Figure 4.13-7C for Project trip assignments generated during peak-hour traffic volumes and lane configurations at analyzed intersections.

I27-4 The comment refers to a development project at Kansas Street and Grand Avenue (also known as related project #33, located at 243 and 330 Kansas Street). A development project at this location was not identified by the City of El Segundo at the time the related projects list was assembled for the Draft EIR's transportation analysis. For discussion regarding an additional related project, see Topical Response No. 1 – Cumulative Impacts, above. In addition, please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

The comment further expresses a concern that traffic generated by this project would use Kansas or Washington Streets through residential neighborhoods north of Grand Avenue. However, the comment notes that the development would have direct access to Pacific Coast Highway through a non-residential area via Grand Avenue. Residential neighborhood streets such as Kansas and Washington Streets provide only one travel lane in each direction whereas Grand Avenue is classified as a secondary arterial and provides two to three travel lanes in each direction. At the intersection of Grand Avenue and Pacific Coast Highway, Grand Avenue provides two eastbound left-turn lanes for vehicles heading northbound on Pacific Coast Highway.

I27-5 The commenter thanks the Project's architect for including widening of eastbound Mariposa Avenue to provide a westbound right lane at the Pacific Coast Highway/Mariposa Avenue intersection. The commenter believes that a dedicated right turn along westbound Mariposa Avenue (west of Pacific Coast Highway) would prevent a traffic bottleneck that could occur due to Project traffic accessing the northern residential tower. The commenter questions why an eastbound right turn lane was not provided at the Indiana Street/Mariposa Avenue intersection.

As shown in Appendix A of the Transportation Impact Analysis (included as Appendix J-1 of the Draft EIR), the AM and PM peak hour traffic turning westbound right from Mariposa Avenue to northbound

Indiana Street is nominal under all scenarios analyzed in the study (with and without proposed Project), and therefore would not warrant an additional turn lane along Mariposa Avenue. The analysis of Indiana Street/Mariposa Avenue intersection shows that the intersection operates under level of service (LOS) B or better, and therefore, no operational effects are anticipated from westbound movements at this intersection. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

I27-6 The commenter states that commercial retail space proposed along Pacific Coast Highway would require public parking in order to be used by City residents. The commenter is concerned that Pacific Coast Highway does not provide a walkable destination to most city residents except for people living along Indiana Street and Illinois Street.

The proposed Project would include public parking for commercial uses on site. As described in Section 4.13, Transportation, spaces would be shared between residential guest parking, commercial use, and for overflow if needed from other sites. See Appendix J-2, Shared Parking Analysis, for more details. Additionally, see Response to Comment I18-4 for assumptions regarding pedestrian trips used in the proposed Project's transportation impact analysis.

I27-7 This comment raises concern for the language used on a website created by the Project applicant as well as notes concern for potential Project revisions that would remove affordable housing units. The comment further suggests the City ensure a set number of affordable housing units be provided under the proposed Project regardless of potential revisions made by City decision makers or the Project Applicant. Chapter 3, Project Description, of the Draft EIR does not specify the number of affordable units within the housing component of the proposed Project. Section 3.3.8, Development Agreement, states the City and the Project applicant will enter into a Development Agreement to ensure a set number of years for Project construction as well as Project benefits, including affordable housing. The full benefits will be negotiated between the parties and will not create any environmental impacts. As such, this comment does not pertain to the adequacy of the environmental analysis in the EIR. Nevertheless, the suggestion will be provided to City decision makers for their review and consideration as part of this Final EIR.

I27-8 This comment states the future of telecommuting for work is unclear and for some companies, workers' pay has been cut. As such, the commenter suggests the proposed Project would not be occupied due to trends in employment. This comment does not pertain to the adequacy of the environmental analysis in the EIR. Furthermore, the comment is speculative and a change which is speculative or unlikely to occur is not reasonably foreseeable. Therefore, no further response is required.

I27-9 This comment repeats the suggestion made in Response to Comment I27-2 and notes impact related to traffic may be reduced with a smaller proposal. As further discussed in Chapter 6 of the Draft EIR and detailed in Table 6-3, impacts under Alternative C (Reduced Development: Reduce 1 Level from PCC-South and PCC-North) would result in similar short-term transportation impacts when compared to the Project, but reduced long-term transportation impacts when compared to the Project. As such, the commenter's suggestion is correct. This comment does not pertain the adequacy of the environmental analysis in the Draft EIR. Nevertheless, the suggestion will be provided to City decision makers for their review and consideration as part of the Final EIR.

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Comment Letter I28

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 11:49 AM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul,

I'd like to send an email to the city voicing my concerns regarding the Pacific Coast Commons proposal and understand the deadline for these emails is today. Do I send these to you? If not, can you please let me know who to send them to? I didn't see anything on El Segundo's website. I28-1

Thanks
Eli

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Response to Comment Letter I28

Elijah Buck
April 12, 2021

I28-1 This comment presents an email communication to City staff asking how to express concerns related to the proposed Project. The comment was received during the Draft EIR's public review period. Furthermore, another letter was submitted by the commenter, as shown as Response to Comment Letter I29, below. As such, no further response is required.

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Comment Letter I29

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 2:07 PM
To: Samaras, Paul
Subject: Re: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul,

Thanks for sending that, yes that's very helpful. Below is my letter of concern for the city.

Dear City of El Segundo,

I am writing to you to express my concerns about the Pacific Coast Commons proposal. As a resident on the east side of El Segundo, I am very much against this project and for many reasons. Selfishly, I don't want this project to go through because the 6 floor building would be looming over the private outdoor space we have, take away hours of sunlight and because of the construction. I'd probably have to move because I'm a voiceover actor who records many auditions from home and with the amount of construction noise, I won't be able to record my auditions. Not to mention, once all these apartments are filled, our very quiet complex and the other quiet complexes around us, will be filled with noise from all the new apartments. I29-1

Now those are personal issues, and obviously the city wouldn't say no to a project because of one person (nor would I expect you to), but I'm not just one person. How many other residents lives will be negatively impacted by these massive buildings?

I've attended two of the meetings hosted by the company behind Pacific Coast Commons and in both meetings they said that they are proposing this because they've heard "from many people in the buildings they've built that people want to live closer to work." I'm paraphrasing the quote, but that was the gist of it. I'm wondering if they can provide any sort of documentation to back their motives. A quick look at Apartments.com shows almost 200 apartments available in El Segundo, 250+ in Manhattan Beach, 300+ in Playa Vista. If people really wanted to live close to work, there are plenty of options. Moving forward with a proposal based off "hear say" doesn't seem like a good use of the town's money and space. I29-2

As for the location, I don't know of a single person in town that is looking to move to a more expensive rental unit that's on Sepulveda. Everyone I know that rents wants more affordable housing and this project, based off the renders and the amenities, sounds more like luxury housing, with studios starting around $2000/month as noted in the last presentation. I don't know whose needs in town luxury housing on Pacific Coast Highway would fulfill. Yes, there aren't many new rentals in town, but how many people are getting priced out of El Segundo? Affordable housing would make the current market more competitive. Luxury housing will drive up the market value and rents will continue to rise.

Now traffic is a huge concern. In LA County, there's an average of 2 cars per household, and the proposed 250 or so apartments would put approximately 500 extra cars on the road. And with the PCH location, this leaves only a couple easy access points to major thoroughfares...Mariposa and Grand. 500 additional cars right there would be debilitating to traffic. I know the company behind PCC did their own environmental study, but has the city done their own? I don't know how a single right hand turn lane could be the answer to all the traffic concerns. I think a better idea would be to place buildings throughout the city, spreading out all the cars that will be on the road, giving more options to freeways, etc. I29-3

Looking at Continental Development Corporations website, it's obvious they've done a lot of work around town. And given the amount of buildings they've put up, this proposal seems more opportunistic for Continental Development Corporations than it is beneficial to the town. Are there other bids being considered? I'd think with something this large, the town would definitely be considering other proposals as well. I29-4

I moved to El Segundo in 2013 from New York City and we picked El Segundo because of it's small town feel. There's nowhere else like El Segundo on the west side of town and this proposal feels just like the money-driven proposals that ruined the area we lived in in NYC.

I love this town. I live and work here and look forward to the years ahead here. I ask that you please vote this proposal down, keep El Segundo small, and if you need to have more apartments built in town, keep the buildings small, spread out and affordable. I29-5

Thanks for your time
Eli Buck

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On Mon, Apr 12, 2021 at 12:53 PM Samaras, Paul <PSamaras@elsegundo.org> wrote:

Hello Mr. Buck,

Yes, you can email me with any comments you have on the project. If you have comments specifically on the draft environmental impact report (EIR) for the project, it will be great if you can send me any comments by the end of the day today. If you do, they will be incorporated and addressed in the final EIR for the project.

For your reference, the following link is to our Active Projects page on the City website, which has information on several projects including the Pacific Coast Commons project

Active Projects | El Segundo

I hope this is helpful. Let me know if you need something else.

Thanks,

Paul Samaras, AICP

Principal Planner

City of El Segundo

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 11:49 AM
To: Samaras, Paul <PSamaras@elsegundo.org>
Subject: Pacific Coast Commons

Hi Paul,

I'd like to send an email to the city voicing my concerns regarding the Pacific Coast Commons proposal and understand the deadline for these emails is today. Do I send these to you? If not, can you please let me know who to send them to? I didn't see anything on El Segundo's website.

2

Thanks

Eli

I29-6

Response to Comment Letter I29

Elijah Buck
April 12, 2021

I29-1 This comment expresses opposition to the proposed Project and cites the proposed buildings' height. Specifically, the commenter is concerned with their property's privacy, shade/shadow impacts, as well as construction and on-site operational noise impacts. The comment further asks about the scope of environmental impacts negatively affecting the nearby residential neighborhood.

Project-related impacts to privacy from private views on the Project site is not required within the scope of the environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

Section 3.1, Aesthetics, of the Draft EIR describes the Project's potential impacts related to shade/shadow effects. Figures 4.1-9A through 4.1-9D illustrate the approximate shade and shadow conditions in the surrounding area created by Project implementation. Shadows cast by the proposed Project were simulated for winter solstice, spring equinox, summer solstice, and fall equinox. As described in Section 3.1, for each shade/shadow scenario illustrated, the duration of shadows cast affecting adjacent uses or property would not be more than three hours. Therefore, the Draft EIR determined the proposed Project would result in less than significant impacts.

Additionally, Section 4.10, Noise, of the Draft EIR, describes the Project's potential impacts related to construction and on-site operational noise to nearby sensitive receptors. The Draft EIR defines noise- and vibration-sensitive land uses as typical locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. As such, sensitive receptors include multi-family homes located immediately to the west and northwest of the Project site. Additional sensitive receptors are located father from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

As presented in the Draft EIR, construction noise would result in a temporary but significant noise impact at identified sensitive receptors and require mitigation measures that would need to demonstrate at least 5 dBA and as high as 20 dBA of sound abatement in order to yield Project-attributed construction noise levels that are compliant with this City standard. Typical construction "sound blankets", such as those offered by local suppliers, are capable of providing this 5 to 20 dBA range of acoustical insertion loss (i.e., the difference in measured sound level at a receiver after a sound-occluding element is placed in the direct path between the receiver and the noise source of interest). Thus, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level.

The incorporation of new multi-family homes and a mix of commercial uses attributed to development of the proposed Project would add a variety of noise-producing mechanical equipment. Project-attributed operational noise at nearby community receptors was assumed to be from exposure to roof-

mounted air-cooled condensing (ACC) units. As such, the Draft EIR analyzed the potential noise impacts and determined less-than-significant impacts would occur to the surrounding residential community.

I29-2 This comment asks for supporting evidence on the proposed Project's housing demand. As shown under Draft EIR Section 4.11, Population and Housing, Table 4.11-7 provides the 6th Cycle Regional Housing Needs Assessment (RHNA) allocation for 2021 to 2029. The City's fair share allocation for the planning period was 491 units at the time of the Draft EIR, but has been recently revised to 492 units (which is the final RHNA allocation).[17] Because the proposed Project will be occupied within the timeframe of the 6th Cycle, it is most relevant to the analysis. As such, between the years 2021 to 2029, the City needs to accommodate at least 492housing units, consisting of a variety of housing types to accommodate extremely low, very low, low, moderate, and above moderate-income households to keep pace with housing demand. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation.

Additionally, Section 4.11 of the Draft EIR evaluates the Project-related impacts to the jobs-housing balance. A jobs/housing balance is a ratio that indicates the number of available jobs in the City compared to the number of available housing units. A balanced community would have a match between employment and housing opportunities so that most of the residents could also work in the community. As indicated in the Draft EIR, according to the City's 2016 housing stock of 7,000 units and the City's 2016 employment numbers of 48,300 jobs, the City maintained a 6.9:1 jobs to housing ratio in the City, which translates to being a jobs-rich community. The proposed Project would generate additional housing available for the community, as the jobs-housing balance of the proposed Project would be 0.3:1, which is a very housing-rich project. Therefore, the proposed Project would facilitate a more balanced jobs-housing profile for the City.

The comment further states concern for the Project's potential cost per housing unit and assumes potential "luxury apartments" would result in an increase of the local rents in the City. This comment is speculative and a change which is speculative is not reasonably foreseeable. Furthermore, according to the State CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." The Project's impact on the surrounding rents is not within the scope of required environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I29-3 This comment is concerned about Project-related traffic onto Mariposa Avenue and Grand Avenue. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR, including analysis related to vehicle trips on Mariposa Avenue and Grand Avenue. As shown in Table 4.13-1, the Project overall is projected to generate an estimated net increase of 2,517 daily trips, including 132 trips (47 inbound/85 outbound) during the AM peak hour and 178 trips (103 inbound/75 outbound) during the PM peak hour. The comment raises concern for Project-related trip distribution and assignment and

[17] The addition of one dwelling unit to the City's RHNA allocation since the time of the Draft EIR does not constitute significant new information requiring recirculation of this EIR, per CEQA Guidelines Section 15088.5. Please see Chapter 3 of the Final EIR for more discussion.

asks how a right-turn lane would answer traffic concerns. Although the commenter was not specific on the vehicle trip distribution concern, the Draft EIR concluded a potentially significant impact would occur during Project construction; however, with the implementation of mitigation measure MM-TRA-1, impacts would be reduced below a level of significance. As such, no further mitigation is required for the topic of transportation under CEQA.

The comment further asks if the City conducted the environmental analysis for the proposed Project, specifically related to traffic. The contents of the Draft EIR and its environmental analysis (including Section 4.13, Transportation) was prepared by Dudek, a private consultant, for the City of El Segundo. Additionally, information contained in Section 4.13 is based on a Transportation Impact Analysis (TIA) prepared by Fehr & Peers (included as Appendix J-1) as well as a Shared Parking Analysis prepared by Fehr & Peers (included as Appendix J-2). Preparation of the transportation analysis by Fehr & Peers occurred under the direction of, and on behalf of, the City. Fehr & Peers are experts in the field of transportation planning and engineering, land use and transportation analyses, and traffic/transportation impact analyses. In addition, both the TIA and Shared Parking Analysis were peer reviewed by Dudek and were also reviewed and approved by the City planning staff. As such, the environmental analysis presented in the Draft EIR, including the traffic analysis, has been conducted and reviewed by a team of industry professionals and experts. Furthermore, the Draft EIR has been prepared in conformance with the substantive and procedural requirements of CEQA and the CEQA Guidelines. All conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

The comment suggests the proposed buildings should be spread out throughout the City. An alternative location for the proposed Project was considered as part of the discussion within Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process. Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the Project. As stated in Section 15126.6(f)(2)(A), the Draft EIR shall analyze alternative sites based on whether or not any of the Project's significant effects would be avoided or substantially lessened by putting that Project in another location. However, there are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation. Furthermore, only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR and other sites were determined to be infeasible because no such sites are under control by the Project applicant.

I29-4 This comment asks if the City is considering other proposals for the Project site. Chapter 6, Alternatives, of the Draft EIR describes and evaluates alternatives to the Pacific Coast Commons Specific Plan. This discussion includes Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process, which evaluated the potential for alternative locations; Section 6.5, Alternatives Selected for Further Analysis, which identified three alternatives to the proposed Project; and Section 6.7, Environmental Superior Alternative, which designated Alternative B as such. It is further noted that the Project site is privately owned property; as such, the City does not collect bids for development on the site. The property owner has submitted an application for development of their property to the City, and that application is being evaluated as required under CEQA in this EIR.

I29-5 This comment expresses opposition to the proposed Project and states potential apartments in El Segundo should be small, spread out, and affordable. This comment does not pertain to the adequacy of the environmental analysis in the EIR. Additionally, the commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

I29-6 This comment presents an email communication between the commenter and City staff. As indicated above in Response to Comment Letter I28, the commenter asks how to participate in the Draft EIR's public review. City staff responded and provided resources on where the Draft EIR was available and how to comment. Therefore, no further response is required.

Comment Letter I30

From: Gayle CdeBaca [redacted]
Sent: Monday, April 12, 2021 5:10 PM
To: Samaras, Paul
Subject: PCC project comments

Paul-

I have questions about the PCH housing project. I reviewed the traffic report but couldn't find the answers.

I would like to know how the following items are being addressed:

1) Traffic flow from Indiana Ct and Indiana to Mariposa. Right now turning left onto Mariposa is very dangerous as you can't see past the cars lined up waiting at the light.
2) Traffic flow into and out of 76 gas station. Right now only one car can enter or exit at a time. When a car is trying to enter while another is waiting to exit, all of the traffic behind the waiting cars back up and often block PCH.
3) Current traffic back up on Mariposa. In a normal non-Covid environment, cars waiting at the light at PCH, back up past Washington St. This is especially bad during school pick up and drop off times. While I understand a new right turn lane is being added, only 1-2 cars will be able to move into that lane and will not relieve the current congestion issue.
4) Has the number of cars in this area actually been tracked over a period of weeks? If so, does it also take into account that these are not normal traffic times?
5) At this time, hotel and high rise employees typically park on the resident streets in and around Mariposa. How is this going to be prevented going forward? The plans don't appear to have enough parking for all the new residential and retail spaces.
6) If this project goes thru, where will all of the construction workers park? The current project on Indiana is displacing a lot of residents and they are lined up along adjacent streets too.

I30-1

I appreciate your feedback on these items.

Gayle CdeBaca

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Response to Comment Letter I30

Gayle CdeBaca
April 12, 2021

I30-1 This comment addresses multiple items regarding the transportation analysis and comments on their current understanding of the existing traffic at Mariposa Avenue and Pacific Coast Highway. The comment states that turning left onto Mariposa Avenue from Indiana Court is dangerous as cars are lined up from Mariposa Avenue and Pacific Coast Highway. It is unclear exactly why this movement would be considered dangerous; when turning left onto Mariposa Avenue, vehicles approaching from both directions on Mariposa Avenue would be visible. Additionally, there is no Indiana "Court" that intersects Mariposa Avenue. Instead, there is Indiana "Street" and "Illinois" Court that are proximate to each other. Based on the existing pavement markings/striping and "No Stopping" signage on the north side of Mariposa Avenue, there is adequate sight distance for vehicles to maneuver to and from those streets to Mariposa Avenue. Furthermore, once the Project constructs the new right-turn lane on Mariposa Avenue, there will be less congestion on the eastbound approach of Mariposa Avenue, thereby further improving existing congestion. This comment also states that vehicles are backed up and block Pacific Coast Highway when a vehicle is exiting the gas station at the corner of Mariposa Avenue and Pacific Coast Highway. While this behavior was not observed during site visits to the field, it is a pre-existing condition that is not caused by the Project.

Overall, intersections that currently operate at Level of Service (LOS) E (considered to be poor intersection operations) or worse would continue to operate at LOS E or worse with the addition of Project traffic. Refer to Tables 6A and 6B in Appendix J-1 of the Draft EIR for a comparison of existing LOS at Project area intersections to LOS with the addition of Project traffic. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

For an updated assessment of LOS as it relates to the addition of three related projects, please refer to Topical Response No. 1- Cumulative Impacts. In summary, the addition of the three related projects is anticipated to change the LOS of the intersection at Pacific Coast Highway/El Segundo Boulevard in the AM peak hour from LOS D to LOS E. Prior to the addition of these related projects, this intersection was forecast to operate at LOS D in the AM peak hour. Therefore, with the addition of the three related projects, this intersection is forecast to operate at LOS E in the AM peak hour for both the Future (No Project) and Future plus Project scenarios. This changed future LOS condition would occur with or without the proposed Project. Importantly, the addition of the proposed Project would not individually contribute to an LOS change from the pre-Project condition. In summary, the addition of the three related projects would not result in the Project creating adverse circulation conditions regarding trips generated on the street network.

This comment also expresses concerns that the right-turn lane that will be added to Mariposa Avenue and Pacific Coast Highway as a part of the Project will not relieve the current congestion issue. As described above, the Draft EIR includes an informational analysis which shows that the intersection of

Mariposa Avenue and Pacific Coast Highway operates at LOS C under existing conditions (acceptable according to City of El Segundo standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the proposed Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a project feature. This right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with Project and right-turn lane. The addition of a dedicated right-turn lane will separate cars wanting to make a right-turn from through traffic and thus will increase the capacity of the intersection.

The comment asks if existing traffic conditions were recorded over a period of weeks. As described in Appendix J-1 of the Draft EIR, existing traffic counts taken for a traffic analysis are taken on a non-holiday weekday (Tuesday, Wednesday, or Thursday) during school years to represent typical traffic conditions. Counts for the proposed Project were taken in May and October of 2019, which were representative of typical pre-COVID traffic conditions.

The comment further asks about employee parking on site. The Shared Parking Analysis (Appendix J-2 in the Draft EIR) indicates that there would be sufficient parking for all uses that are part of the Project and therefore the need for overflow parking is not anticipated. As described in the study, and if desired by neighborhood, the developer plans to work with residents to suggest the boundaries of this potential permit parking district. A permit parking district would be implemented by the City at the request and approval of the residents and would allow potentially only residents to park on the street.

Lastly, the comment asks about parking availability for construction workers. As part of the Shared Parking Analysis (pages 15 through 18 of Appendix J-2 in the Draft EIR), Project construction parking analysis was also conducted to understand the parking needs of construction employees and uses on-site. Two timelines were analyzed. The sequential construction timeline analysis shows that parking for all construction employees could be accommodated on-site through all phases of construction. The concurrent construction timeline shows that parking for construction employees could be accommodated on site during Phase 1. During Phases 2 and 3, sufficient off-site parking with transport to and from the Project site would be provided for hotel guests and employees, and construction employees. The location of the off-site parking would be determined at the time based on market conditions and availability.

Comment Letter I31

From: Stephanie Jordon [redacted]
Sent: Monday, April 12, 2021 12:29 AM
To: Planning
Subject: High density apartments

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Paul,

I Brenton C Graham @ 1630 e palm Ave

Unit 08 El Segundo , Ca have Air rights.

The parking structure would be blocking my

View of the mountains and the view of PCH.

I did not purchase my property 25 years ago

To look at a parking structure. This is not

An eminent domain situation.

Sent from my iPhone

I31-1

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Response to Comment Letter I31

Stephanie Jordon and Brenton C. Graham
April 12, 2021

I31-1 This comment presents the same letter as shown in Response to Comment Letter I12, above. As such, please see Response to Comment Letter I12. No further response is required.

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Comment Letter I32

From: Lionel Uhry [redacted]
Sent: Monday, April 12, 2021 3:24 PM
To: Samaras, Paul
Subject: Pacific Coast Commons EIR Comment Letter
Attachments: Pacific Coast Commons EIR comment letter-April-12-2021.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Paul,

Please find attached our comment letter to the Pacific Coast Commons EIR.

I32-1

Thank you,
Lionel

Please note Mar Ventures continues to work a blended office and work from home schedule. We continue to have access to emails and appreciate your patience in our response times.

LIONEL UHRY | SENIOR VICE PRESIDENT
DRE LIC# 01752589
ACQUISITIONS & DEVELOPMENT
MAR VENTURES, INC.
721 NORTH DOUGLAS STREET
EL SEGUNDO CA 90245
TEL: 310-781-8261
FAX: 310-781-9253
LIONEL.UHRY@MARVENTURES.COM
WWW.MARVENTURES.COM

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April 12, 2021

Paul Samaras, Principal Planner
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

RE: Comments Regarding Pacific Coast Commons Project EIR (Case No. EA-1248)

Dear Mr. Samaras,

I am submitting the following comments to the Pacific Coast Commons Project EIR and request that these items be corrected in the Final EIR.

Comments/Revisions

1. **Executive Summary, Page 34:** Typographical error. 18 individuals should state 118 individuals.
2. **Chapter 1 (Introduction), page 1-5; Chapter 3 (Project Description), page 3-20; Chapter 4, Section 9 (Land Use), page 4.9-33:** The code section for the Zone Text Amendment to add the PCC Specific Plan to the El Segundo Municipal Code should be corrected in each of these sections to read "ESMC Section 15-3-2(A)(12)" instead of "ESMC Section 15-3-2(A)(11)" because the Lakes Specific Plan was adopted by the City of El Segundo during the preparation of the PCC Specific Plan. This will be corrected in the Specific Plan as well.
3. **Chapter 1 (Introduction), page 1-5:** The last sentence in the bullet regarding improvements to Holly and to Palm Avenues being provided through irrevocable offers to dedicate land should be deleted as the dedications are being provided now.
4. **Chapter 2 (Environmental Setting), Page 29):** Plan dates should be corrected throughout the EIR to be consistent with the plans used in the EIR which is January 2021. (See the end of Chapter 2; page 2-9, and the end of Chapter 3.8.). I32-2
5. **Chapter 3 (Project Description), pages 3-8 through 3-9**: Information regarding the new right turn lane on Mariposa Avenue should be added to the project description.
6. **Chapter 4, section 1 (Aesthetics), page 4.1-7; Chapter 4, Section 5 (Geology and Soils), page 4.5-10:** The year referenced for the California Building Code in each of these corrections should be corrected to read "2019" rather than "2016".
7. **Chapter 4, Section 3 (Cultural Resources), page 4.3-4:** the intersection reference to "Lincoln and Grand Avenues" should be corrected to "Pacific Coast Highway and Grand Avenue."
8. **Chapter 4 Section 9 (Land Use), page 4.9-6:** The date referenced for the Circulation Element should be 2004 not 1992. The 2004 update is posted on the City's website.
9. **Chapter 4, Section 11 (Population and Housing), page 4.11-16:** Correct the number of residential units in the chart at the top of the page from 236 to 263 units.
10. **Chapter 4, Section 13 (Transportation), page 4.13-22:** the building height in the last bullet – should read 63 feet.

Please do not hesitate to contact me with any questions regarding the above comments.

Sincerely,

Lionel Uhry
Sr. Vice President
Mar Ventures

Response to Comment Letter I32

Mar Ventures, Inc.
Lionel Uhry
April 12, 2021

I32-1 This comment presents an email communication indicating an attached letter (included as Response to Comment I32-2) is provided. No further response is required.

I32-2 This comment, provided by the Project applicant, is comprised of a requested list for revisions to be corrected in the Final EIR. The corrections have been reviewed and accepted. Please see Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

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Pacific Coast Commons Specific Plan
Final Environmental Impact Report
Responses to Additional Comments Received

State Clearinghouse No. 2020050508

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

FEBRUARY 2022

Printed on 30% post-consumer recycled material.

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Section 1. Introduction

All comment letters received by the City of El Segundo ("City") through December 9, 2021 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses. The City received comment letters from two organizations prior to the City's Planning Commission meeting on December 9, 2021, and verbal comments were also presented at the meeting.

For the new comment letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 1 lists the comment letters received, including the commenting organization's name; the assigned numbering; and the date of the correspondence for responses provided in Section 2, Written Comments.

Table 1. List of Comment Letters Received

Comment Letter	Name	Type	Date
1	Southwest Regional Council of Carpenters (via Mitchell M. Tsai, Attorney at Law)	Organization	December 8, 2021
2	Supporters Alliance for Environmental Responsibility ("SAFER", via Lozeau Drury LLP)	Organization	December 9, 2021

Members of the public who attended the City's Planning Commission meeting on December 9, 2021 were also given opportunities to provide verbal comments. The individuals that provided comments are listed in Table 2. Written transcriptions of the verbal comments are provided, with brackets delineating the individual comments and a numeric identifier have been added to the right margin. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 2 lists the commenters from the City's Planning Commission meeting on December 9, 2021 and the assigned numbering for responses provided in Section 3, Verbal Comments.

Table 2. List of Verbal Commenters

Comments	Name	Type	Date
1	Nino Mascolo	Individual	December 9, 2021
2	Byron Washum	Individual	December 9, 2021
3	Ray Lawson (Southwest Regional Council of Carpenters)	Individual	December 9, 2021
4	Paul Morrison	Individual	December 9, 2021
5	Amalia Fuentes - Supporters Alliance for Environmental Responsibility ("SAFER")	Individual	December 9, 2021
6	Maria Barron	Individual	December 9, 2021
7	Matthew Klemp	Individual	December 9, 2021

As presented in Sections 2 and 3 below, none of the comment received identified deficiencies in the Draft or Final EIR analyses that would require recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5.

CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, is presented below for reference:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before

certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

Although no comments have been raised that would require revisions to the Final EIR, these comments are available to the City's decision makers for their review and consideration as part of their deliberations on the Project's environmental documentation.

Comment Letter 1

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

December 8, 2021

El Segundo Planning Commission
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: planning@elsegundo.org

RE: Agenda Item No. H-1: Pacific Coast Commons Specific Plan Project

Dear Chair Baldino and Honorable Commissioners,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWRCC**"), my Office is submitting these comments on Agenda Item No. H-1 for the November 18, 2021 City Planning Commission Meeting for the City of El Segundo's ("**City**" or "**Lead Agency**") Final Environmental Impact Report ("**FEIR** or **DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project. The Project proposes to demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

1-1

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield*

Citizens for Local Control v. Bakersfield (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

1-1 Cont.

Moreover, SWRCC requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

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The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

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> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Recently, on May 7, 2021, the South Coast Air Quality Management District found that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The

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[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

> city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

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The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations (**"CCR"** or **"CEQA Guidelines"**) § 15002(a)(1).[8] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.

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[8] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

App. 4th 1344, 1354 (*"Berkeley Jets"*); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the

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project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

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B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

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An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency

is required to revise and recirculate that information as part of the environmental impact report.

Here, the City has made significant revisions to the Draft EIR which are detailed in the FEIR beginning on page 3-1 of that document. These revisions require recirculation of the EIR for an additional public comment period. These are not minor non-substantive revisions.

The City has significantly altered its transportation and cumulative impacts analyses. The City has now added three additional related projects and attached them to the FEIR as Appendix A in the *Revised Future Analysis*. As a result, all related impacts are substantially altered and the EIR needs to be recirculated to allow for adequate public review and comment. The City has changed its transportation analysis as it relates to trip generation, traffic volume, and level of service analysis. (See FEIR, Appendix A.) These changes are accompanied by dozens of pages of expert data analysis that cannot be left to the public for a last-minute glance.

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C. The FEIR Failed to Respond to SWRCC's and Expert's Comments

CEQA requires that a lead agency "evaluate comments on environmental issues received from persons who reviewed the draft EIR" and provide a written response with good faith and reasoned analysis. CEQA Guidelines § 15088. The responses are required to be provided in a revision to the draft EIR or in a separate section in the final EIR. *Id.*

SWRCC submitted comments to the DEIR on April 12, 2021 addressed to Planner Paul Samaras. Upon review of the FEIR, it does not appear that the City responded to or considered SWRCC's comments. Those comments are attached hereto as Exhibit A for the City's renewed consideration. A copy of the e-mail where my Office transmitted these comments are attached as Exhibit B.

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III. **CONCLUSION**

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

April 12, 2021 SWRCC Letter to Paul Samaras and Exhibits (Exhibit A); and

April 12, 2021 E-mail from Leon Ramsey Jr, Mitchell M. Tsai, Attorney at Law to Paul Samaras (Exhibit B).

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Cont.

EXHIBIT A

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

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Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

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Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

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The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips,

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reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

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I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particular matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants, Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert

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on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

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II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

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Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

[2] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

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B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

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An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.

1-14

[3] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.

1-14 Cont.

- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[4]

1-14 Cont.

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

1-15

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

1-15 Cont.

Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

1-15 Cont.

(DEIR, ES-10~16.)

E. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an

1-16

impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

1-16 Cont.

1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project's GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency "should explain the limitations of the particular model or methodology selected for use." CEQA Guidelines § 15064.4(c).

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAPs should include the following features:

1-17

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

1-17 Cont.

Collectively, the above-listed CAP features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

1-17 Cont.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

1-18

(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts. 1-18 Cont.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT. 1-19

The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the 1-20

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

1-20 Cont.

F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

1-21

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

1-21 Cont.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal. App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

1-22

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

1-22 Cont.

B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

1-23

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

1-23 Cont.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

1-24

CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

The DEIR should be revised and recirculated with an affordable housing component.

1-24 Cont.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

1-25
Cont.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

1-26

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

1-26 Cont.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

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number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added).[12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

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Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

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As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

1-26 Cont.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

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Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

1-26 Cont.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

1-27

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

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Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

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Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

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Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofiller. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

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Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*. 73, 388-393.

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Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII. Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

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Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

1-27 Cont.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

1-27 Cont.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

1-27 Cont.

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case; No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

1-27 Cont.

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

1-27 Cont.

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

1-27 Cont.

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

1-27 Cont.

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 – 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989 – 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 - 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

1-27 Cont.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

1-27 Cont.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

1-27 Cont.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

1-27 Cont.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

1-27 Cont.

6

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

1-27 Cont.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

1-27 Cont.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

1-27 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

EXHIBIT D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

April 12, 2021

Greg Sonstein, Esq.
Mitchell M. Tsai, Attorney at Law
155 South El Molino Avenue Suite 104
Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site. 1-28

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes 1-29

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

1-29 Cont.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

1-30

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

2

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

1-31

[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

3

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

1-31 Cont.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

1-32

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

1-32 Cont.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

1-33

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

1-33 Cont.

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

1-34

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-34 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

1-35

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

7

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

1-35 Cont.

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

1-36

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

1-36 Cont.

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

9

Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

1-37

As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

10

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

1-37 Cont.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

1-38

However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

1-39

[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

1-40

[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

13

project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-40 Cont.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

1-41

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

14

First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

1-41 Cont.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

1-42

[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

1-42 Cont.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

1-42 Cont.

[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

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concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

1-42 Cont.

[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

1-42 Cont.

[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1-43

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

1-44

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

1-45

[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

1-45 Cont.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

1-46

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

1-46 Cont.

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

1-47

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

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2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

1-47 Cont.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

1-48

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

1-48 Cont.

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

1-48 Cont.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

1-48 Cont.

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

1-49

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones.

1-49 Cont.

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Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

1-49 Cont.

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• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

1-49 Cont.

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• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

1-49 Cont.

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Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

1-49 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

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Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

1-49 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

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ii. The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level. iii. The Certification Statement signed and printed on the contractor's letterhead.	
b. The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify: 1. Source of supply 2. Quantity of fuel 3. Quality of fuel, including sulfur content (percent by weight)	1-49 Cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties. 1-50

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	2.83				4.2E-06
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	30.25			**Lifetime Exposure**	7.9E-05

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Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
		Total Emissions From Passenger and Light Duty Vehicles
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) [Calc: (L1*L2)]
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) [Calc: (L3 converted into lbs) / (365 days)]
5	674	Service Population [618 residents + 56 long-term jobs]
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) [Calc: (L4/L5)]
		Daily VMT Per Capita From Passenger and Light Duty Vehicles
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles [Calc: (L9/365)]
11	674	Service Population [618 residents + 56 long-term jobs]
12	24.14	Daily VMT Per Capita [(Calc: L10/L11)]

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

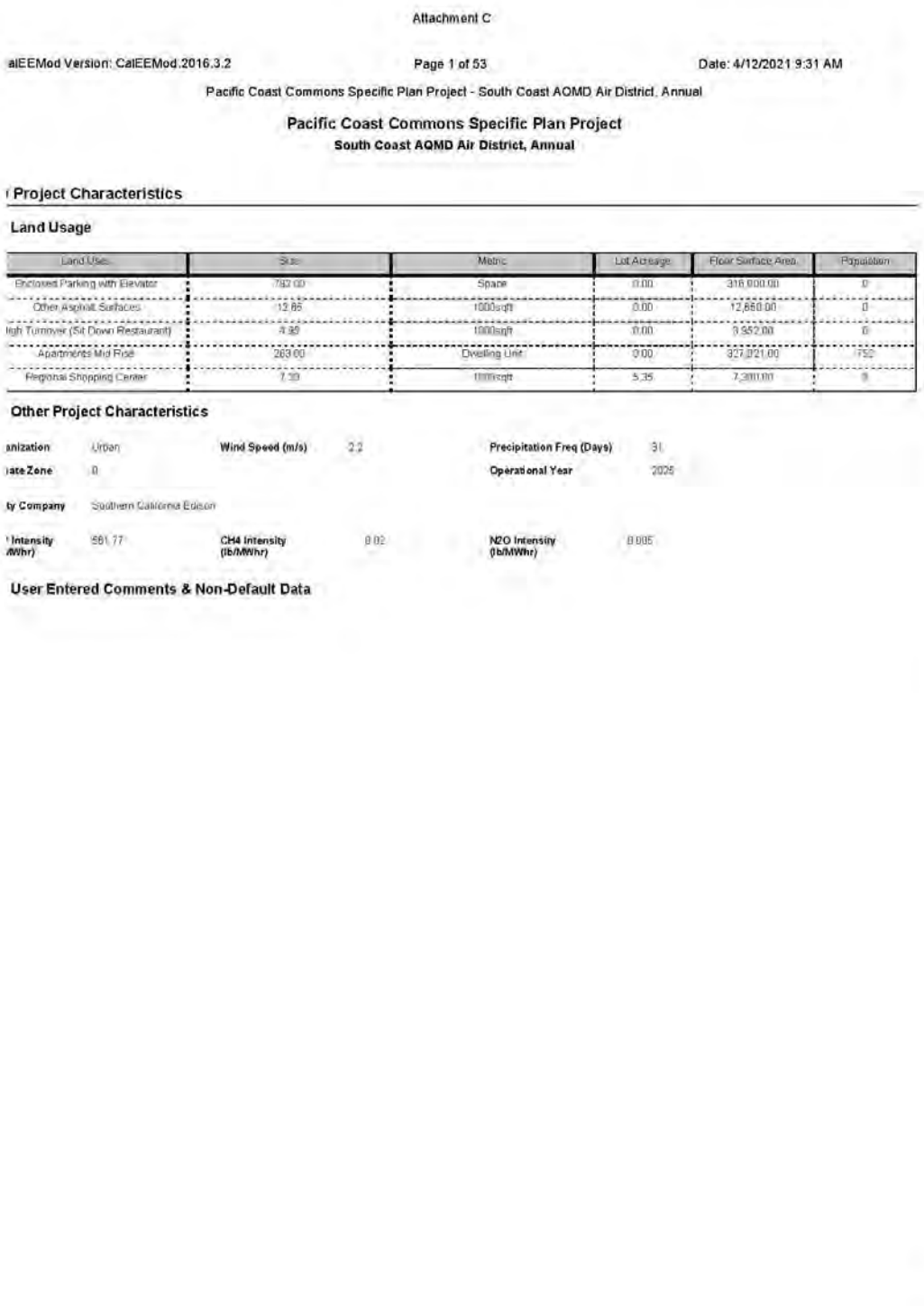
1-51 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

1-51 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes



Attachment C

alEEMod Version: CalEEMod.2016.3.2 Page 1 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Annual

Project Characteristics

Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
igh Turnover (Sit Down Restaurant)	4.35	1000sqft	0.00	4,352.00	0
Apartments Mid Rise	263.00	Dwelling Unit	9.00	327,921.00	752
Regional Shopping Center	7.39	1000sqft	5.35	7,390.00	0

Other Project Characteristics

anization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
ate Zone	8			Operational Year	2025
ty Company	Southern California Edison				
l Intensity /MWhr)	561.77	CH4 Intensity (lb/MWhr)	0.02	N2O Intensity (lb/MWhr)	0.005

User Entered Comments & Non-Default Data

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	282.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	-4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

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tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.05	5.04
tblVehicleTrips	SU_TR	131.04	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	8.65	5.19
tblVehicleTrips	WD_TR	127.15	170.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstovesDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1620	0.7437	1.6700e-003	0.3852	0.0626	0.4077	0.1937	0.0486	0.2122	0.0000	150.2969	150.2969	0.0035	0.0000	151.1444
2022	1.3593	2.3980	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0970	0.0983	0.1953	0.0000	532.1323	532.1323	0.0866	0.0000	534.2970
2023	0.3882	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8981	832.8981	0.1113	0.0000	835.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8981**	**832.8981**	**0.1113**	**0.0000**	**835.6806**

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7435	1.6700e-003	0.3552	0.0526	0.4077	0.1637	0.0485	0.2122	0.0000	160.2959	160.2959	0.0039	0.0000	161.1442
2022	1.3593	2.3850	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1320	532.1320	0.0886	0.0000	534.2966
2023	0.3592	2.9109	3.2200	9.1600e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8977	832.8977	0.1113	0.0000	835.6802
2024	1.2711	1.8401	1.9799	5.3600e-003	0.2664	0.0473	0.3137	0.0765	0.0443	0.1208	0.0000	483.9749	483.9749	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1600e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8977**	**832.8977**	**0.1113**	**0.0000**	**835.6802**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.5769	0.5769
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6766	1.6766
6	1-1-2023	3-31-2023	0.9621	0.9621
7	4-1-2023	6-30-2023	0.6759	0.6759
8	7-1-2023	9-30-2023	0.7218	0.7218

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9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6606	0.6606
11	4-1-2024	6-30-2024	1.1603	1.1603
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.6765	1.6765

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.9697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.9697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

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Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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uilding Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
aving - Phases 2 and 3	Pavers	2	8.00	130	0.42
aving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
aving - Phases 2 and 3	Rollers	2	8.00	80	0.38
rchitectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

rips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
emolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction - hase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
emolition - Phases 2 nd 3	6	108.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phases 2 nd 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction hases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phases 2 and	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

.1 Mitigation Measures Construction

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3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1680	15.1680	1.0400e-003	0.0000	15.1939
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.6000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.9300e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	0.0275	0.0275	2.2000e-004	0.0000	0.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**20.3126**	**20.3126**	**1.5800e-003**	**0.0000**	**20.3621**

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3.2 Demolition - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	1.4300e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.8000e-004	3.6600e-003	9.6000e-004	1.8000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1830
Vendor	8.0000e-004	0.0283	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.6000e-003	2.8900e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0339
Total	**5.5900e-003**	**0.0759**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

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3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.4700e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	8.3000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6865	2.6865	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0700e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9427**	**7.9427**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-003	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0111	2.7800e-003	3.0000e-006	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.6300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	6.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8000e-004	9.6300e-003	2.3800e-002	3.0000e-005	6.6000e-004	2.0000e-005	6.6000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0254**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9688e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5600e-004**	**0.0000**	**10.2895**

1-51 Cont.

.4 Grading - Phase 1 - 2022

litigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

litigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6500e-003	2.3900e-003	3.0000e-005	6.6800e-004	2.0000e-005	6.8800e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

1-51 Cont.

5 Building Construction - Phase 1 - 2022

nmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2863
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9321**	**225.9321**	**0.0541**	**0.0000**	**227.2863**

nmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-003	0.2604	0.0663	7.3000e-004	0.0184	4.9000e-004	0.0189	5.1000e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3500e-003	0.0000	70.8926
Worker	0.0458	0.0326	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6800e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3089**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1482**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5875**	**178.5875**	**7.0600e-003**	**0.0000**	**178.7639**

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2650
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2650

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2684	0.0653	7.3000e-004	0.0184	4.9000e-004	0.0189	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3600e-003	0.0000	70.8926
Worker	0.0460	0.0525	0.3165	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	0.0536	0.3209	0.4428	1.9200e-003	0.1468	1.4300e-003	0.1482	0.0394	1.3300e-003	0.0407	0.0000	178.5875	178.5875	7.0600e-003	0.0000	178.7639

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.5800e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

6 Paving - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9300e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	5.8000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0408	9.9800e-003	1.1000e-004	2.7700e-003	7.6000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0585	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2165	16.2165	4.1000e-004	0.0000	16.2246
Total	**8.0600e-003**	**0.0457**	**0.0685**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.6000e-003**	**1.6000e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9600e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	5.5000e-004	0.0000	10.6642
Worker	8.0900e-003	4.9000e-003	0.0556	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	15.2166	15.2166	4.1000e-004	0.0000	15.2268
Total	**9.2600e-003**	**0.0453**	**0.0656**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**25.8645**	**25.8645**	**1.0600e-003**	**0.0000**	**25.8910**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8831**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.5000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2500e-003	7.0000e-005	5.3200e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.4000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

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3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3649	14.3649	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.9000e-005	5.3800e-003	1.5300e-003	8.0000e-005	1.6080e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0130	1.6000e-004	0.0293	3.4500e-003	1.5000e-004	3.6000e-003	0.0000	18.8277	18.8277	4.4000e-004	0.0000	18.8387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**5.6100e-003**	**2.7000e-004**	**5.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.1600e-003	5.0000e-005	1.3500e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1535	5.1535	2.8000e-004	0.0000	5.1706
Worker	4.6600e-003	3.8200e-003	0.0392	1.3000e-004	0.0145	1.6000e-004	0.0146	3.8500e-003	1.4000e-004	3.9900e-003	0.0000	11.7093	11.7093	2.8000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.4000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.6000e-004**	**0.0000**	**16.8863**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2087	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2087**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.8000e-004	0.0000	5.1706
Worker	4.8600e-003	3.2200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.4000e-004**	**0.0000**	**16.8863**

1-51 Cont.

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3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3096	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1698
Total	**0.0359**	**0.3767**	**0.3096**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1698**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0193	3.0000e-004	0.0195	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.6900e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	8.5700e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0597	3.3000e-004	0.0369	2.6000e-004	0.0371	9.7800e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8019
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7272**	**54.7272**	**0.0177**	**0.0000**	**55.1697**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-003	0.1642	0.0524	7.6000e-004	0.0103	3.0000e-004	0.0106	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.8900e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.9575	9.9575	5.4000e-004	0.0000	9.9711
Worker	0.0124	8.4600e-003	0.0997	3.3000e-004	0.0769	2.6000e-004	0.0771	9.7500e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	**0.1195**	**1.0933**	**1.2345**	**2.0500e-003**		**0.0532**	**0.0532**		**0.0500**	**0.0500**	**0.0000**	**176.1716**	**176.1716**	**0.0419**	**0.0000**	**177.2193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3149	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	**0.0931**	**0.3722**	**0.7689**	**3.3400e-003**	**0.2769**	**2.1300e-003**	**0.2810**	**0.0747**	**1.9700e-003**	**0.0767**	**0.0000**	**309.2681**	**309.2681**	**0.0107**	**0.0000**	**309.5343**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0924	1.1000e-003	0.0257	3.6000e-004	0.0261	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1715
Worker	0.0840	0.0574	0.5764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.5300e-003	0.0681	0.0000	202.2438	202.2438	4.7500e-003	0.0000	202.3627
Total	0.0931	0.3722	0.6689	3.3400e-003	0.2759	2.1300e-003	0.2780	0.0727	1.9700e-003	0.0747	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.9000e-004	0.0208	2.6000e-004	0.0211	5.0000e-003	2.4000e-004	5.2900e-003	0.0000	77.1792	77.1792	4.1900e-003	0.0000	77.2831
Worker	0.0576	0.0379	0.4566	1.5600e-003	0.1810	1.2700e-003	0.1823	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	0.0641	0.2651	0.5216	2.3500e-003	0.2018	1.5300e-003	0.2034	0.0541	1.4100e-003	0.0555	0.0000	218.7233	218.7233	7.3400e-003	0.0000	218.9060

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3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	**0.0809**	**0.7394**	**0.8892**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5169**	**127.5169**	**0.0302**	**0.0000**	**128.2707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.3273	0.0690	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2811
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

1-51 Cont.

12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4600e-004	0.0296	8.4300e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0707
Worker	5.0100e-003	3.9400e-003	0.0479	1.6000e-004	0.0189	1.9000e-004	0.0190	5.0100e-003	1.8000e-004	5.1900e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7627
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**0.0008**	**0.0000**	**24.8333**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	0.0286	8.4800e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6000e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.6500e-003**	**0.0326**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0165	4.0000e-004	0.0570	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	1.0783	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0692	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5800e-003	6.0000e-005	1.6400e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0565	4.0000e-004	0.0570	0.0150	3.8000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	0.0197	0.0811	0.1597	7.0000e-004	0.0620	4.7000e-004	0.0625	0.0166	4.4000e-004	0.0170	0.0000	64.3778	64.3778	2.0800e-003	0.0000	64.4298

1-51 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,384.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	990.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	308.60	171.62	554,321	554,321
Total	2,516.01	3,099.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.80	9.40	6.80	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	9.40	6.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.80	9.40	6.80	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	9.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
NaturalGas Mitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5300e-005	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7937
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

1-51 Cont.

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	MMBtu/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6880	54.6880	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14600	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.9000e-005	5.9000e-005		5.9000e-005	5.9000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7927
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.9488**	**215.9488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

1-51 Cont.

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0166	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0166	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

6.0 Area Detail

6.1 Mitigation Measures Area

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0827	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

1-51 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0033	0.0013	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0013**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5109	0.6283	0.0156	121.8697
Unmitigated	101.5109	0.6283	0.0156	121.8697

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1955 / 10.8028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.90248 / 0.0939037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331415	2.9039	0.0127	4.4000e-004	3.4780
Total		**101.5109**	**0.6283**	**0.0156**	**121.8697**

.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.8028	82.8736	0.5815	0.0140	111.8715
nclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
igh Turnover (Sit down Restaurant)	1.55249 / 0.0958039	5.7304	0.0482	1.2000e-003	7.1304
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.5407 / 0.331415	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5100**	**0.6283**	**0.0156**	**121.8697**

.0 Waste Detail

.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2501	0.0000	94.3242
Unmitigated	38.0730	2.2501	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.96	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9592	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5569	0.0920	0.0000	3.8573
Total		**38.0730**	**2.2501**	**0.0000**	**94.3242**

1-51 Cont.

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed (tons)	Total CO2	CH4	N2O	CO2e
	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5569	0.0920	0.0000	3.8573
Total		38.0730	2.2501	0.0000	94.3242

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	269.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.80	1000sqft	0.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

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tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.05	5.04
tblVehicleTrips	SU_TR	131.04	205.63
tblVehicleTrips	SU_TR	26.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0692	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

1-51 Cont.

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0692	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.9049	17.6189	43.6920	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7959		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6720**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.9049	17.6189	43.6920	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7959		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6720**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

1-51 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	347	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	150.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

1-51 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1483	4.8911	1.0364	0.0146	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e- 003	0.1200	3.8400e- 003	0.1318	0.0369	3.6700e- 003	0.0406		544.8769	544.8769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8900e- 003	0.0842	6.5800e- 003	0.0908	0.2372	6.0800e- 003	0.2432		886.9227	886.9227	0.0238		886.5182
Total	**0.5396**	**7.0176**	**4.5018**	**0.0288**	**1.3600**	**0.0256**	**1.3856**	**0.3666**	**0.0242**	**0.3908**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.670 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1405	4.7911	1.0304	0.0148	0.3776	0.0152	0.3928	0.0926	0.0140	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1238	3.8400e-003	0.1316	0.0389	3.6700e-003	0.0405		544.9769	544.9769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8000e-003	0.8943	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		886.9227	886.9227	0.0238		886.5192
Total	**0.5338**	**7.0176**	**4.5018**	**0.0288**	**1.3600**	**0.0256**	**1.3856**	**0.3666**	**0.0242**	**0.2909**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.670 6**

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0360		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.467 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0360**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.467 3**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.9530	0.2263	2.6500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4365	272.4365	0.0165		272.8505
Worker	0.2111	0.1369	1.8896	5.5600e-003	0.6589	4.1100e-003	0.6630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	**0.2389**	**1.0906**	**2.1160**	**8.1100e-003**	**0.6229**	**6.0300e-003**	**0.6289**	**0.1647**	**5.6300e-003**	**0.1703**		**826.1401**	**826.1401**	**0.0314**		**826.9244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.0663	0.0000	10.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**10.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.457 3**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.8598	0.2353	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1369	1.8836	5.5800e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1190	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1723		826.1401	826.1401	0.0314		826.9244

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.8598	0.2253	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0164	1.2400e-003	0.0176		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.9000e-003	0.9667	0.2536	7.2800e-003	0.2608		1,158.361 1	1,158.361 1	0.0403		1,159.368 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.8598	0.2359	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0164	1.2400e-003	0.0176		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5600e-003	0.9008	0.2372	6.0500e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.8800e-003	0.9667	0.2536	7.2900e-003	0.2608		1,158.361 1	1,158.361 1	0.0403		1,159.368 7

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9269		2,895.268 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5200e-003	0.0640	1.5600e-003	0.0657	0.0164	1.5800e-003	0.0180		270.0691	270.0691	0.0159		270.4668
Worker	0.3168	0.1978	2.7888	8.5700e-003	0.9842	6.3900e-003	0.9906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3429**	**1.1032**	**3.0027**	**0.0111**	**0.9582**	**8.0500e-003**	**0.9663**	**0.2536**	**7.4600e-003**	**0.2611**		**1,124.248 3**	**1,124.248 3**	**0.0374**		**1,125.173 2**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0640	1.6600e-003	0.0657	0.0184	1.5900e-003	0.0200		370.0591	370.0591	0.0159		370.4569
Worker	0.3168	0.1970	2.7860	8.5700e-003	0.0942	6.3900e-003	0.1006	0.2372	5.8900e-003	0.2430		654.1791	654.1791	0.0215		654.7174
Total	0.3429	1.1032	3.0007	0.0111	0.1582	8.0500e-003	0.1663	0.2556	7.4800e-003	0.2631		1,124.238 3	1,124.238 3	0.0374		1,125.173 2

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.8900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.078 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0783	2.7168	0.6417	7.5800e-003	0.1920	4.9900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1282	0.0129	1.3413	9.5800e-003	1.3508	0.3557	8.8300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	0.5534	3.0128	4.7219	0.0204	1.5333	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0840	1.6800e-003	0.0857	0.0184	1.5900e-003	0.0200		270.0591	270.0591	0.0159		270.4558
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5311**	**4.8600e-003**	**0.5360**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**697.8145**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0548	1.6900e-003	0.0567	0.0184	1.6800e-003	0.0200		270.0591	270.0591	0.0159		270.4558
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0895	427.0895	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**4.8600e-003**	**0.5160**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**698.0145**

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**49.0421**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.8107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	6.3900e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.7200e-003**	**1.0319**	**0.2740**	**9.5700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0522	1.8102	0.4276	5.0600e-003	0.1280	3.5300e-003	0.1313	0.0365	3.1900e-003	0.0400		540.1183	540.1183	0.0312		540.9115
Worker	0.3168	0.1978	2.7760	6.6700e-003	0.8842	6.3900e-003	0.9006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3690	2.0080	3.2146	0.0136	1.0122	9.7200e-003	1.0319	0.2740	9.0700e-003	0.2831		1,394.297 4	1,394.297 4	0.0533		1,395.628 9

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0380		0.9975	0.9975		0.9280	0.9280		3,746.904 0	3,746.904 0	1.0494		3,773.210 3
Total	2.2691	21.4844	19.6434	0.0380	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450		3,746.904 0	3,746.904 0	1.0494		3,773.210 3

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4619	0.4663	7.0100e-003	0.1689	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0484		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2560	3.0800e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 9	1,047.470 9	0.0553		1,049.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3035		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4541**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1280**		**2,839.598 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6434	0.0388		0.9975	0.9975		0.9200	0.9200	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4044**	**19.6434**	**0.0388**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9200**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5600e-003	0.0489		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 9	1,047.470 9	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4741**	**0.0271**	**1.5127**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1266**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3699	0.3954	4.9000e-003	0.1230	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4643	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0351		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0351	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0399	1.3989	0.3454	4.9000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4457	0.2585	3.8824	9.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	**0.4857**	**1.6574**	**4.2458**	**0.0173**	**1.4693**	**0.0109**	**1.4802**	**0.3926**	**0.0101**	**0.4026**		**1,757.251 6**	**1,757.251 6**	**0.0568**		**1,758.671 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.919 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.919 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2300	7.6512	2.4404	0.0367	0.9841	0.0142	0.9983	0.2423	0.0136	0.2559		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0389	1.3889	0.9854	4.9000e-003	0.1289	1.5400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.5967	0.3680	5.1471	0.0165	1.7584	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0388		1,645.659 2
Total	0.8652	9.3781	7.9729	0.0581	2.8805	0.0282	2.9287	0.7534	0.0265	0.7799		6,151.470 9	6,151.470 9	0.3196		6,159.459 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2308	7.6512	2.4409	0.0367	0.8841	0.0140	0.8983	0.2423	0.0136	0.2559		3,963.047 2	3,963.047 2	0.2630		3,969.373 3
Vendor	0.0285	1.3689	0.3854	4.9000e-003	0.1260	7.6400e-003	0.1295	0.0369	7.4700e-003	0.0383		523.7364	523.7364	0.0277		524.4272
Worker	0.5957	0.3590	5.1471	0.0165	1.7984	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 3
Total	0.8552	9.3791	7.9729	0.0581	2.8085	0.0282	2.8287	0.7534	0.0265	0.7799		6,151.470 9	6,151.470 9	0.3196		6,159.459 6

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 5
Worker	1.1169	0.6713	9.6509	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 5	0.0720		3,085.611 0
Total	1.2337	4.7779	10.8092	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1169	4.1080	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2357	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0964	1.1230	0.0146	0.3640	4.5700e-003	0.3686	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.6118	9.0151	0.0299	3.3533	0.0230	3.3763	0.8890	0.0212	0.9103		2,982.626 8	2,982.626 8	0.0688		2,984.295 7
Total	1.1714	4.7082	10.1382	0.0445	3.7173	0.0276	3.7449	0.9999	0.0256	1.0254		4,548.136 5	4,548.136 5	0.1505		4,551.848 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0864	1.1290	0.0145	0.3848	4.5700e-003	0.3886	0.1100	4.3700e-003	0.1143		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.5118	9.0151	0.0299	3.3539	0.0230	3.3763	0.8893	0.0212	0.9105		2,982.626 9	2,982.626 9	0.0668		2,984.295 7
Total	1.1714	4.7082	10.1382	0.0445	3.7373	0.0276	3.7649	0.9993	0.0256	1.0254		4,548.136 5	4,548.136 5	0.1485		4,551.848 3

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0226		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	0.9882	9.5246	14.6258	0.0226		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	4.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4000e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0220**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	6.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4800e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1531	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5196**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6626	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9186	0.0215	2.9601	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6626	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9186	0.0215	2.9601	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01
Unmitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.24	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	906.80	171.62	554,321	554,321
Total	2,515.91	3,089.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	9224.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7539
Total		0.1195	1.0380	0.5574	6.5100e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	6.23403	0.0668	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.60776	0.0279	0.2763	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3240	330.3240	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7309
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

6.0 Area Detail

6.1 Mitigation Measures Area

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 5	5,058.071 5	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 5	5,058.071 5	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7805	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr															
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.923 5	5,018.923 5	0.0962	0.0920	5,048.647 8
Landscaping	0.6686	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1997
Total	5.4599	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.847 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	782.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.80	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

1-51 Cont.

tblVehicleTrips	SU_TR	5.88	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	36.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 8
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0859	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.640 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

1-51 Cont.

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 8
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0859	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.640 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.6801	17.7986	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0663**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.6801	17.7986	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0663**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	2/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

1-51 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	3.9493	1.1116	0.0145	0.3076	0.0154	0.3230	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.890 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1230	3.9600e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2388	2.7080	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		829.0894
Total	0.5710	7.0895	4.3263	0.0278	1.3600	0.0259	1.3681	0.3666	0.0246	0.3912		2,931.745 6	2,931.745 6	0.1691		2,935.973 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1116	0.0145	0.3378	0.0154	0.3532	0.0928	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9815	0.5085	4.9600e-003	0.1280	3.9600e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9864
Worker	0.3690	0.2338	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5718	7.0805	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931.745 5	2,931.745 5	0.1691		2,935.973 6

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9500	0.2583	2.4800e-003	0.0640	1.9600e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1496	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.0339	517.0339	0.0139		518.1809
Total	0.2599	1.1006	1.9460	7.6800e-003	0.6229	6.0700e-003	0.6290	0.1647	5.6900e-003	0.1703		781.5841	781.5841	0.0316		783.1736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.6589	4.1100e-003	0.6630	0.1492	3.7900e-003	0.1529		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1086	1.9460	7.6800e-003	0.6229	6.0900e-003	0.6290	0.1657	5.6900e-003	0.1723		782.3841	782.3841	0.0316		783.1736

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9268		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9268		2,895.149 5

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9587	0.2533	2.4600e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3680	0.2398	2.7083	8.3100e-003	0.8943	6.5800e-003	0.9009	0.2372	6.0600e-003	0.2432		829.5343	829.5343	0.0222		829.0894
Total	0.3982	1.1985	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2536	7.9600e-003	0.2615		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1589	1.1589		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1589	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.9697	0.2633	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.6502	264.6502	0.0177		264.9927
Worker	0.3699	0.2398	2.7083	8.3100e-003	0.6942	6.5800e-003	0.7008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		827.0894
Total	0.3982	1.1905	2.9616	0.0108	0.7582	8.5600e-003	0.7668	0.2536	7.9600e-003	0.2615		1,091.084 5	1,091.084 5	0.0399		1,091.682 1

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9289		2,895.269 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2386	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2186	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		796.8292	796.8292	0.0201		799.3305
Total	0.3745	1.1102	2.7393	0.0105	0.9482	8.1100e-003	0.9553	0.2556	7.5300e-003	0.2631		1,061.023 4	1,061.023 4	0.0371		1,061.950 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2737	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2356	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0164	1.6400e-003	0.0181		362.1942	362.1942	0.0170		362.6199
Worker	0.3470	0.2156	2.4998	8.0100e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		799.8292	799.8292	0.0201		799.3306
Total	0.3745	1.1182	2.7393	0.0105	0.9582	0.0100	0.9663	0.2536	7.5300e-003	0.2631		1,161.023 4	1,161.023 4	0.0371		1,161.950 4

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0024	0.7052	0.7185	7.3600e-003	0.1926	5.1600e-003	0.1977	0.0553	4.9300e-003	0.0602		786.5827	786.5827	0.0511		787.8598
Worker	0.8206	0.3248	3.7497	0.0120	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,199.243 0	1,199.243 8	0.0301		1,199.998 8
Total	0.8229	1.0299	4.4682	0.0194	1.5339	0.0148	1.5486	0.4110	0.0138	0.4248		1,984.826 5	1,984.826 5	0.0812		1,986.858 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0824	2.7952	0.7185	7.3600e-003	0.1420	5.1600e-003	0.1972	0.0553	4.9300e-003	0.0602		786.5827	786.5827	0.0511		787.8596
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	9.5900e-003	1.3509	0.3557	8.8300e-003	0.3646		1,198.243 8	1,198.243 8	0.0301		1,198.995 8
Total	**0.6029**	**3.0299**	**4.4682**	**0.0194**	**1.5333**	**0.0148**	**1.5481**	**0.4110**	**0.0138**	**0.4248**		**1,984.826 5**	**1,984.826 5**	**0.0812**		**1,986.855 6**

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1020	11.1249	14.5805	0.0220		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1020**	**11.1249**	**14.5805**	**0.0220**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9617	0.2385	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1083	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6653
Total	0.2010	1.0100	1.4884	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2395	2.4500e-003	0.0649	1.7200e-003	0.0667	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1083	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6663
Total	0.2010	1.0100	1.4894	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2862

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	48.8421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2186	2.4936	6.0100e-003	0.8842	6.3300e-003	0.8905	0.2372	5.8300e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9788**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 4**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2186	2.4936	6.0100e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9788**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 4**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4644	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4644**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4906	6.6800e-003	0.1599	2.7800e-003	0.1717	0.0453	2.6300e-003	0.0480		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4527**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4154**	**0.0129**	**0.4283**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4644	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4644**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4906	6.6800e-003	0.1599	2.7800e-003	0.1717	0.0453	2.6300e-003	0.0480		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4527**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4154**	**0.0129**	**0.4283**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	16.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**16.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3991	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2938	3.4559	0.0116	1.3415	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**	**0.0000**	**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3691	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		598.7233	598.7233	0.0295		599.4604
Worker	0.4909	0.2835	3.4553	0.0116	1.3415	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,752.279 0**	**1,752.279 0**	**0.0566**		**1,753.693 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6877	2.5678	0.0360	0.8841	0.0146	0.8988	0.2423	0.0139	0.2562		3,909.269 2	3,909.269 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0359	1.5400e-003	0.0374		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.6079	0.0154	1.7584	0.0125	1.7709	0.4743	0.0115	0.4858		1,538.074 3	1,538.074 3	0.0361		1,538.977 6
Total	0.9329	9.4395	7.5992	0.0562	2.8005	0.0286	2.8291	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6871	2.5878	0.0360	0.8841	0.0146	0.8986	0.2423	0.0139	0.2562		3,909.368 2	3,909.368 2	0.2617		3,915.911 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0359	1.5400e-003	0.0374		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.8079	0.0154	1.7684	0.0125	1.7809	0.4743	0.0115	0.4858		1,536.974 3	1,536.974 3	0.0881		1,538.977 6
Total	**0.9329**	**9.4389**	**7.5992**	**0.0562**	**2.8005**	**0.0286**	**2.8291**	**0.7534**	**0.0269**	**0.7804**		**5,956.065 8**	**5,956.065 8**	**0.3274**		**5,964.249 7**

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5726	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	**1.5726**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.209 9**	**2,555.209 9**	**0.6079**		**2,570.406 1**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0803	1.3706	0.0143	0.3840	4.8400e-003	0.3889	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0886		1,528.381 3
Worker	1.2272	0.7344	8.6398	0.0089	3.3533	0.0734	3.3767	0.8990	0.0215	0.9205		2,883.889 3	2,883.889 3	0.0678		2,885.583 0
Total	1.3502	4.8146	9.9105	0.0232	3.7373	0.0282	3.7655	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1562		4,413.964 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0800	1.2705	0.0143	0.3840	4.6400e-003	0.3888	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0895		1,528.351 3
Worker	1.2272	0.7344	8.6299	0.0289	3.3530	0.0234	3.3767	0.8893	0.0215	0.9108		2,883.889 3	2,883.889 3	0.0671		2,885.563 0
Total	1.3502	4.8146	9.9005	0.0432	3.7373	0.0282	3.7655	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1566		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.3342	0.0142	0.3640	4.7700e-003	0.3688	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0070		1,673.164 1
Worker	1.1649	0.6690	9.0553	0.0260	3.3533	0.0230	3.3763	0.8893	0.0212	0.9105		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0402	3.7373	0.0278	3.7651	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1690		4,313.572 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.2342	0.0142	0.3849	4.7700e-003	0.3896	0.1106	4.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0870		1,523.154 1
Worker	1.1849	0.6690	8.0583	0.0280	3.9533	0.0230	3.9763	0.6883	0.0212	0.9095		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0422	3.7373	0.0278	3.7651	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1490		4,313.572 4

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5746	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5746	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5500e-003	0.1296	0.0368	1.5200e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0220**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5500e-003	0.1296	0.0368	1.5200e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 6**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1800	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.94	1,094.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit-Down Restaurant)	869.51	1,476.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	263.17	498.60	171.62	554,321	554,321
Total	2,515.61	3,069.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down)	16.60	8.40	6.90	6.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000712	0.000925
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000925
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000712	0.000925
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000925
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 42 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	6234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7069	4.7069	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

CalEEMod Version: CalEEMod.2016.3.2 Page 43 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	6.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.80776	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7069	4.7069	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

1-51 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Health	0.4801	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

1-51 Cont.

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4501	3.8314	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,010.023 5	5,010.023 5	0.0962	0.0930	5,048.847 9
Landscaping	0.6585	0.2506	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1960
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0930	5,088.043 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

1-51 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

1-51 Cont.

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

```
 Anemometer Height:   10.000 meters

 Dominant Surface Profile: Urban

 Dominant Climate Type:    Average Moisture

 Surface friction velocity (u*): not adjusted

DEBUG OPTION ON



 AERSCREEN output file:

 2021.04.05_PacificCoastCommons_Operation.out



 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

1-51 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

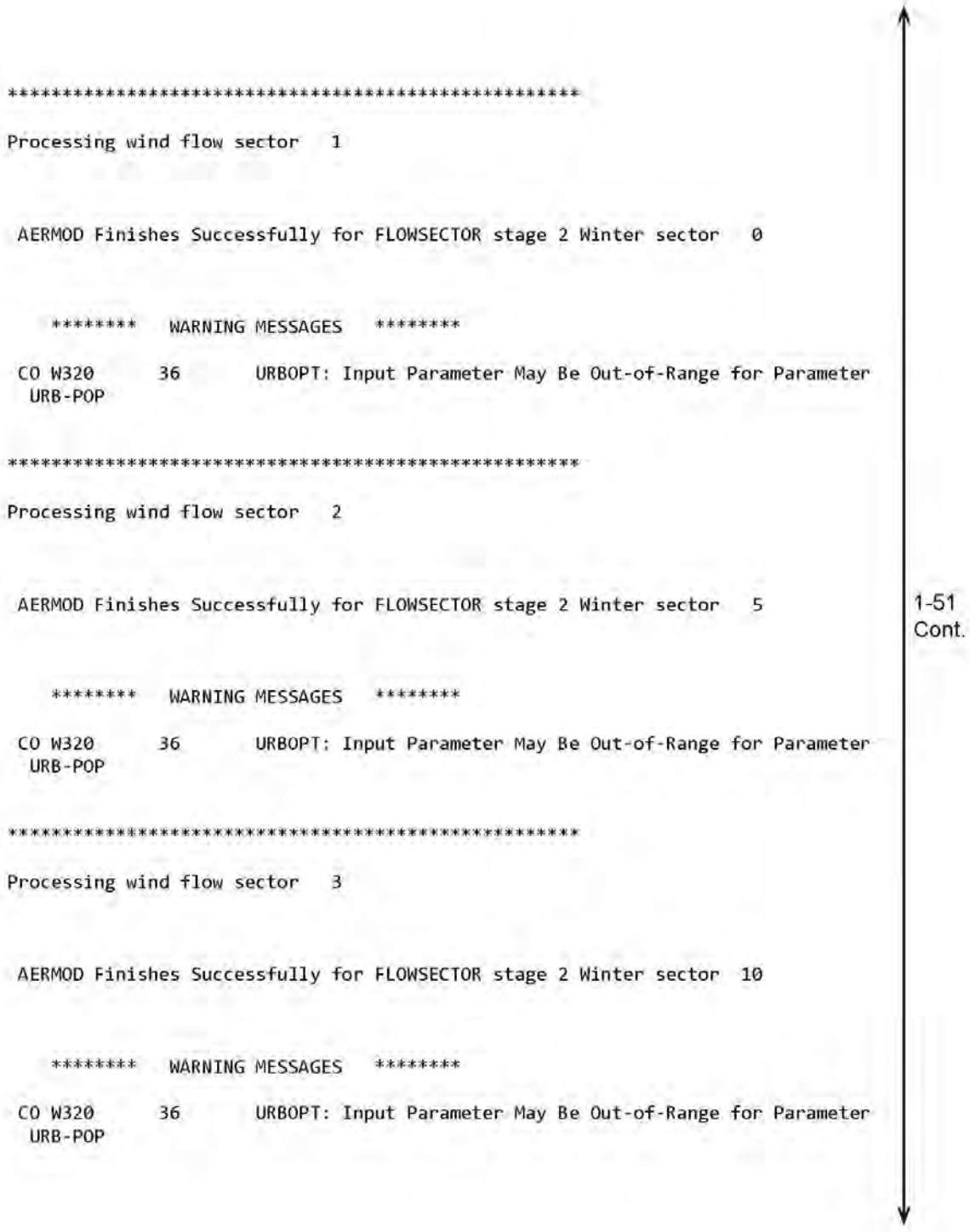
FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD

 Processing Winter

Processing surface roughness sector  1
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

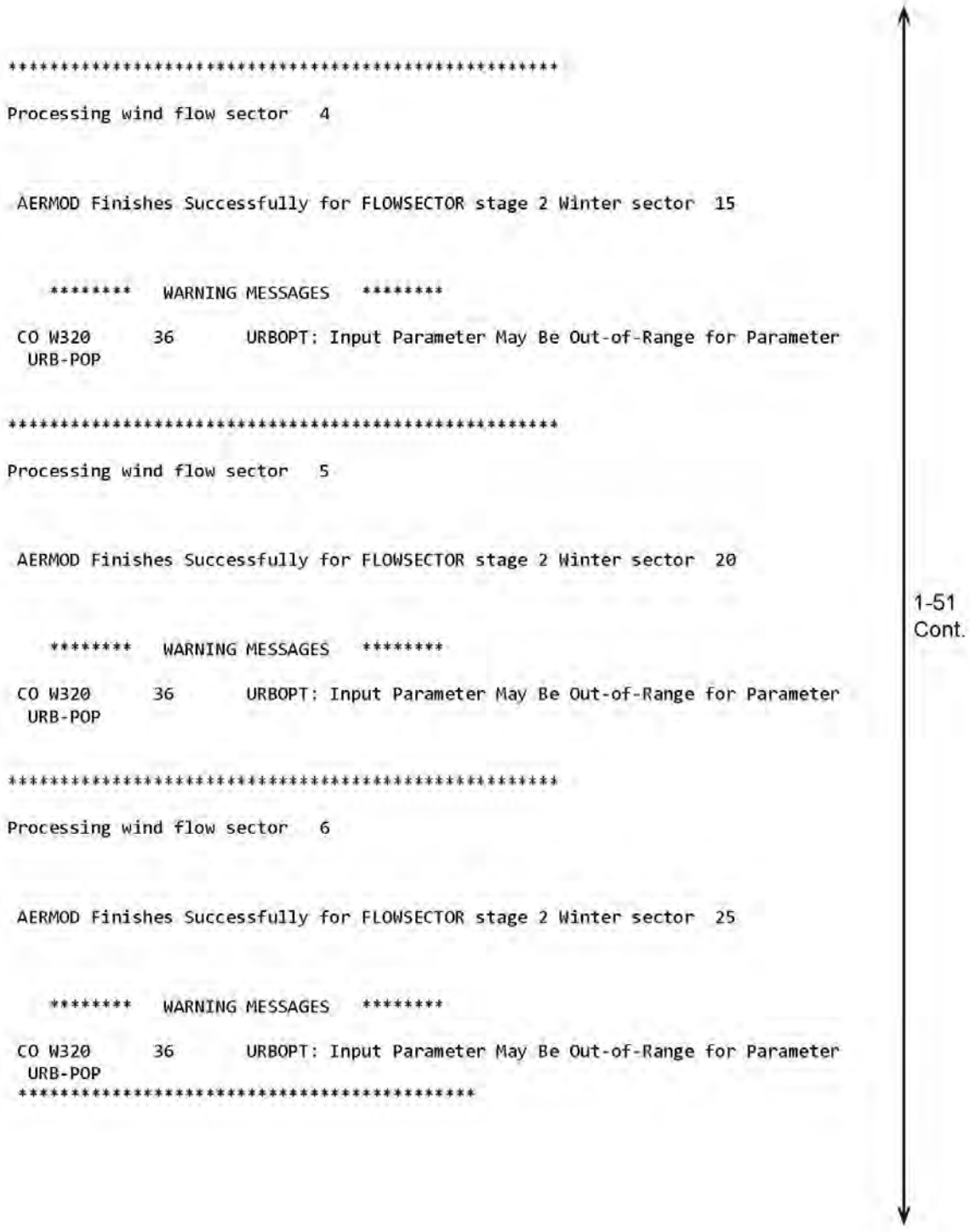
Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

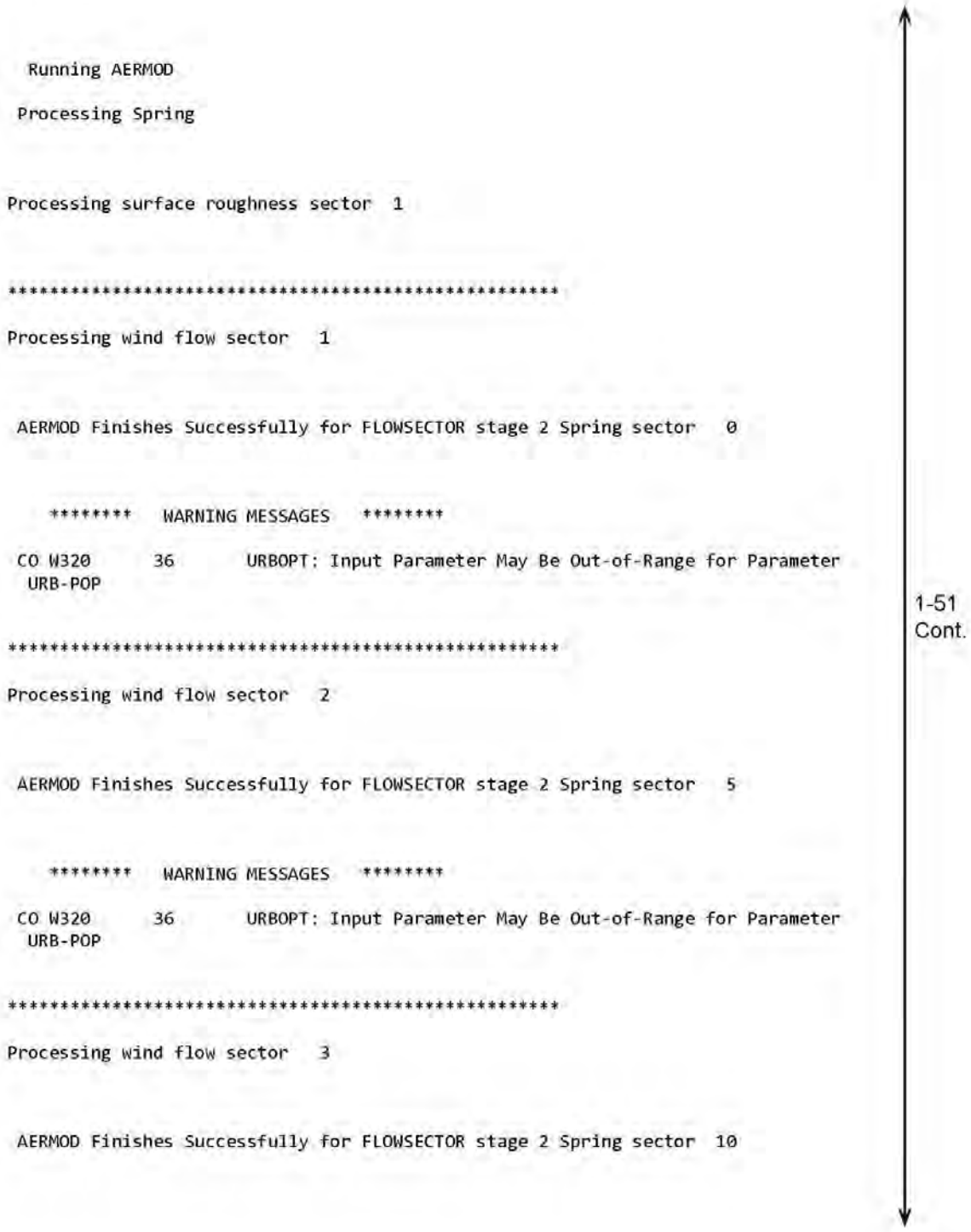
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 **************************************************
```

1-51
Cont.



```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

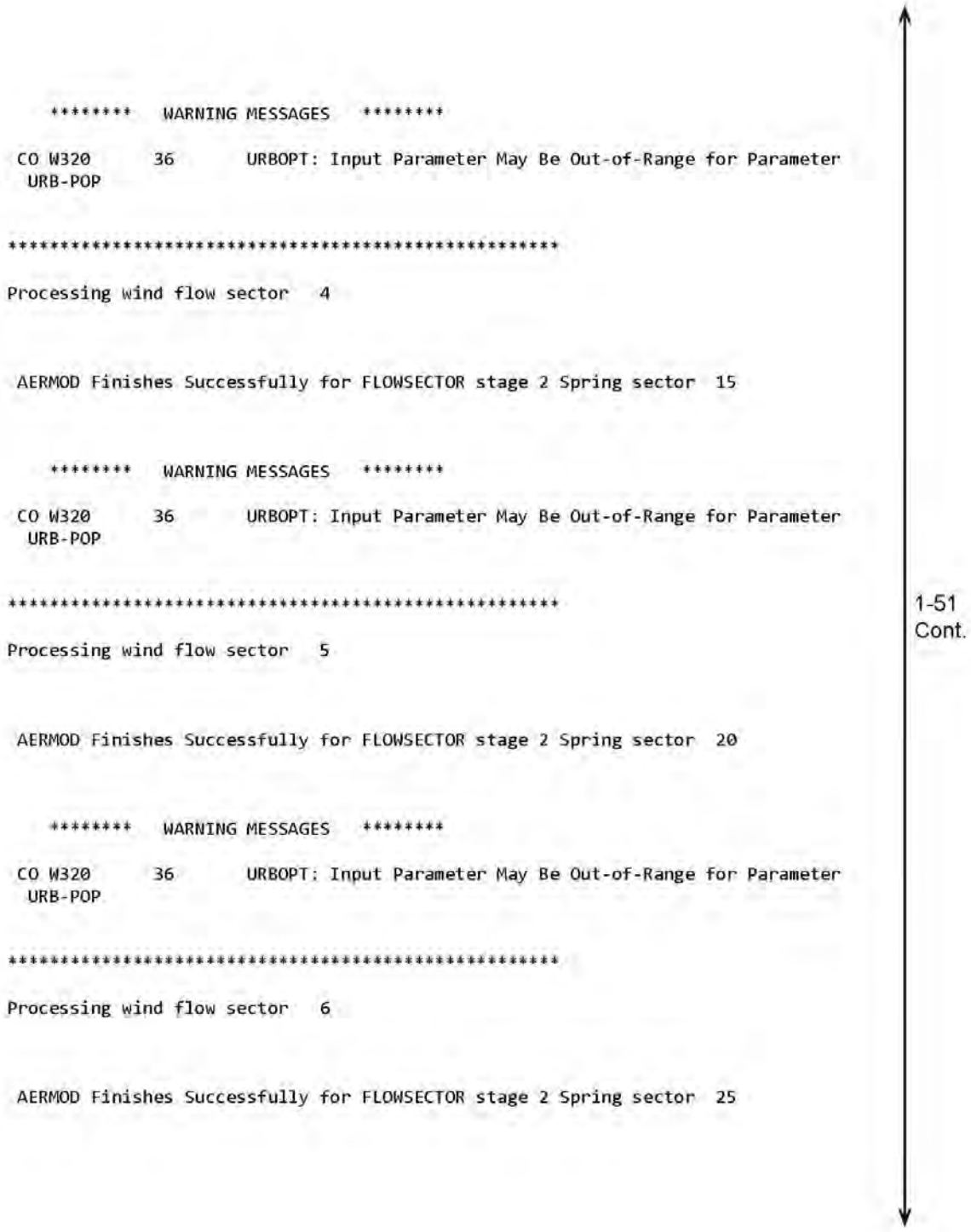
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

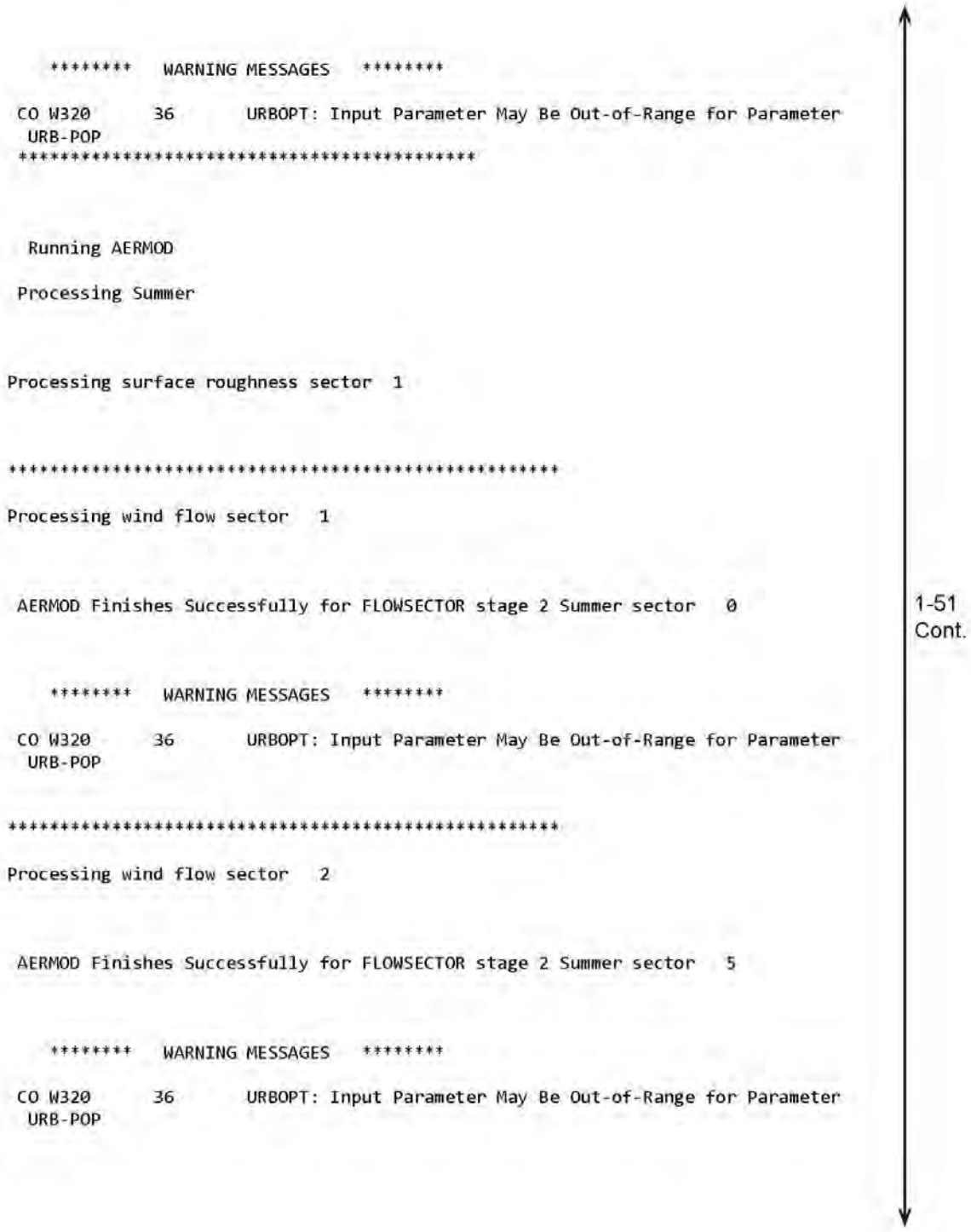
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

1-51 Cont.



```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

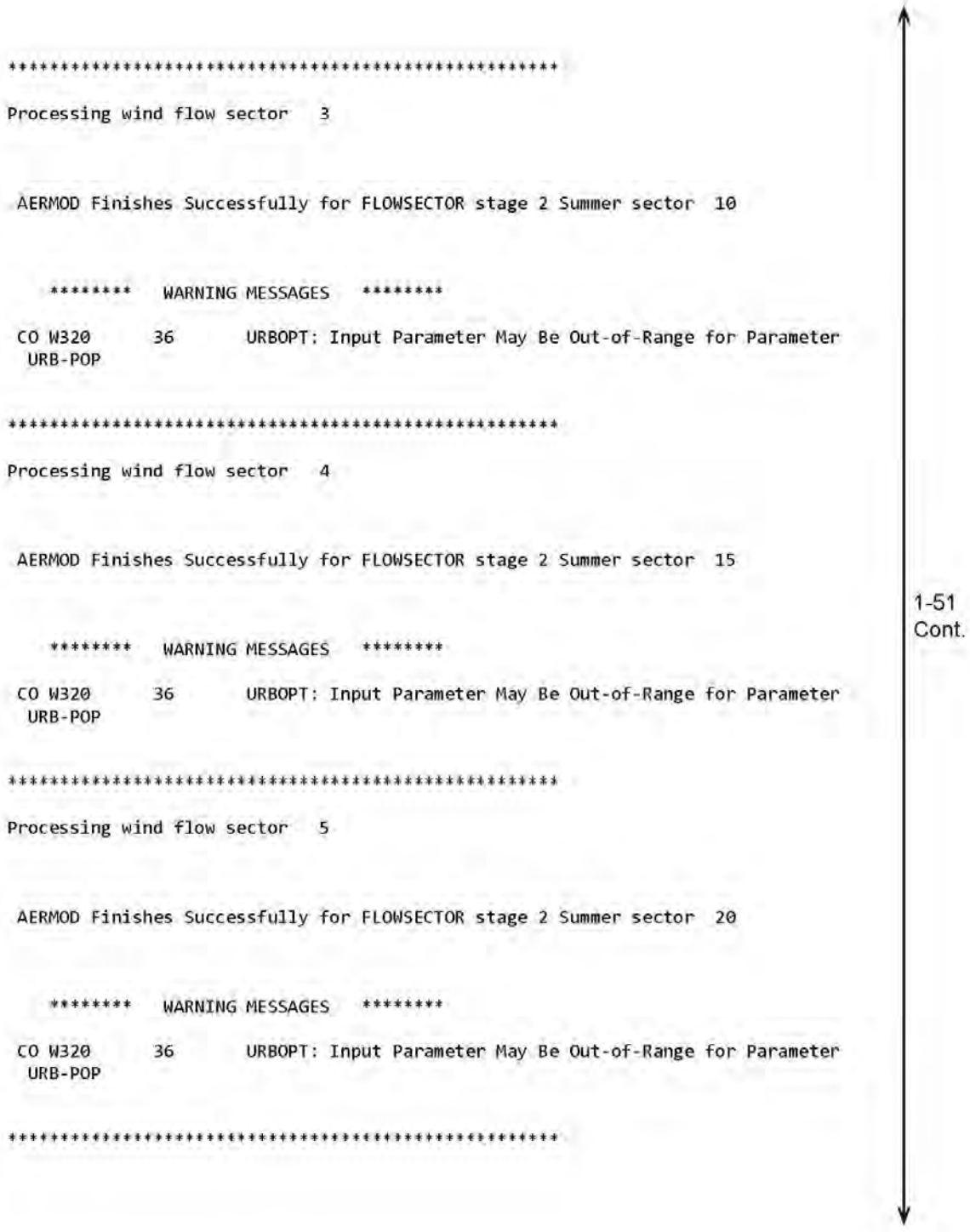
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

1-51
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

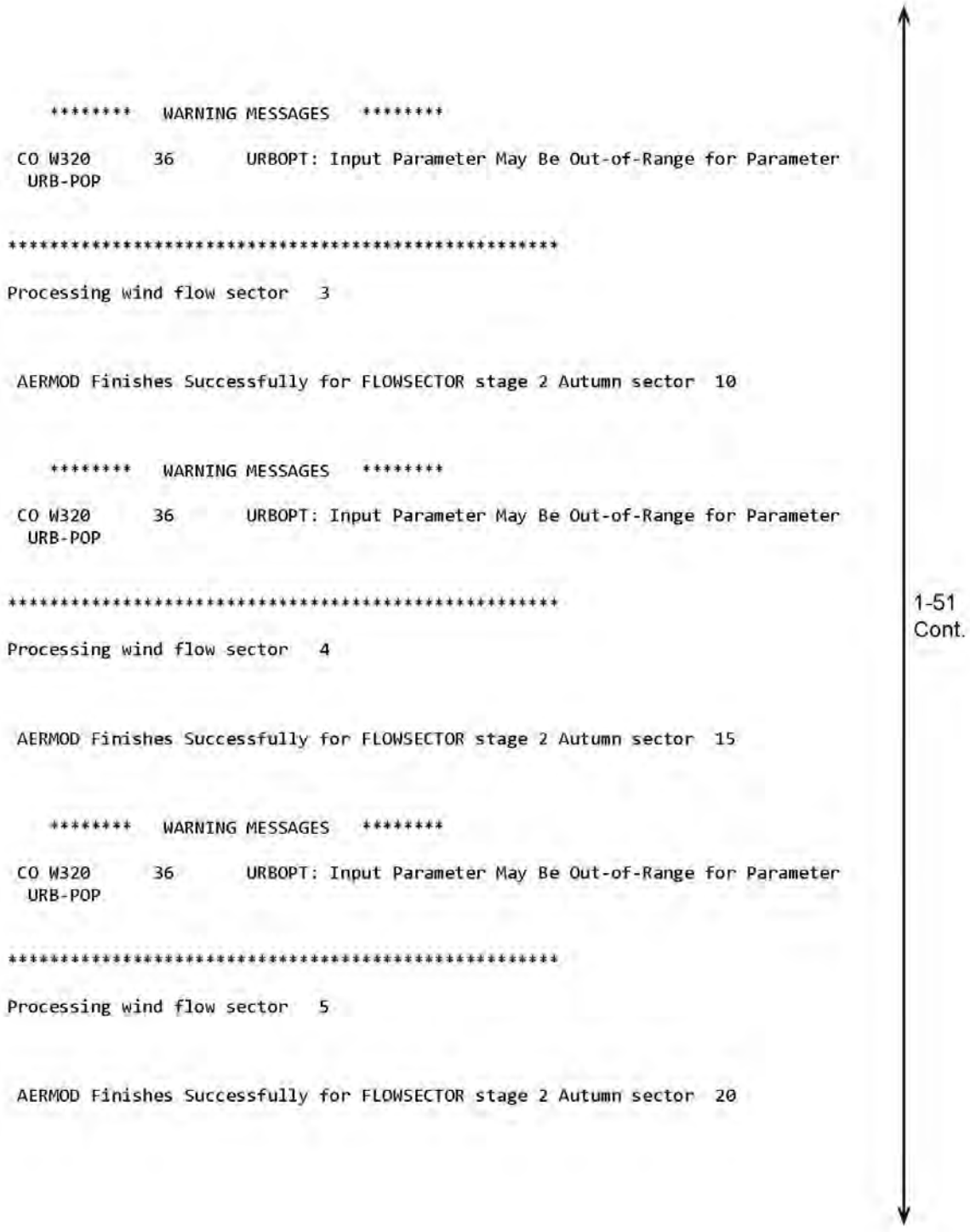
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

1-51 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

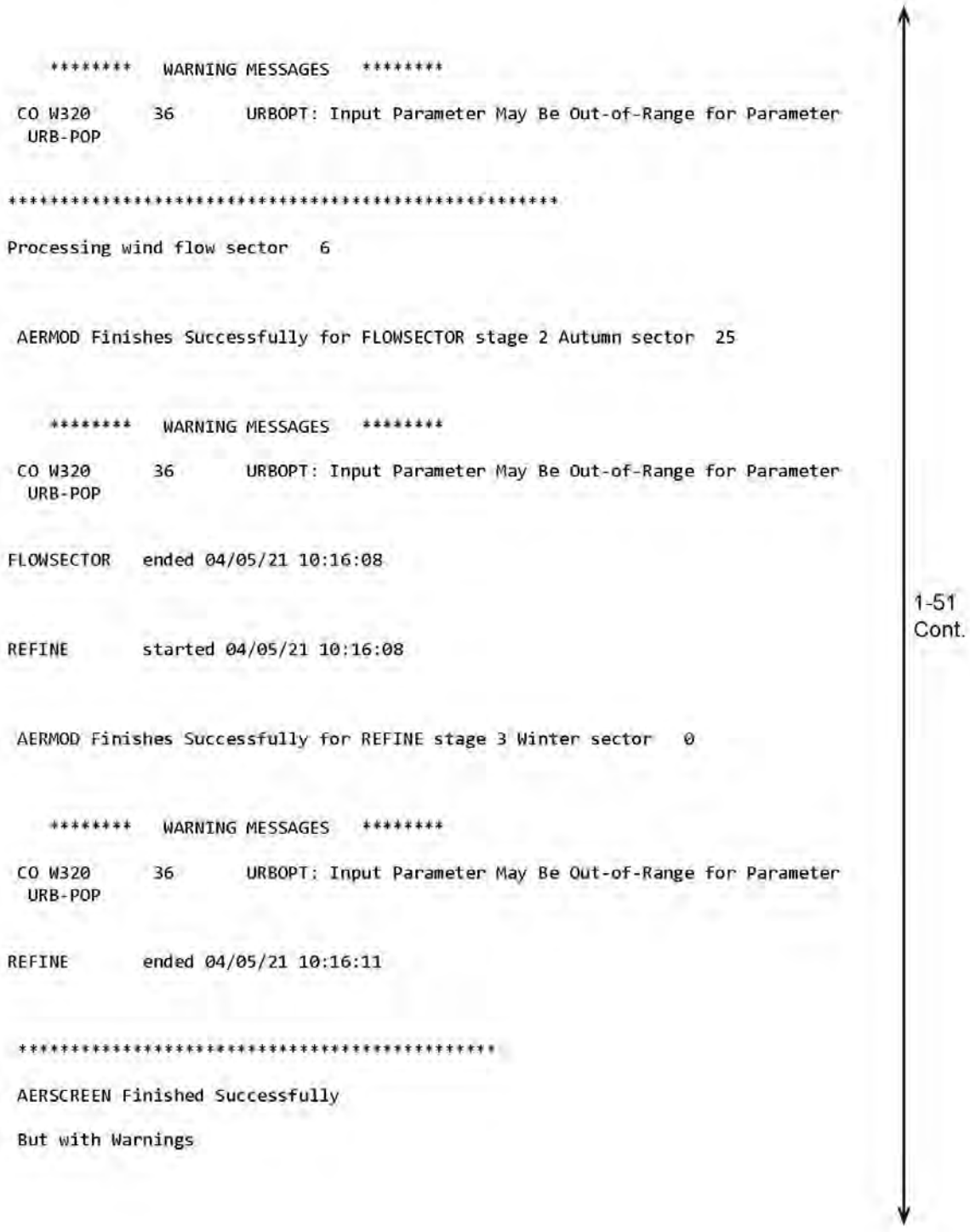
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

REFINE       ended 04/05/21 10:16:11


 ***********************************************

 AERSCREEN Finished Successfully

 But with Warnings
```

1-51 Cont.

```
Check log file for details

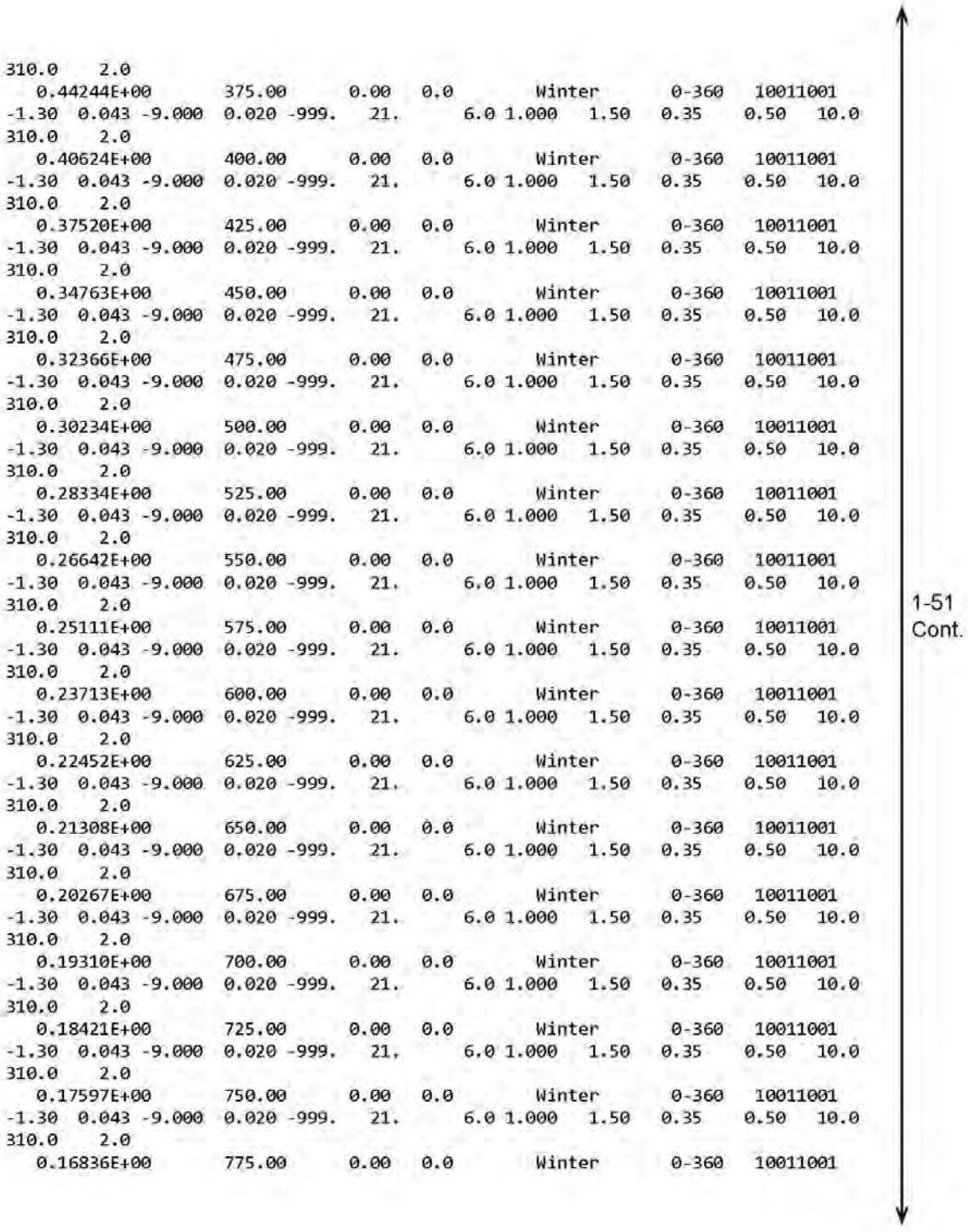
**********************************************

Ending date and time  04/05/21 10:16:14
```

1-51
Cont.

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.62000E-01      1625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46442E-01      2025.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45668E-01      2050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

```
   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

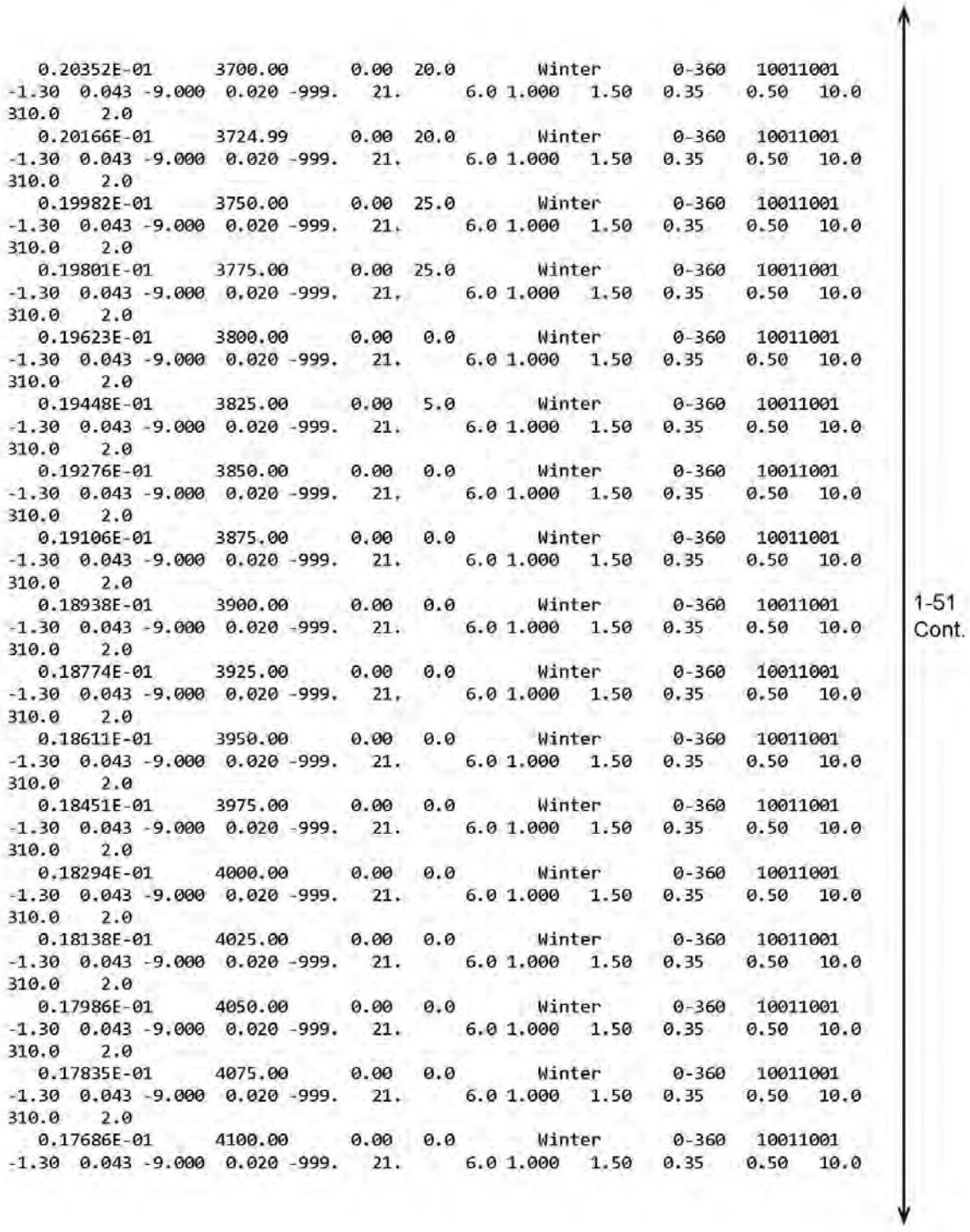
1-51 Cont.

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310.0    2.0
   0.28742E-01      2875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter      0-360   10011001
```

1-51 Cont.

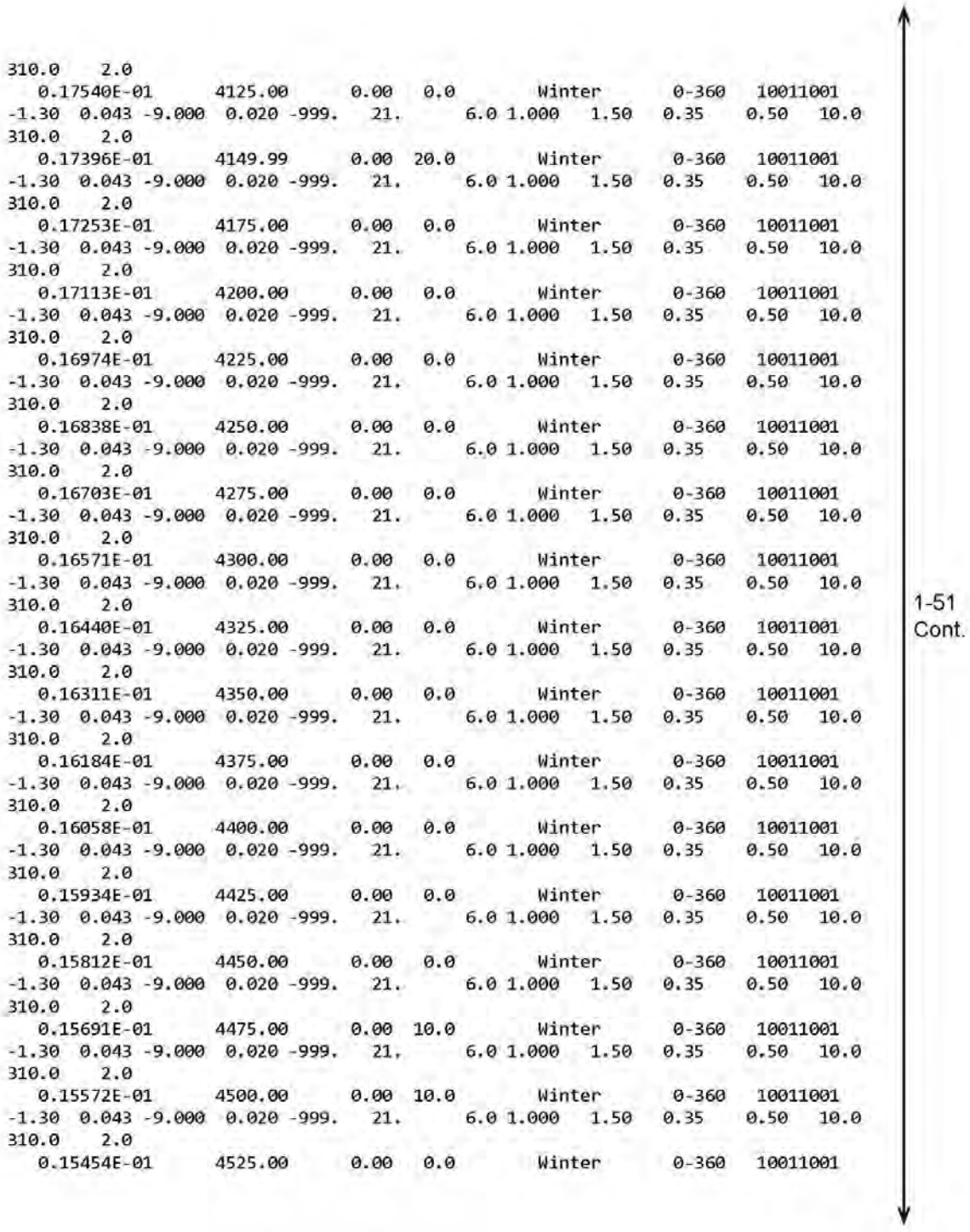
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310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.



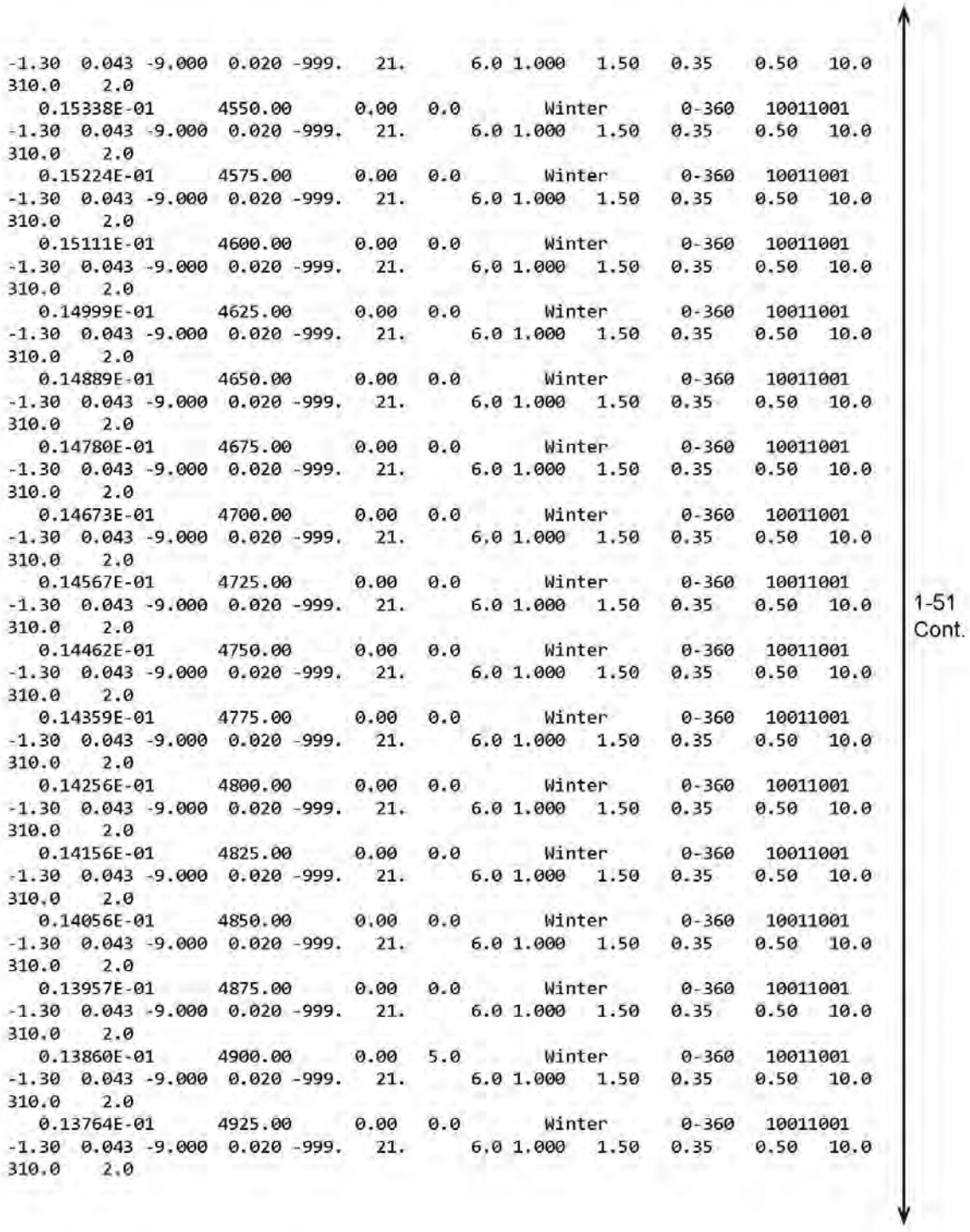
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310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



```
310.0    2.0
   0.17540E-01      4125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter       0-360   10011001
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1-51 Cont.



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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

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Attachment E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

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Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

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Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

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Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

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Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds.; *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

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Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost. *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

1-52 Cont.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association, Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

1-52 Cont.

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

1-52 Cont.

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Mentor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

1-52 Cont.

Attachment F

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:
California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:
Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

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Cont.

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

1-52 Cont.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

1-52 Cont.

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

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1-52 Cont.

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

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1-52 Cont.

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

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1-52 Cont.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

1-52 Cont.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

1-52 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

EXHIBIT B

MITCHELL M. TSAI
ATTORNEY AT LAW

Mitchell Tsai <mitch@mitchtsailaw.com>

COMMENT LETTER: Pacific Coast Commons Specific Plan Project [SCH No.: 2020050508]

Leon Ramsey, Jr. <leon@mitchtsailaw.com> Mon, Apr 12, 2021 at 6:27 PM
To: psamaras@elsegundo.org
Cc: Mitchell Tsai <mitch@mitchtsailaw.com>, Greg Sonstein <greg@mitchtsailaw.com>

Good evening,

Please see attached regarding the above-referenced project and confirm receipt of this email and its attachment.

Thank you,

Leon Ramsey Jr.
Paralegal

Mitchell M. Tsai, Attorney At Law
155 South El Molino Avenue
Suite 104
Pasadena, CA 91101
Office: (626) 381-9248
Phone: (626) 389-8320
Fax: (626) 389-5414
Email: leon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

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Response to Comment Letter 1

Southwest Regional Council of Carpenters
(via Mitchell M. Tsai, Attorney at Law)
December 8, 2021

1-1 In summary, this comment includes an introductory statement and a general summary of the proposed Project's description.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-2 This comment requests the City to provide notice to the commenter of all notices referring or related to the proposed Project.

The commenter's request will be granted in accordance with the California Public Records Act (Government Code §§6250-6270); California Environmental Quality Act (CEQA) (Public Resource Code §21000 et seq); and Planning and Zoning Law (Government Code §§65000-65010), as cited in the letter. Additionally, in accordance with CEQA Guidelines Section 15094, the Lead Agency (the City of El Segundo) shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the Project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-3 In summary, this comment states the City should require the Project applicant to provide additional community benefits such as local hire project labor agreement to construct the proposed Project. Furthermore, the comment cites Comment 1-26 for more discussion.

Please refer to Response to Comment 1-26.

This comment requests that the City consider utilizing "skilled and trained workforce policies and requirements". This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing economic benefits and benefits to greenhouse gas, air quality, and transportation impacts. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

Additionally, the comment requests that the City require the Project to be built to standards exceeding the 2019 California Green Building Code (CalGreen) to mitigate environmental impacts. Draft EIR Sections 4.4, Energy and 4.6, Greenhouse Gas Emissions, determined impacts would be less than significant and no mitigation was required. The proposed Project would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency (Draft EIR page 4.4-14). Moreover, Table 4.6-8, Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies, demonstrates that the proposed

Project would be consistent with the City's Municipal Code and CalGreen requirements (Draft EIR page 4.6-43). Given this, the proposed Project currently meets required standards and no change or addition is required to the Draft EIR's environmental analysis. However, this comment is acknowledged and will be taken into consideration by the City's decision markers.

1-4 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations.

The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq.* The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-5 In summary, this comment states that significant revisions to Chapter 3, Changes to the Draft EIR, of the Final EIR were made, thus, requiring recirculation of the EIR due to changes to transportation and cumulative impacts analyses with the addition of three additional related projects.

Chapter 2, Responses to Comments, of the Final EIR addressed concerns associated with cumulative impact analyses. As discussed in Topical Response No. 1 – Cumulative Impacts (starting on Final EIR page 2-2), the City added three reasonably foreseeable projects shown and incorporated in Table 2-2, Additional Related Projects. Topical Response No. 1 determined the additions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures, as further demonstrated in Topical Response No. 1. Given that these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact, pursuant to CEQA Guidelines Section 15088.5, recirculation of the Draft EIR is not required.

Regarding the commenter's assertion about the Final EIR's transportation analysis, Topical Response No. 1 concluded the addition of three related projects would not change the Draft EIR's determination. Appendix A, Revised Future Analysis, of the Final EIR was included to support this conclusion. For example, the addition of three related projects would not change the proposed Project's proximity to public transit and the Project (and other related projects) would cumulatively contribute to transit ridership maintained by Metro and LADOT, which would result in less than significant impacts. Additionally, the Final EIR demonstrated the addition of three related projects would not result in a cumulatively significant impact related to vehicle miles traveled (VMT). As further described in Chapter 2 of the Final EIR, the Project's VMT would fall below SCAG's efficiency-based threshold and the Project site is located within an urbanized area served by public transit. Therefore, the Project's contribution to cumulative VMT would not be cumulatively considerable.

Finally, the comment notes changes to the Draft EIR have been made to the Project's trip generation, traffic volume, and level of service (LOS) analyses. As detailed in Chapter 2, Responses to Comments, of the Final EIR, discussion of the changes in the LOS analysis were made for informational purposes related to the applicability of the City's General Plan policies. However, automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As such, the City's LOS

policy is not applicable under CEQA per Senate Bill (SB) 743. No change or addition to the EIR's environmental analyses are required.

1-6 In summary, this comment states the Southwest Regional Council of Carpenters submitted comments to the Draft EIR on April 12, 2021. However, an administrative error occurred. As such, the comment letter was not included in Final EIR Chapter 2, Responses to Comments.

The City acknowledges the receipt of the pre-dated comment letter, which is included as Comments 1-8 through 1-25. Please see Responses to Comments 1-8 through 1-25 for responses to the letter.

1-7 In summary, this comment states opposition to the proposed Project and requests revisions and recirculation of the Draft EIR.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

Responses 1-8 through 1-25 are for "Exhibit A, April 12, 2021 SWRCC Letter to Paul Samaras"

1-8 Please refer to Response to Comment 1-1.

1-9 Please refer to Response to Comment 1-2.

1-10 Please refer to Response to Comment 1-3.

1-11 In summary, this comment states a summary of the qualifications of Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D and refers to their comments regarding the Draft EIR's greenhouse gas emissions analyses, which are attached to the primary comment letter.

The comment does not express any environmental comments or concerns related to the analysis in the Draft EIR. The aforementioned comments are included as Comments 1-26 and 1-28 through 1-51. As such, please see Responses to Comments 1-26 and 1-28 through 1-51, for more discussion.

1-12 Please refer to Response to Comment 1-4.

1-13 Please refer to Response to Comment 1-5.

1-14 In summary, this comment recommends that the City adopt mitigation measures to mitigate public health risks related to COVID-19 during construction of the proposed Project.

The potential for Project construction to cause COVID-19 to spread through worker exposure is not an impact on the environment under CEQA, rather it is a public health concern under the purview of federal, state, and local public health agencies. CEQA requires the consideration of significant changes in the environment caused by a proposed project; therefore, an existing adverse environmental condition that a project does not create or exacerbate is not responsible for mitigating that adverse condition. Implementation of the proposed Project would not create or exacerbate an existing environmental hazard or an existing public health hazard, and therefore, no mitigation is required. Compliance with existing mandates from federal, state, and local public health agencies, including California Occupational Safety and Health Administration's (Cal/OSHA) *COVID-19 Prevention Emergency Temporary Standards* (ETS) are specifically intended to

address workplace health and safety (OSHSB 2021). Policy mandates from public health agencies are consistently updated to address rapidly changing circumstances and provide the most appropriate and methods for protecting worker safety. For instance, the most recent Order from the County of Los Angeles Department of Public Health requires that by January 17, 2022, mandates that employers must provide their employees who work indoors and in close contact with other workers or the public, and require them to wear, a well-fitting medical grade mask, surgical mask, or higher-level respirator, such as an N95 filtering facepiece respirator or KN95, at all times while indoors at the worksite or facility (LACDPH 2022). In addition to mandatory measures set forth by the County of Los Angeles Department of Public Health related to masking in the workplace and Cal/OSHA's *COVID-19 Prevention Emergency Temporary* Standards (ETS), there are other federal OSHA standards that apply to protecting workers from infection include: requirements for personal protective equipment (PPE) (29 CFR part 1910, Subpart I (e.g., 1910.132 and 133)), respiratory protection (29 CFR 1910.134), sanitation (29 CFR 1910.141), and OSHA's requirements for employee access to medical and exposure records (29 CFR 1910.1020). Employers are also required by the General Duty Clause, Section 5(a)(1) of the OSH Act, to provide a safe and healthful workplace free from recognized hazards that are causing or likely to cause death or serious physical harm (OSHA 2021).

Therefore, compliance with mandatory federal, state, and local public health agency regulations would ensure adequate and appropriate protections for workplace safety and the proposed Project would not create or exacerbate an existing environmental or public health hazard. There is no aspect of the proposed Project that would prevent or interfere with the United Brotherhood of Carpenters providing the Carpenter union members with additional trainings related to COVID-19. No changes to the project description or environmental analyses included in the Draft EIR are required.

1-15 In summary, this comment states the Draft EIR defers details within specific mitigation measures, as detailed below.

In summary, this comment states MM-CUL-1 does not include details of the Worker Environmental Awareness Program (WEAP) to reduce potential impacts to archeological resources. As described in Draft EIR Section 4.3, Cultural Resources, mitigation measure MM-CUL-1 includes numerous requirements that must be included in the training program, which include: (1) inform workers about sensitivity of the Project area, (2) provide specific details on the kinds of archaeological materials that may be identified during construction, (3) explain the importance of and legal basis for the protection of significant archaeological resources, (4) provide actions to be taken in the event of a discovery of cultural resources (see MM CUL-2), (5) define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource, and (6) each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, which must include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor. Contrary to the commenter's assertion, these required components of the WEAP are detailed and include measurable performance standards for accomplishing the objectives of the WEAP. Additionally, the development of the WEAP must be conducted by a qualified archaeologist that meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, and must ultimately be prepared to the satisfaction of the City. Thus, no change to the Draft EIR is required nor does MM-CUL-1 defer critical details necessary to reduce impacts.

In summary, this comment states MM-GEO-1 does not include details of the Paleontological Resources Impact Mitigation Program (PRIMP) to reduce potential impacts to paleontological resources. As described

in Draft EIR Section 4.5, Geology and Soils, mitigation measure MM-GEO-1 includes numerous requirements that must be included in the program, which include: (1) must be consistent with the Society of Vertebrate Paleontology (SVP) (2010) guidelines, (2) must provide requirements for preconstruction meeting attendance and worker environmental awareness training, (3) must provide procedures for adequate paleontological monitoring and discoveries treatment, (4) must provide paleontological methods [including sediment sampling for microvertebrate fossils], reporting, and collections management, (5) must require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities [including augering] in previously undisturbed, Pleistocene Sand Dune deposits, and (6) in the event that paleontological resources (e.g., fossils) are unearthed during grading, must require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources. Contrary to the commenter's assertion, these required components of the PRIMP are detailed and include measurable performance standards for accomplishing the objectives of the PRIMP. Additionally, the development of the PRIMP must be conducted by a qualified paleontologist that meets SVP guidelines and must ultimately be prepared to the satisfaction of the City. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-1 does not include any specific performance standards for removal or a plan for review. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-1 includes language to ensure abatement procedures for the removal of specified materials are in compliance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project activities. Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-1. As such, mitigation measure MM-HAZ-1 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-2's proposed Hazardous Materials Contingency Plan (HMCP) does not include a plan or performance standards to mitigate soil vapor to less than significant levels. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-2 includes numerous requirements that must be included in the plan, which include: (1) must include training procedures for identification of contamination, (2) must describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations, (3) must manage and dispose of any contaminated soils in accordance with local and state regulations, and (4) must include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. MM-HAZ-2 includes language to ensure the development of the proposed HMCP is in accordance with all applicable state and local regulations. Moreover, the MM-HAZ-2 states contaminated soils shall be managed and disposed of in accordance with local and state regulations. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project

activities. For example, in the event of asbestos removal, Project activities would be required to comply with the National Emission Standards for Hazardous Air Pollutants (Title 40 of the United States Code (USC), Chapter 1, Subchapter C, Part 61, Subpart M) and the Toxic Substances Control Act of 1976 (Title 15 USC, Chapter 53, Subchapter I, Section 2601 et seq.). Regarding the implementation of the proposed HMCP, Project activities would be required to comply with the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code, Division 20, Chapter 6.11, Sections 25404–25404.9). Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-2. As such, mitigation measure MM-HAZ-2 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

1-16 In summary, this comment states that the Draft EIR does not support its findings with substantial evidence.

This comment does not express any environmental comments or concerns related to the analyses in the Draft EIR. Instead, as shown in Comments 1-17 through 1-20, concerns related to greenhouse gas emissions, air quality, transportation, and hazards and hazardous materials are identified as specific examples of the commenter's concern. Please see Responses to Comments 1-17 through 1-20 for more discussion.

1-17 In summary, the comment begins with an overview of caselaw related to greenhouse gas (GHG) emissions and asserts the Draft EIR did not support its findings on GHG impacts, utilized an incorrect quantitative analysis of GHG emissions, incorrectly relied upon an outdated quantitative GHG threshold, did not identify a potentially significant GHG impact; did not consider performance-based standards under California Air Resources Board's (CARB's) 2017 Scoping Plan or performance-based standards under Southern California Association of Governments' (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) plan, and did not consider all feasible mitigation to reduce GHG emissions.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-29 through 1-49 below. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-29 through 1-49 below.

1-18 In summary, the comment asserts the Draft EIR's Air Quality analysis is not supported by substantial evidence.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-30 through 1-42 below correspond to each of the bulleted items listed in the comment. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-30 through 1-42 below.

1-19 In summary, this comment states that the VMT analysis does not accurately reflect total VMT as home-based VMT analysis does not includes trips made from the other uses on the Project site, such as retail and hotel.

In the absence of VMT guidance from the City of El Segundo, State CEQA guidance from the Governor's Office of Planning and Research (OPR) was used. This document provides suggestions to lead agencies regarding methodologies to analyze VMT associated with a project. For residential projects, OPR recommends that a proposed project exceeding a level of 15% below existing daily household VMT per capita may indicate a significant transportation impact. Household VMT per capita for PCC was determined by using the Southern California Association of Government's (SCAG) 2016 Regional Transportation Plan (RTP) travel demand model. The SCAG travel demand model identifies trip purposes as Home-Based Work (HBW) and Home-Based Other (HBO), where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. Therefore, all trips produced or attracted to the residential use have been included in the VMT analysis for the project and provides an accurate estimate of the project related VMT per capita or resident.

While this is a mixed-use project with retail uses, the State's guidance does not require VMT analysis for local-serving retail land uses on the grounds that they do not increase VMT and defines local serving as less than 50,000 square feet. Since the proposed commercial components of the Project total 11,252 square feet, (i.e., less than 50,000 square feet) the VMT analysis properly focused on the proposed residential components of the Project. The hotel uses are already an existing use on the Project site and therefore, were not included in the analysis.

This comment also includes a footnote referring to the City of Santa Clarita VMT Guidelines. The Santa Clarita guidelines are intended to provide guidance for office, retail, and residential projects and thus discusses all of the different trip types. The Santa Clarita guidelines follows the OPR guidance in screening local serving retail projects with less than 50,000 square feet from VMT analysis as local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. The guidelines also provides thresholds for each project type as outlined in the OPR guidance. Although Santa Clarita's local CEQA guidelines are in no way applicable to the City of El Segundo, it can be noted for purposes of this response that the analysis done in this EIR is consistent with the Santa Clarita guidelines. No change to the Draft EIR is required.

1-20 In summary, this comment states that additional investigation is required to characterize contamination on the Project site associated with nearby contaminated sites, including the adjacent gas station and regional tetrachloroethylene (PCE) and trichloroethylene (TCE) contamination.

With regards to the PCE and TCE contamination: As noted in the second paragraph of Draft EIR page 4.7-5, groundwater flow is west-southwest, making the PCE contamination plume downgradient from the Project site. The known and suspected contamination sources listed as part of the investigation are also downgradient of the Project site. Investigations on nearby properties, conducted between 2016 and 2018, further evidence the regional PCE and TCE contamination observed southwest of the subject property has not impacted the area of the Project site (see Appendix F of the Draft EIR).

Furthermore, a soil vapor investigation was conducted at 650 and 700 N Pacific Coast Highway, less than 200 feet northeast of the Project site, did not identify PCE or TCE contamination in soil vapor above current (2019) Environmental Screening Levels (ESLs) (City of El Segundo 2021). As such, there are no identified sources of PCE or TCE on, adjacent to, or upgradient of the Project site, there is no evidence of contamination upgradient of the Project site, and there is no evidence that the contamination plume has impacted the Project site. The Phase I ESA determined that there were no conditions that would require further analysis. Therefore, there is no evidence of impacts to future occupants.

With regards to the gas station, it is noted that contamination may be present due to operational violations, but contamination has not been identified during multiple former investigations. Out of an abundance of precaution, MM-HAZ-2 was proposed to mitigate the most likely potential contamination which may be identified during construction. Should any contamination be identified, it would be removed, the release would be reported in accordance with environmental regulatory rules and regulations (California Code of Regulations Title 19, Section 2631), and confirmation sampling would be conducted to confirm removal. These actions would further remove potential impacts to future occupants during operation of the proposed Project. No changes or additions to the project description or analyses included in the Draft EIR are required.

1-21 In summary, this comment states the Draft EIR's Project Objectives are narrow and affect the consideration of reasonable alternatives, specifically related to Project Objectives 1 and 5.

Each project objective was prepared in accordance with Section 15124(b) of the State CEQA Guidelines. Project Objective 1 is outlined in Draft EIR Section 3.5, Project Objectives, and states the following, "Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses" (Draft EIR page 3-18). Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Alternative development scenarios are not unduly constrained by the retention of the existing hotels, as additional residential and commercial uses could occur in multiple configurations. Further, the commenter's potentially preferred scenario of not maintaining the existing hotels would not be beneficial from an environmental perspective (i.e., would increase demolition and construction-related impacts to the environment).

With regard to Objective 5, the comment notes the objective calls for "increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses." Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is also consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Eliminating underutilized surface parking lots to allow for a densification of land use intensity and a diversity of land uses that share parking facilities to minimize parking and encourage alternative modes of transportation is specifically supportive of many City General Plan policies and objectives as outlined in Table 4.9-1 in Section 4.9, Land Use and Planning, and SCAG RTP/SCS goals as outlined in Table 4.6-6 in Section 4.6, Greenhouse Gas Emissions of the Draft EIR.

Importantly, both of these Objectives allow for numerous potential alternative development scenarios that involve both additional residential and commercial uses in multiple configurations. The retention of the existing hotels and redevelopment of underutilized surface parking are objectives of the Project Applicant and would not limit consideration of a reasonable range of alternatives. Further, CEQA Guidelines Section 15126.6(c) states: "the range alternatives to the proposed project shall include those that could feasibly accomplish ***most of the basic objectives*** of the project and could avoid or substantially lessen one or more of the significant effects." (emphasis added). Therefore, contrary to the commenter's assertion, these two Project Objectives would not "curtail any meaningful analysis or consideration of Project alternatives that substantially reduce the Project's environmental impacts." No changes to the Draft EIR are required.

1-22 In summary, this comment cites provisions of the California Government Code and case law for background on State planning and zoning law.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-23 In summary, this comment states the Draft EIR does not demonstrate consistency with the Southern California Association of Governments (SCAG) Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), in accordance with SB 375, and cites Comments 1-28 through 1-51 for examples.

Draft EIR Section 4.9, Land Use and Planning discusses regional regulations such as the SCAG RTP/SCS within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR page 4.9-4). Moreover, under Section 4.9.4, Impact Analysis, and Table 4.6-6, Project Consistency with the Connect SoCal (SCAG 2020-2045 RTP/SCS) within Section 4.6, Greenhouse Gas Emissions, of the Draft EIR analyzes the proposed Project's consistency with each goal identified within the SCAG RTP/SCS (Draft EIR pages 4.9-11 through 4.9-12 and 4.6-33 through 4.6-37). However, this particular comment does not identify the aforementioned specific examples related to the analysis in the Draft EIR. Additionally, please see Responses to Comments 1-26 and 1-28 through 1-51, below, for more discussion.

1-24 In summary, this comment states the Draft EIR does not demonstrate consistency with State Housing Element law and cites provisions of the California Government Code and case law for background.

Draft EIR Section 4.9, Land Use and Planning discusses the City's General Plan and zoning regulations within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR pages 4.9-5 through 4.9-8). Moreover, under Section 4.9.4, Impact Analysis, Table 4.9-1, General Plan Consistency Analysis, outlines the applicable policies of the General Plan and analyzes the proposed Project's consistency with each applicable provision (Draft EIR pages 4.9-12 through 4.9-33). Applicable goals and policies of the City's Housing Element are identified and subsequent Project consistency analyses are detailed under Table 4.9-1 on Draft EIR pages 4.9-20 and 4.9-21. The comment does not identify specific examples of inconsistency within the Draft EIR's consistency analysis.

Additionally, the comment asserts the Draft EIR does not analyze consistency with the latest Regional Housing Needs Allocation (RHNA) and states the Project as proposed does not include affordable housing units. Moreover, the comment states the Draft EIR's provision for a future development agreement should be included within the Draft EIR's Project Description.

Section 4.11, Population and Housing, of the Draft EIR details Housing Element law and the City's 5th and 6th Cycle RHNA allocation. Chapter 3, Changes to the Draft EIR, of the Final EIR revised the City's fair share allocation for the 2021-2029 RHNA planning period. As such, the comment correctly states the City's 6th Cycle RHNA allocation. However, the comment incorrectly asserts Draft EIR page 4.11-6 as the latest RHNA allocation. At the time of drafting the Draft EIR (February 2021), the City's 5th Cycle RHNA allocation was identified and discussed since this RHNA planning period ended in October 2021. In anticipation of the 6th Cycle, the Draft EIR includes Table 4.11-7, SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology (Draft EIR page 4.11-10) and analyzes the Project's contribution to the current planning period in Section 4.11.4, Impact Analysis (Draft EIR page 4.11-17).

Lastly, as described in Chapter 3, Project Description, of the Draft EIR, the Project proposes 263 new housing units. Section 3.3.8, Development Agreement, further states (as the comment indicates) that the Project would provide benefits including some provision of affordable housing in return for a proposed Development Agreement between the City and the Applicant. Moreover, the Draft EIR states "[t]he full benefits will be negotiated between the parties but will not create any environmental impacts"

(Draft EIR page 3-17). As shown above, the Draft EIR adequately analyzes Project consistency with the City's Housing Element and demonstrates the addition of 263 new units would contribute to the City's RHNA allocation for the 6th Cycle (which started in October 2021). Furthermore, the affordable housing provision is outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." No changes to the Draft EIR's project description or environmental analyses are required. For informational purposes only, the Development Agreement (proposed at the time of drafting these Responses to Additional Comments) is comprised of a total of 32 affordable housing units (12% of the total housing units), including 1 very-low income unit and 14 low income units within PCC South, and 2 very-low income units and 15 low income units in PCC North.

1-25 In summary, this comment requests for the Project's denial and to revise and recirculate the EIR to address the aforementioned concerns.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Response 1-26 is for "Exhibit A of A, March 8, 2021 SWAPE Letter to Mitchell M. Tsai"

1-26 In summary, the commenter states that by implementing a local hire provision requiring 10-mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project was anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[1] On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years consistent with SCAQMD guidance, which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

[1] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Response 1-27 is for "Exhibits B and C of A, Curriculum Vitae for Paul Rosenfeld and Matt Hagemann"

1-27 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

Responses 1-28 to 1-50 are for "Exhibit D of A, SWAPE Letter to Greg Sonstein"

1-28 In summary, the comment states that the Draft EIR fails to adequately evaluate the Project's air quality, health risk, and GHG impacts.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-29 In summary, the comment states that changes to the default modeling inputs in the CalEEMod modeling were incorrect and questions the estimated GHG emissions quantified in the Draft EIR and underlying assumptions included in the model.

As specifically identified in the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis" (CAPCOA 2017). As such, the changes to the default CalEEMod assumptions for the project emissions modeling were appropriate based on applicant input and project-specific information.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Project-specific information was applied to the CalEEMod model where appropriate and based on information obtained from the Project applicant regarding site-specific characteristics of the site and Project components. The Project applicant and their contractor(s) represent 'experts' in estimating construction activities for the Project based on their experience with similar projects and their need to estimate construction activities, such as duration of construction and equipment needed, for budgeting. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b)). Because assumptions provided the Project applicant and their team represent an expert opinion supported by facts, these assumptions constitute substantial evidence under CEQA that can be used to more accurately estimate project-generated emissions.

Regarding operations, Project-specific data was used from the transportation analysis including the Project's trip generation rates for each land use type. The emissions estimates also assume compliance with regulations (state or local) are also taken into account for certain input variables such as compliance with building energy standards and utility renewable energy standards, as adopted by the State of California, some of which are not currently programmed into the model by default since many laws have been updated since the release of the model. Therefore, the use of Project-specific data in CalEEMod is appropriate and fully in line with the CalEEMod User's Guide and the Draft EIR's analysis is based on substantial evidence and is adequate as presented. No revisions to the Draft EIR are required.

Regarding the commenter's question about CalEEMod input consistency with the Draft EIR, please refer to Response to Comment 1-30.

1-30 In summary, the comment states that Appendix C-1 contains model inputs were not consistent with information disclosed in the Draft EIR, specifically that the CalEEMod land use inputs were not consistent with the project description land use metrics.

The minor discrepancy in the modeled inputs have been adjusted for the purpose of responding to this comment and are presented below. As shown, adjustments to CalEEMod have been conducted, which include revisions to the square footage as well as updates to the model. The Draft EIR CalEEMod inputs assumed 314,659 square feet of residential space, 11,000 square feet of commercial/retail space, and 763 parking spaces. The revised CalEEMod inputs assume 327,021 square feet of residential development, 11,252 square feet of commercial/retail uses, and 792 parking spaces.

At the time that the Project's Notice of Preparation (NOP) was released and the time that the analysis was prepared, the version of the CalEEMod was Version 2016.3.2 was the most appropriate and available model to use for the analysis. CalEEMod Version 2020.4.0 was released in June 2021. As with previous updates of CalEEMod, CalEEMod 2020.4.0 includes updates per current industry values and bug fixes. The key changes incorporated into CalEEMod 2020.4.0 were incorporating the CARB EMFAC 2017 update, including the Institute of Transportation Engineers 10th edition trip rates released in 2017, and incorporation of 2019 Title 24 Standards. The results of this re-run of CalEEMod to incorporate the minor discrepancies in the data inputs and the updated CalEEMod are shown below, in comparison to the results shown in the Draft EIR. As shown, the changes in the CalEEMod outputs are negligible when compared to the outputs in the Draft EIR and the significance thresholds. As such, the negligible changes in modeling results shown below are not substantive, do not change the analysis presented in the Draft EIR, do not result in new information, and do not require any revisions to the significance conclusions in the Draft EIR.

A portion of Table 4.2-9 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the estimated maximum daily construction emissions generated during construction of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Maximum Construction Emissions	VOCs	NOx	CO	SOx	PM10	PM2.5
	Pounds per Day					
Draft EIR Maximum Daily Emissions	49.34	41.60	27.18	0.08	4.52	2.61
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	No	No	No	No	No	No
Updated Maximum Daily Emissions	49.05	41.22	27.73	0.07	4.52	2.62
Difference	(0.29)	(0.38)	0.55	(0.01)	0.00	0.01
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-10 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the maximum daily area, energy, and mobile source emissions associated with operation (Year 2025) of the proposed Project as assessed in the Draft EIR as well as the emissions estimated in the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Total Operational Emissions	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Draft EIR Project Total	11.47	19.12	53.79	0.15	10.52	3.25
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No
Updated Project Total	14.54	10.56	69.92	0.13	10.55	3.24
Difference	3.07	(8.56)	16.13	(0.02)	0.03	(0.01)
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-11 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the localized significance thresholds for construction activities of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Draft EIR Project Total	40.50	21.15	2.80	2.44
SCAQMD LST	91	664	5	3
LST exceeded?	No	No	No	No
Updated Construction Emissions	27.52	18.24	1.58	1.23

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Difference	(12.98)	(2.91)	(1.58)	(1.21)
LST exceeded?	**No**	**No**	**No**	**No**

Notes:
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-3 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the construction GHG emissions for construction activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-3. Estimated Annual Construction Greenhouse Gas Emissions

Total Construction Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	**1,969.95**	**0.28**	**0**	**1,977.08**
Updated Construction Emissions	**1,851.36**	**0.26**	**0**	**1,877.17**
Difference	(118.59)	(0.02)	0	(99.91)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-4 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the operational GHG emissions (including the amortized construction emissions) for operational activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-4. Estimated Annual Operational Greenhouse Gas Emissions

Total Operational Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	2,435.45	1.17	0.02	2,920.96
Updated Operational Emissions	**2,443.28**	**1.20**	**0.02**	**2,563.72**
Difference	7.83	0.03	0	(357.24)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

The proposed Project's construction health risk assessment (HRA) used the estimated annual construction exhaust PM_{10} emissions as a surrogate for diesel particulate matter (DPM), generated during construction of the Project. As presented in Additional Data for Draft EIR Table 4.2-9 above, the revised estimations of construction emissions indicate that PM_{10} emissions would not change compared to what was estimated in the Draft EIR. Therefore, the results of the HRA for the Project

would remain unchanged and the Project would result in a less than significant impact after implementation of mitigation measure MM-AQ-1.

As discussed in Section 4.4, Energy, of the Draft EIR, fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon. Furthermore, fuel consumption from mobile trips, during both construction and operations, was also estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. As presented in Additional Data for Draft EIR Tables 4.6-3 and 4.6-4 above, the revised CO_2 emissions generated during both construction and operations are expected to negligibly change compared to the CO_2 emissions estimated in the Draft EIR. Therefore, the petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful and impacts would remain less than significant impact.

1-31 In summary, the comment states that the Draft EIR did not include the total amount of demolition haul trips required for the Project and claims that the default number of demolition hauling trips was underestimated by 431 trips.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Haul truck trips during the demolition phase was based on demolition and earthwork quantities provided by the Project's applicant. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. In order to estimate the number of haul trucks from pavement removal, CalRecycle's Construction/Demolition and Inert Debris Tools and Resources rate of 2,400 pounds per cubic yard of debris for asphalt was utilized. Assuming a depth of 4 inches and an area of approximately 3.01 acres of pavement to be removed would result in a volume of approximately 1,939 tons of debris. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 one-way haul trips during the demolition subphase of Phase 2/3. The commenter states that the model should have included 178,660-square-feet of demolition, which is an incorrect assumption. CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips

required for the demotion phase, since the commenter states the total demolition of building material would be 178,660-square-feet. Notably, pavement debris in CalEEMod is expressed as tons of debris, not square footage of the area. Therefore, no changes to the Draft EIR are required.

1-32 In summary, the comment states that the Draft EIR incorrectly estimates the grading acreage.

The Project's total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information. As discussed in Section 3.1, Project Description of the Draft EIR, the total site includes 6.23 acres, which includes the developed hotel properties. As such, 3.88 acres would be subject to grading/construction activities for Phases 1 and 2/3. Contrary to the commenter's assertion, the text included from the CalEEMod User Guide does not demonstrate an insufficiency regarding the analysis presented in the Draft EIR. The total net acreage to be graded of 3.88 acres, as provided by the proposed Project applicant, was used to determine the total area to be graded during each grading phase of the proposed Project. The text emphasized by the commenter appears to expressly condone the use of the total area to be graded as a means of determining the amount of grading needed on the site. Furthermore, each grading phase (Phase 1 and 2/3) is assumed to occur over two months, with multiple pieces of construction equipment working within each of the sites for the duration of the proposed Project's construction. Two-month grading period for each phase with multiple pieces of equipment working within the site, represents a reasonable, if not conservative, approach to analysis for grading a total of 3.88 acres. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-33 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material moisture content contained in the model.

The default values in CalEEMod model for the road dust (e.g., material silt content, material moisture content, and mean vehicle speed) are statewide averages used in the EPA's AP-42 methods for calculating fugitive dust emissions from paved and unpaved roads. Users are able to override the defaults in CalEEMod if data specific to the project is known. Furthermore, local jurisdictions can also provide guidance to users as to what default properly reflects known regional road dust parameters. The proposed Project site is underlain by quaternary Dune Sand deposits, Appendix E of the Draft EIR. It was determined that the proposed Project site is likely to be underlain by similar subsurface sandy materials with a thin cap of artificial fill. Overall, the underlying soils are likely to be comprised of Dune Sand deposits, which has a high concentration of sand that gives them a gritty feel, with varying amount of silt and clay materials that should be slightly moist to moist and loose to very dense. Density is anticipated to increase with depth. The proposed Project would be required to comply with the provisions in SCAQMD Rule 403 to prevent, reduce or mitigate fugitive dust emissions from each grading site. SCAQMD Rule 403 restricts visible fugitive dust to the project property line, restricts the PM10 emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, the proposed Project will utilize one or more of the best available control measures (identified in the tables 1 and 2 of the rule), which may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering of all active sites periodically, maintaining moisture content of exposed soils, using chemical stabilizers and/or ceasing all activities during periods of high wind. Furthermore, the geotechnical due-diligence report indicated that the maximum moisture content of soils sampled was approximately 16.9%. In addition, the percentage of silt in CalEEMod was adjusted based on the UC Davis Soil Resource Laboratory for the Project area. The interactive tool allows for the identification of U.S. Department of Agriculture-National

Cooperative Soil Survey (USDA-NCSS) soil survey data for locations throughout the State. Soils within the Project area would be comprised of approximately 3.7% clay and 93% sand, with the remainder being silt. Therefore, the model was updated based on site specific information the applied moisture content of exposed soils and the excavation materials silt characteristics provided included in the geotechnical due-diligence report by the proposed Project applicant in order to reduce fugitive dust emissions during all graining and earthwork activities per SCAQMD Rule 403. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-34 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material silt content contained in the model.

Please see Responses to Comment 1-33.

1-35 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the haul trips contained in the model. The number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.

The Project's demolition and total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information provided by the proposed Project applicant. Overall, the proposed Project would result in the grading of 3.88 acres. Construction worker estimates and vendor truck trips by construction phase were based on information provided by the Project applicant. Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. Grading is estimated to involve 17,700 cubic yards of soil for export, which would be required for Phase 2. Per information provided by the applicant, the Project was assumed to use haul trucks with a capacity of 20 cubic yards during grading/excavation activities. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 and 1,720 one-way haul trips during the demolition and grading subphases of Phase 2/3. The commenter states that the model should have included at least 178,660-square-feet of demolition, which is an incorrect assumption (refer to Response to Comment 1-31). CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips required for the demotion phase, since the commenter states the total demolition of building material would be 178,660 square feet. Therefore, no changes to the Draft EIR are required.

1-36 In summary, the comment states that the Draft EIR fails to mention or justify the changes to the construction related architectural coating areas.

The CalEEMod model assumed the default architectural exterior and interior square footages as presented in Appendix C-1 of the Draft EIR. CalEEMod however assumes that the Project's total square footage (325,659 square feet of buildings and 317,850 square feet of parking area) would undergo application of architectural coatings for both Phases 1 and Phases 2/3 concurrently, thus overestimating emissions of volatile organic compounds (VOCs). Therefore, in order to correctly

estimate the application of architectural coatings for both Phase 1 and Phases 2/3, the default exterior and interior square footages were utilized in the model which was reallocated based on the specific development undertaken during Phase 1 and Phases 2/3. As previously discussed, Phase 1 would include development of 3,273 SF of retail and 187 parking spaces; Phase 2 would include development of 120 dwelling units (146,550 SF), 2,056 square feet of retail and 3,700 square feet of restaurant, and 336 parking spaces; and Phase 3 would include development of 143 dwelling units (176,039 SF), 2,223 square feet of retail, and 240 parking spaces. Thus, the interior and exterior architectural square footages used in CalEEMod reflect the specific land use quantities inputted in the land use section of CalEEMod but adjusted for the specific construction phases (Phase 1 and Phases 2/3). Therefore, no changes to the Draft EIR are required.

1-37 In summary, the comment states that the air quality and GHG emissions modeling underestimates the number of weekday and Sunday trips during operations.

The proposed Project's trip generation from Section 4.13, Transportation of the Draft EIR, indicated that the overall trips generated from operations would be 2,517 weekday trips. The CalEEMod data was based on 2,507 trips and has been updated for the purpose of this response, as demonstrated in Response to Comment 1-29, which reflects that the proposed Project would generate approximately 2,517 trips. The air quality and GHG emission calculations modeling were revised as presented in Tables 4.2-10 and Table 4.6-4. Furthermore, the commenters assertion that weekday and Sunday trips were underestimated are incorrect. The Saturday and Sunday trip generation rates were adjusted based on the default proportions allocated in CalEEMod, based on the weekday trip generation rates presented in Table 4.13-1 of Section 4.13, Transportation. As presented in Table 4.2-10 and 4.6-4, the proposed Project-generated criteria air pollutant and GHG emissions would minimally change compared to the output presented in the Draft EIR, assuming the same trip generation from Section 4.13, Transportation. Details of the updated emission calculations are provided in Appendix A to this document.

1-38 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default energy use values, and the model may underestimate the Project's energy-source operational emissions.

Page 4.2-28 of Section 4.2 discusses that the input parameters were adjusted in good faith in compliance with the 2019 Title 24 standards since CalEEMod Version 2016.3.2 assumes compliance with the 2016 Title 24 standards. The 2019 Title 24 standards are the currently applicable building energy efficiency standards that became effective on January 1, 2020. As discussed in Section 4.2, Air Quality (page 4.2-28), the California Energy Commission (CEC) Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings, are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively. The first-year savings for multi-family buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the 2016 standards, the multi-family, savings are 2% of electricity, 8% of demand and 5% of gas. Furthermore, the 2022 Title 24 standards are under development. The 2022 standards focus on four key areas in new construction: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic system and battery storage standards; and, strengthening ventilation standards to improve indoor air quality. In August 2021, the CEC adopted the 2022 standards; but, before those standards can become effective,

they must be approved by the California Building Standards Commission. If approved, the 2022 Title 24 standards will go into effect on January 1, 2023. Therefore, the Project would likely need to meet the more stringent 2022 standards. Therefore, no changes to the Draft EIR are required.

1-39 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default wastewater treatment system percentages. The model assumes that the Project's wastewater would be treated 100% aerobically. The commenter states that the use of 100% aerobic wastewater treatment percentages in the model is incorrect.

As shown on Page 44, Appendix A, Calculation Details for CalEEMod solids produced from aerobic processes are digested in anaerobic digesters; thus, anaerobic facilities are assumed in the CalEEMod aerobic wastewater treatment process (CAPCOA 2017). Furthermore, the wastewater treatment system assumptions are used by CalEEMod to quantify the Project's GHG emissions associated with wastewater treatment. Therefore, no changes to the Draft EIR are required.

1-40 In summary, the comment states that the air quality emissions modeling included these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated.

The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions which was reflected in the modeling's "mitigated" output which would result in a 55% reduction in fugitive dust emissions. As discussed in Section 4.2, Air Quality, of the Draft EIR (page 4.2-14), the Project would be required to comply with all applicable SCAQMD Rules and Regulations, including, but not limited to, Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 403 (Fugitive Dust). Compliance with these rules would minimize fugitive dust generated during Project construction to the maximum extent practical. Therefore, no changes to the Draft EIR are required.

1-41 In summary, the comment states that the CalEEMod operational mitigation measures included in the model are incorrect and may underestimate the Project's operational emissions.

In order to capture the traffic reductions based on the Project's site-specific location, the report on Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures was utilized. It is primarily focused on the quantification of project-level mitigation of GHG emissions associated with land use, transportation, energy use, and other related project areas. The Project would, improve the pedestrian network, this measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive; improve transit access, the proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro C Line (formerly Green Line) and multiple bus lines. The Metro C Line is a light rail line running between Redondo Beach and Norwalk, with the closest station approximately 0.51-mile east of the Project site. There are two Metro bus lines, one Beach Cities bus line, and two Los Angeles Department of Transportation (LADOT) Commuter Express lines that run in the vicinity of the Specific Plan area (Metro Line 232; Metro Line 625; Beach Cities Line 109; LADOT Commuter Express 438; and LADOT Commuter Express 574); and would be located in an area with high destination accessibility, the Project site is located within an urbanized portion of the County of Los Angeles with access to housing and employment.

The commenter also states that the water reduction measures applied in CalEEMod was incorrect. The 20x2020 Water Conservation Plan sets forth a statewide road map to maximize the state's urban water efficiency and conservation opportunities between 2009 and 2020, and beyond. It aims to set in motion a range of activities designed to achieve the 20% per capita reduction in urban water demand by 2020. These activities include improving an understanding of the variation in water use across California, promoting legislative initiatives that incentivize water agencies to promote water conservation, and creating evaluation and enforcement mechanisms to assure regional and statewide goals are met. Furthermore, the Project would be required to meet the California Green Building Standards Code, also called the "CALGreen Code." As mandated by law, California buildings must reduce the maximum flow of water by 20% on all plumbing fittings and fixtures. Therefore, a 20% reduction in water usage was applied in CalEEMod in compliance with the CALGreen Code and state water reduction goals.

This commenter also states that the Draft EIR's GHG analysis incorrectly assumes reductions associated with solid waste emissions. The Draft EIR's assumption that the Project would reduce the amount of solid waste that would be landfilled by 50% was based on mandatory compliance with AB 939, AB 341, and AB 1826 (as discussed in Section 4.6, Greenhouse Gas Emissions). The Project would also provide storage areas for recyclables and green waste, as well as food waste storage. Therefore, the Project would comply with AB 939, AB 341, and AB 1826 would ensure that the anticipated solid waste reductions are realized. Therefore, no changes to the Draft EIR are required.

1-42 In summary, the comment states that the Draft EIR diesel particulate matter health risk emissions are inadequately evaluated and their screening-level construction HRA indicates a potentially significant impact.

Regarding the commenter's assertion the construction HRA relies upon a flawed air model, and as discussed in Response to Comments 1-29 through 1-35, the CalEEMod User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis". As such, the changes to the default CalEEMod assumptions for project emissions modeling were appropriate based on applicant input and Project-specific information.

The commenter also states that the Draft EIR failed to evaluate the Project's operational health risk impacts. The Project would not result in a long-term source of TAC emissions. No residual TAC emissions and corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the Project. Additionally, CARB has published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities." The *Air Quality and Land Use Handbook* is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The enumerated facilities or sources include the following:

- High-traffic freeways and roads
- Distribution centers
- Rail yards
- Ports

- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities.

The Project would not include any of the previously listed land uses and would not expose sensitive receptors to TAC emissions from these sources.

Regarding the commenter's assertion that health risk impacts from Project operation should also be evaluated, a 30-year exposure duration vastly exceeds the 6-month requirement set forth by Office of Environmental Health Hazard Assessment (OEHHA). As discussed in the construction HRA (Appendix C-2 of the Draft EIR), the construction HRA was performed in accordance with the OEHHA approved the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). SCAQMD requires that all HRAs prepared for CEQA documents follow SCAQMD policies in conjunction with the 2015 Risk Assessment Guidelines Manual. For the purposes of the construction HRA, given the less-than-lifetime exposure period, and the higher breathing rates and sensitivity of children to construction-generated TACs, the cancer risk calculation assumes that the exposure would affect children early in their lives. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy and occur for 34 months, over the duration of construction activities.

Regarding the commenter's assertion of the incorrect application of construction-related mitigation and failure to adequately analyze health risks associated with DPM, the commenter uses a screening model, known as AERSCREEN, to evaluate health risk impacts from diesel emissions during construction of the proposed Project. While the AERSCREEN model is an acceptable model by the U.S. Environmental Protection Agency's (EPA) and SCAQMD, it is a screening model. As a screening model, it overestimates impacts with the general understanding that if AERSCREEN does not show impacts, then impacts would also not occur if a more detailed analysis is conducted using a more refined model. AERSCREEN is a simplified model in that it does not consider meteorological data or topographical data. AERSCREEN assumes calm wind conditions at all times and a stable atmosphere (i.e., no atmospheric mixing). AERSCREEN also has simplified emissions input fields such that it typically overestimates emission impacts from varying construction activities.

In addition, the SCAQMD does not have guidance requiring that construction and operational health risk be evaluated together. Based on an email from Michael Krause, Planning and Rule Manager with SCAQMD, who is an expert, a project's construction and operational health risks need to be evaluated separately. Thus, the construction HRA is analyzed in accordance with industry guidance and an operational HRA is not necessary.

Further, the comment states that the commenter prepared a screening-level health risk assessment using changed CalEEMod inputs with the assumption that health risks should be combined for construction and operation of the Project. The commenter has not provided any substantive comments that would alter model inputs or the findings of the emissions calculations in the Draft EIR. Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors to a much greater degree than AERSCREEN, which

better represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis was modeled to assume a construction start date of October 2021, which represented the earliest date of construction at the time the analysis was prepared, anticipating when air quality and GHG assessments would be initiated.[2] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024) (USEPA 2016).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

1-43 The commenter states that the Draft EIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion is incorrect.

Please see the following Responses to Comments:

1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model; Please refer to Responses to Comments 1-29 through 1-41.

2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; Please refer to Response to Comment 1-45.

[2] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; Please refer to Response to Comment 1-46.

4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; Please refer to Response to Comment 1-47.

5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS; Please refer to Response to Comment 1-48.

1-44 The commenter states that the modeling underestimates the Project's emissions, and the Draft EIR's quantitative GHG analysis should not be relied upon to determine Project significance.

Please see Responses to Comments 1-29 through 1-41.

1-45 The commenter states that the Draft EIR incorrectly applies the GHG threshold of 3,000 MT CO2e per year.

Regarding the commenters assertion that the Draft EIR used an outdated quantitative GHG threshold, the South Coast Air Quality Management District (SCAQMD) formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year threshold for industrial uses and stationary projects would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population for project level analyses and 6.6 MT CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Based on the supporting analysis outlined in SCAQMD's draft GHG guidance and meeting notes, this 3,000 MT CO_2e per year level would capture 90% of GHG emissions from new residential or commercial projects in the region (SCAQMD 2008). This type of market capture analysis captures a substantial fraction of the GHG emissions from future development to accommodate for future population and job growth and excludes small development projects that would contribute a relatively small fraction of the cumulative statewide GHG emissions.

Therefore, the Draft EIR relies on use of the 3,000 MT CO_2e per year threshold because it has been recommended by SCAQMD and SCAQMD is an expert agency in the region. Furthermore, the SCAQMD provides substantial evidence that the thresholds are consistent with policy goals and 2050 GHG emissions reduction targets set by the State. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions form the above-described uses, consistent with Executive Order (EO) S-3-05 target of reducing GHGs to 80% below 1990 levels by 2050. No changes to the Draft EIR are required.

1-46 The commenter states that the Draft EIR would result in potentially significant GHG emissions exceeding the 2030 "Substantial Progress" threshold of 660 MT CO_2e per service population per year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e per service population per year.

Overall, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific quantitative thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). State CEQA Guidelines Section 15064.4 states that a lead agency shall make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use, or (2) rely on a qualitative analysis or performance based standards. The City appropriately applied their discretion to apply a numeric GHG threshold recommended by the SCAQMD and is not required to apply alternative thresholds as recommended by the commenter. Regarding the commenters assertion that the Project would result in significant GHG emissions, as presented in Table 4.6-4 of Section 4.6, Greenhouse Gas of the Draft EIR, GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year, with the Project resulting in approximately 2,921 MT CO_2e per year. Response to Comments 29 through 49 discusses the adequacy of the utilized CalEEMod input parameters.

1-47 In summary, the comment states that their modeling indicates that the Project's VMT would exceeds the CARB 2017 Scoping Plan projections for 2010, 2025, and 2030.

CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve 2030 and 2050 GHG emission reduction targets, decrease health risk, and reduce petroleum consumption from the transportation sector. CARB developed a scenario-based modeling system that was used to identify foreseeable emission reductions associated with existing mobile-source regulations, and to explore different combinations

of further advancements in technologies, fuels, and transportation system efficiencies. This modeling usefully relates VMT and GHG metrics to each other, and can be a useful source of information for planners considering projects using one or the other of these metrics. Specifically, in support of the Mobile Source Strategy, CARB developed two scenarios using the model that are particularly relevant with respect to GHG emissions from the transportation sector. Notably, the baseline scenario represents the mobile-source GHG emissions reductions associated with existing mobile-source controls, regulations, foreseeable deployment of technology, and current projections of VMT included in the existing RTP/SCSs adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375. Furthermore, the Cleaner Technologies and Fuels (CTF) scenario evaluates what level of additional deployment of cleaner vehicle technologies and fuels combined with slower growth in VMT would be necessary to achieve state air quality targets and climate goals of 40% reduction in GHG emissions from 1990 levels by 2030 and 80% by 2050. The existing total VMT per capita (2015-2018 average) was 24.6 and the existing light-duty VMT per capita (2015-2018 average) was 22.2.

As presented in Section 4.13, Transportation, the daily household VMT per capita for the Project -was determined by using the SCAG 2016 RTP/SCS travel demand model (SCAG 2016). The SCAG travel demand model identifies trip purposes as Home-Based Work and Home-Based Other, where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. The other trip type, Non-Home-Based, is produced and attracted by nonresidential land uses. The average trip length and vehicle trips for all Home-Based Work and Home-Based Other productions are used to calculate the daily household VMT per capita for residential uses.

Residential is already an existing land use in the Transportation Analysis Zones (TAZ) located in the City in which the Project is located, and the model therefore includes residential trips and average trip lengths. It is assumed that the Project's residential trips would have the same characteristics as the existing residential trips in the zone. The VMT per capita assumed for the Project site was therefore based on the vehicle trips and average trip lengths for the TAZ in which the Project is located from the SCAG model, which indicates a daily household VMT per capita of 10.9 for all home-based production trips within the TAZ, which is 23% below the City's VMT of 14.2. As such, the proposed Project's daily household VMT would not conflict with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 State climate goals. Therefore, no changes to the Draft EIR are required and impacts would remain less than significant.

1-48 In summary, the comment states that the Draft EIR does not consider performance-based goals under SCAG's RTP/SCS and SB 375 (e.g., per capita emission targets or VMT per capita benchmarks).

State CEQA Guidelines Section 15064.4 states that a lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. As discussed in the Draft EIR, the City has not adopted quantitative project-level significance thresholds for assessing impacts related to GHG emissions applicable to the proposed Project, therefore, the SCAQMD threshold of 3,000 MT CO_2e was used to assess the Project's GHG emissions as discussed above.

As discussed in Section 4.13, Transportation of the Draft EIR, as the City has not yet adopted new transportation impact study guidelines including the VMT metric and significance criteria in compliance with Senate Bill (SB) 743 guidelines, the impact thresholds used for this Project are based on the Governor's Office of Planning and Research (OPR) guidelines. The proposed Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita, and the Project was determined to have a less-than-significant VMT impact. Given the less than significant VMT impact, the GHG emissions from per capita VMT associated with the Project are assumed to be consistent with the VMT goals of the 2017 Scoping Plan and SCAG's 2020-2045 RTP/SCS. Furthermore, Impact GHG 4.6b evaluates the consistency of the Project with plans adopted for the purpose of reducing GHG emissions separate from the quantitative analysis. The Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within 2017 Scoping Plan, Assembly Bill (AB) 32, EO S-3-05 and B-30-15, and SCAG's 2020-2045 RTP/SCS. The Specific Plan allows land use designations which creates a mix of land uses that are within walking distance of one another, and introduces retail uses along the Pacific Coast Highway (PCH) to provide streets that are attractive to pedestrians. The Project would promote healthy, walkable communities. Therefore, if the Project would not conflict with these plans, the City would be able to achieve its GHG reduction goals, and, therefore, these plans can be used at a Project level to show that a project would not have a significant cumulative effect on the environment as it relates to GHG impacts.

As the substantial evidence provided on pages 4.6-29 through 4.6-46 of Section 4.6, Greenhouse Gas Emissions, of the Draft EIR shows, the Project would be consistent with the applicable provisions of these plans. Therefore, the Draft EIR properly concludes, based on substantial evidence, that the Project's GHG impacts are less than significant and mitigation measures are not required.

1-49 In summary, the comment states that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further, thus, the Project should incorporate the mitigation measures provided.

Please see Responses to Comment 1-42.

Additionally, it is important to note, CEQA does not require adoption of every imaginable feasible mitigation measure. CEQA's requirement applies only to feasible mitigation that will "substantially lessen" a project's significant effects. (Public Resources Code, § 21002.) As explained by one court: A lead agency's "duty to condition project approval on incorporation of feasible mitigation measures only exists when such measures would [avoid or] 'substantially lessen' a significant environmental effect." (San Franciscans for Reasonable Growth v. City and County of San Francisco (1989) 209 Cal.App.3d 1502, 1519.) "Thus, the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention or proposed in the project EIR." (Ibid.) Rather, an EIR should focus on mitigation measures that are feasible, practical, and effective. (Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal.App.4th 342, 365.). Furthermore, as presented in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions, the proposed Project would not result in significant impacts requiring the need for additional mitigation.

1-50 In summary, this comment provides a generic disclaimer about the comment letter. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Responses 1-51 through 1-52 are for "Attachments A through F of Exhibit D of A"

1-51 The commenter provided their own health risk, air quality, and GHG calculations to determine significance of the Project due to construction and operations. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-52 In summary, this comment provides the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No further response is required.

Response 1-53 is for "Exhibit B, April 12, 2021 SWRCC Letter"

1-53 This comment represents a copy of an email from the commenter to the City dated April 12, 2021 with a reference to an attachment. The City assumes the attachment is in reference to the aforementioned comments. No further response is provided.

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Comment Letter 2

LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
rebecca@lozeaudrury.com

Via Email

December 9, 2021

Chair Ryan Baldino and
Honorable Members of the Planning
Commission
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

Paul Samaras, AICP
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245
psamaras@elsegundo.org

Re: Comment on Final Environmental Impact Report, Pacific Coast Commons Specific Plan (SCH# 2020050508)

Dear Chair Baldino, Honorable Members of the Planning Commission, and Mr. Samaras:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Final Environmental Impact Report ("FEIR") prepared for the Project known as Pacific Coast Commons Specific Plan, aka SCH# 2020050508, including all actions related or referring to the proposed demolition of existing surface parking lots and construction of a new mixed use development located at 401-575 N. Pacific Coast Highway (PCH) and the parking lot on 600-block of PCH in the City of El Segundo ("Project").

After reviewing the FEIR, we conclude that the FEIR fails as an informational document, fails to adequately analyze the Project's environmental impacts, and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Planning Division address these shortcomings in a revised environmental impact report ("REIR") and recirculate the REIR prior to considering approvals for the Project.

This comment has been prepared with the assistance of Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH (Exhibit A). Mr. Offermann's comments are incorporated herein by reference.

2-1

I. PROJECT DESCRIPTION

2-2

The Specific Plan area for this Project consists of eight parcels which total 6.385 gross acres. Current developments onsite include the Fairfield Inn and Suites Hotel and the

Aloft Hotel, as well as surface parking lots. The Project would redevelop existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel and would create five new land use districts. The site is bounded by Los Angeles International Airport to the north and residential communities to the east and south.

The Specific Plan allows for the following: (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/ townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures that would contain approximately 792 parking stalls. Construction activities would last approximately 34 months.

2-2 Cont.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.* Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal. App. 4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *see also, Berkeley Jets*, 91 Cal.App.4th at pp. 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or

2-3

significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code § 21081; 14 Cal.Code Regs. § 15092(b)(2)(A) & (B). The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 732.

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal. App. 4th at p. 1355 (emphasis added) (quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391 409, fn. 12). As the court stated in *Berkeley Jets*:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

2-3 Cont.

More recently, the California Supreme Court has emphasized that:

> When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.

Sierra Club v. Cty. of Fresno (2018) 6 Cal.5th 502, 510 (2018), citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405. "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, "a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient, i.e., whether the EIR comports with its intended function of including 'detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'" 6 Cal.5th at 516, citing *Bakersfield Citizens for*

Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1197. "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." 6 Cal.5th at 516. Whether a discussion of a potential impact is sufficient "presents a mixed question of law and fact. As such, it is generally subject to independent review. However, underlying factual determinations—including, for example, an agency's decision as to which methodologies to employ for analyzing an environmental effect—may warrant deference." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. As the Court emphasized:

> [W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

Sierra Club v. Cty. of Fresno, 6 Cal.5th at 514. We find that the FEIR prepared by the City here is inadequate for the reasons set forth below.

2-3 Cont.

III. DISCUSSION

A. There is Substantial Evidence that the Project Will Have a Significant Health Risk Impact from its Indoor Air Quality Impacts.

Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (Exhibit A). Mr. Offermann concludes that it is likely that the Project will expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and curriculum vitae are attached as Exhibit A.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "[t]he primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." Ex. A, p. 2-3.

2-4

Formaldehyde is a known human carcinogen. Mr. Offermann states that future residents of the Project would be exposed to a 120 in one million risk, assuming all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. *Id.* at 4. As for commercial employees, he estimates an exposure level of 17.7 in one million. *Id.* at 5. These potential exposure level exceeds the South Coast Air Quality Management District's ("SCAQMD") CEQA significance threshold for airborne cancer risk of 10 per million.

Mr. Offermann concludes that these significant environmental impacts should be analyzed in the EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id.* Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the applicant use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins in the buildings' interiors. *Id.* at 12.

Mr. Offermann also notes that because of the Project's close proximity to roads with moderate to high traffic and to air traffic from the nearby Los Angeles International Airport, the project is sound impacted. It will therefore require a "mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors," so as to allow occupants the discretion to control exterior noise. *Id.* at 11.

2-4
Cont.

The City has a duty to investigate issues relating to a project's potential environmental impacts, especially those issues raised by an expert's comments. *See Cty. Sanitation Dist. No. 2 v. Cty. of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98 ("under CEQA, the lead agency bears a burden to investigate potential environmental impacts"). In addition to assessing the Project's potential health impacts to residents and employees, Mr. Offermann identifies the investigatory path that the City should be following in developing an EIR to more precisely evaluate the Project's future formaldehyde emissions and establishing mitigation measures that reduce the cancer risk below the SCAQMD level. Such an analysis would be similar in form to the air quality modeling and traffic modeling typically conducted as part of a CEQA review.

The failure to address the project's formaldehyde emissions is contrary to the California Supreme Court's decision in *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA*"). At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. *CBIA*, 62 Cal.4th at 800-801. However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. *Id.* at 801 ("CEQA calls upon an agency to evaluate

existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." *Id.* at 800 (emphasis added).

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. Residents and commercial employees will be users of the Project. Rather than excusing the City from addressing the impacts of carcinogens emitted into the indoor air from the project, the Supreme Court in *CBIA* expressly finds that this type of effect by the project on the environment and a "project's users" must be addressed in the CEQA process.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings*, either directly or indirectly.'" *CBIA*, 62 Cal.4th at 800 (emphasis in original). Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." *Id.*, citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d). It goes without saying that the future residents and employees of the Project are human beings and the health and safety of those residents and workers is as important to CEQA's safeguards as that of other nearby residents currently living near the project site.

The City's EIR must disclose and mitigate the potential environmental impacts to future users of the building.

2-4 Cont.

B. There is Substantial Evidence that the Project will have Significant Adverse Air Quality, Health Risk, and Greenhouse Gas Impacts

1. The DEIR Relied on Unsubstantiated Input Parameters to Estimate Project Emissions and Thus the Project May Result in Significant Air Quality Impacts.

The Southwest Regional Council of Carpenters submitted a public comment on April 12, 2021 which was supported by the comments of expert environmental consulting firm SWAPE. (Exhibit B). Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the DEIR's analysis of the Project's impacts on air quality, health risk, and greenhouse gases. SAFER joins the Carpenters' comment and SWAPE's comment, the latter of which is incorporated by reference herein.

2-5

SWAPE found that the DEIR incorrectly estimated the Project's construction and operational emissions and therefore cannot be relied upon to determine the significance of the Project's impacts on local and regional air quality. The DEIR relies on emissions calculated from the California Emissions Estimator Version CalEEMod.2016.3.2 ("CalEEMod"). DEIR, p. 4.2-1. This model, which is used to generate a project's construction and operational emissions, relies on recommended default values based on site specific information related to a number of factors. SWAPE comment, p. 1. CEQA requires any changes to the default values to be justified by substantial evidence. *Id.* at 1-2.

SWAPE reviewed the DEIR's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the DEIR. *Id.* at 2. As a result, the DEIR's air quality analysis cannot be relied upon to determine the Project's emissions.

Specifically, SWAPE found that the following values used in the DEIR's air quality analysis were either inconsistent with information provided in the DEIR or otherwise unjustified:

1. Underestimated Land Use Sizes. SWAPE comment, p. 2.
2. Failure to Model All Required Demolition. *Id.* at p. 3-4.
3. Unsubstantiated Changes to Acres of Grading Values. *Id.* at 4-5.
4. Unsubstantiated Changes to Material Moisture Content Bulldozing Values. *Id.* at 5-6.
5. Unsubstantiated Changes to Material Silt Content Values. *Id.* at 6-7.
6. Unsubstantiated Changes to Hauling Trip Numbers. *Id.* at 7-8.
7. Unsubstantiated Changes to Architectural and Area Coating Areas. *Id.* at 8-9.
8. Underestimated Operational Vehicle Trip Rates. *Id.* at 10-11.
9. Unsubstantiated Changes to Energy Use Values. *Id.* at 11.
10. Unsubstantiated Changes to Wastewater Treatment System Percentages. *Id.* at 12.
11. Incorrect Application of Construction-Related Mitigation Measures. *Id.* at 13-14.
12. Incorrect Application of Mobile-Related Operational Mitigation Measures. *Id.* at 14-15.

As a result of these errors in the DEIR, the Project's construction and operational emissions were underestimated and cannot be relied upon to determine the significance of the Project's air quality impacts.

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2. There is Substantial Evidence that the Project May Have a Significant Health Impact as a Result of Diesel Particulate Emissions.

One of the primary emissions of concern regarding health effects for land development projects is diesel particulate matter ("DPM"), which can be released during Project construction and operation. DPM consists of fine particles with a diameter less than 2.5 micrometers including a subgroup of ultrafine particles (with a diameter less than 0.1

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micrometers). Diesel exhaust also contains a variety of harmful gases and cancer-causing substances. Exposure to DPM is a recognized health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. According to the California Air Resources Board ("CARB"), DPM exposure may lead to the following adverse health effects: aggravated asthma; chronic bronchitis; increased respiratory and cardiovascular hospitalizations; decreased lung function in children; lung cancer; and premature deaths for those with heart or lung disease.[1]

The DEIR concluded that the mitigated excess cancer risk posed by the Project to nearby sensitive receptors would not exceed the SCAQMD significance threshold of 10 in one million, and that the Project would result in a less-than-significant operational health risk impact. SWAPE comment, p. 15; DEIR, p. 4.2-38. SWAPE identifies four main reasons for why the DEIR's evaluation of health risk impacts and less-than-significant conclusion is incorrect.

First, the DEIR's construction HRA is incorrect due to its reliance on an exhaust PM_{10} estimate from a flawed air model. SWAPE comment, p. 16. The DEIR's HRA uses an underestimated DPM concentration, and therefore underestimates the Project's cancer risk and cannot be relied upon to determine impacts of the Project. *Id.*

Second, the DEIR did not evaluate the Project's toxic air contaminants (TACs) and associated health risk impacts. *Id.* The Traffic Impact Analysis indicates the generation of an estimated 2,517 average daily vehicle trips, but the DEIR fails to discuss potential TACs associated with Project operation or indicate the levels at which pollutants would trigger adverse health effects. *Id.* In failing to connect TAC emissions to potential health risks to nearby receptors, the Project fails to meet the CEQA requirement that projects correlate increases in project-generated emissions to adverse impacts on human health caused by those emissions. *See Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 510.

Third, the California Department of Justice recommends the preparation of a quantitative HRA pursuant to the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines. OEHHA released its most recent guidance document in 2015 describing which types of projects warrant preparation of an HRA. *See* "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/hotspots2015.html. The OEHHA document recommends that if a project is expected to last over 6 months, the exposure should be evaluated throughout the project using a 30-year exposure duration to estimate individual cancer risks. SWAPE letter, p. 16. Based on its extensive experience, SWAPE reasonably assumes that the

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[1] *See* CARB Resources - Overview: Diesel Exhaust & Health, available at https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health).

Project will last at least 30 years, and therefore recommends that health risk impacts from the project be evaluated. *Id.* A Revised EIR is therefore required to analyze these impacts.

Fourth, the FEIR fails to evaluate the "*cumulative* lifetime cancer risk to nearby, existing receptors as a result of Project *construction and operation together*." SWAPE comment, p. 17 (emphasis in original). A Revised EIR should be prepared to quantify the cumulative excess cancer risk posed by the Project's construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million. *Id.*

SWAPE prepared a screening-level HRA to evaluate potential impacts from Project construction using AERSCREEN, a screening-level air quality dispersion model. SWAPE comment, p. 17. SWAPE applied a sensitive receptor distance of 125 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance utilizing age sensitivity factors. *Id.* at 17-19. SWAPE found that the excess cancer risks at a sensitive receptor located approximately 125 meters away over the course of Project construction and operation is **approximately 79 in one million**. *Id.* at 19. This risk appreciably exceeds SCAQMD's threshold of 10 in one million.

SWAPE's analysis constitutes substantial evidence that the Project may have a significant health impact as a result of diesel particulate emissions. SWAPE recommends that an updated EIR be prepared which includes "a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation." *Id.*

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3. The DEIR Failed to Adequately Analyze the Project's Greenhouse Gas Impacts and Thus the Project May Result in Significant Greenhouse Gas Emissions.

The DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 metric tons of carbon dioxide equivalent per year ("MT CO2e/year"). The DEIR also relies on the Project's consistency with the City of El Segundo Climate Action Plan, SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32 to conclude the Project would have less-than-significant GHG impacts. SWAPE comment, p. 20; DEIR, p. 4.6-29 – 4.6-48. However, SWAPE states that the DEIR's conclusion about a less-than-significant greenhouse gas impact is incorrect for several reasons:

1. The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
2. The DEIR's quantitative GHG analysis relies upon an outdated threshold;
3. The DEIR's unsubstantiated air model indicates a potentially significant impact;
4. The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and

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5. The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

SWAPE comment, p. 20-27. SWAPE's analysis demonstrates potentially significant health risk and GHG impacts from the project that necessitate mitigation, and it proposes several feasible mitigation measures from CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* to reduce these impacts. *Id.* at 27. In addition to implementing these measures, the Revised EIR should include an updated air quality, health risk, and GHG analysis.

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I. CONCLUSION

For the foregoing reasons, SAFER believes that the EIR is wholly inadequate. SAFER urges the Planning Commission to refrain from recommending certification of the FEIR or recommending approval of the Project in order to allow staff additional time to address the concerns raised herein. Thank you for considering our comments and please include this letter in the record of proceedings for this project.

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Sincerely,

Rebecca Davis

EXHIBIT A

IEE INDOOR ENVIRONMENTAL ENGINEERING IEE
1448 Pine Street, Suite 103 San Francisco, California 94109
Telephone: (415) 567-7700
E-mail: offermann@IEE-SF.com
http://www.iee-sf.com

Date: November 12, 2021

To: Rebecca Davis
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, California 94612

From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: Pacific Coast Commons Project, El Segundo, CA
(IEE File Reference: P-4516)

Pages: 19

Indoor Air Quality Impacts

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Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

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Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and

particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Pacific Coast Commons Project, El Segundo, CA the buildings consist of residential and commercial spaces.

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The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

The employees of the commercial spaces are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the commercial spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

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Assuming that the employees of commercial spaces work 8 hours per day and inhale 20 m^3 of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor

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concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

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3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m²-h) and the area (m²) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., µg/m²-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 µg/m²-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 µg/m²-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

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If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m³) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m³/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m³)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m³/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section

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3.10.2 "Calculation of Estimated Building Concentrations" of the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

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Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The Pacific Coast Commons Project is close to roads with moderate to high traffic (e.g., Pacific Coast Highway, E. Mariposa Avenue, E. Holly Avenue, Indiana Street, etc.) as well as air traffic from Los Angeles International Airport, and thus the Project site is a sound impacted site.

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According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), The future plus project traffic noise levels reported in Table 4.10-6 range from 55.4 dBA to 70.2 dBA CNEL.

As a result of the anticipated high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

An air quality analyses should to be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour

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standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

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Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

2-9 Cont.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California"*. In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality*" when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,

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Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA

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cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Francis (Bud) J. Offermann III PE, CIH

Indoor Environmental Engineering
1448 Pine Street, Suite 103, San Francisco, CA 94109
Phone: 415-567-7700
Email: Offermann@iee-sf.com
http://www.iee-sf.com

Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers: ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.

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Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.

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Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
  - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
  - Chairman of EHC Research Subcommittee
  - Member of Man Made Mineral Fiber Position Paper Subcommittee
  - Member of the IAQ Position Paper Committee
  - Member of the Legionella Position Paper Committee
  - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
  - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
  - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
  - Member of Research Subcommittee

American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
  - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)

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American Industrial Hygiene Association (AIHA)

Cal-OSHA Indoor Air Quality Advisory Committee

International Society of Indoor Air Quality and Climate (ISIAQ)

- Co-Chairman of Task Force on HVAC Hygiene

U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)

Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering

Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.

Models for Predicting Air Quality, Indoor Air'90, Toronto, Canada, August, 1990.

Microbes in Building Materials and Systems, Indoor Air '93, Helsinki, Finland, July, 1993.

Microorganisms in Indoor Air Assessment and Evaluation of Health Effects and Probable Causes, Walnut Creek, CA, February 27, 1997.

Controlling Microbial Moisture Problems in Buildings, Walnut Creek, CA, February 27, 1997.

Scientific Advisory Committee, Roomvent 98, 6th International Conference on Air Distribution in Rooms, KTH, Stockholm, Sweden, June 14-17, 1998.

Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Microbial Growth in Materials, Healthy Buildings 2000, Espoo, Finland, August, 2000.

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Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.

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Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

PEER-REVIEWED PUBLICATIONS :

F.J.Offermann, C.D.Hollowell, and G.D.Roseme, "Low-Infiltration Housing in Rochester, New York: A Study of Air Exchange Rates and Indoor Air Quality," *Environment International*, *8*, pp. 435-445, 1982.

W.W.Nazaroff, F.J.Offermann, and A.W.Robb, "Automated System for Measuring Air Exchange Rate and Radon Concentration in Houses," *Health Physics*, *45*, pp. 525-537, 1983.

F.J.Offermann, W.J.Fisk, D.T.Grimsrud, B.Pedersen, and K.L.Revzan, "Ventilation Efficiencies of Wall- or Window-Mounted Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, *89-2B*, pp 507-527, 1983.

W.J.Fisk, K.M.Archer, R.E Chant, D. Hekmat, F.J.Offermann, and B.Pedersen, "Onset of Freezing in Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, *91-1B*, 1984.

W.J.Fisk, K.M.Archer, R.E Chant, D. Hekmat, F.J.Offermann, and B.Pedersen, "Performance of Residential Air-to-Air Heat Exchangers During Operation with Freezing and Periodic Defrosts," *ASHRAE Annual Transactions*, *91-1B*, 1984.

F.J.Offermann, R.G.Sextro, W.J.Fisk, D.T.Grimsrud, W.W.Nazaroff, A.V.Nero, and K.L.Revzan, "Control of Respirable Particles with Portable Air Cleaners," *Atmospheric Environment*, Vol. 19, pp.1761-1771, 1985.

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R.G.Sextro, F.J.Offermann, W.W.Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Evaluation of Indoor Control Devices and Their Effects on Radon Progeny Concentrations," *Atmospheric Environment*, 12, pp. 429-438, 1986.

W.J. Fisk, R.K.Spencer, F.J.Offermann, R.K.Spencer, B.Pedersen, R.Sextro, "Indoor Air Quality Control Techniques," *Noyes Data Corporation*, Park Ridge, New Jersey, (1987).

F.J.Offermann, "Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," *ASHRAE Transactions* , Volume 94, Part 1, pp 694-704, 1988.

F.J.Offermann and D. Int-Hout "Ventilation Effectiveness Measurements of Three Supply/Return Air Configurations," *Environment International* , Volume 15, pp 585-592 1989.

F.J. Offermann, S.A. Loiselle, M.C. Quinlan, and M.S. Rogers, "A Study of Diesel Fume Entrainment in an Office Building," *IAQ '89*, The Human Equation: Health and Comfort, pp 179-183, ASHRAE, Atlanta, GA, 1989.

R.G.Sextro and F.J.Offermann, "Reduction of Residential Indoor Particle and Radon Progeny Concentrations with Ducted Air Cleaning Systems," submitted to *Indoor Air*, 1990.

S.A.Loiselle, A.T.Hodgson, and F.J.Offermann, "Development of An Indoor Air Sampler for Polycyclic Aromatic Compounds", *Indoor Air* , Vol 2, pp 191-210, 1991.

F.J.Offermann, S.A.Loiselle, A.T.Hodgson, L.A. Gundel, and J.M. Daisey, "A Pilot Study to Measure Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air* , Vol 4, pp 497-512, 1991.

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance Comparisons of Six Different Air Cleaners Installed in a Residential Forced Air Ventilation System," *IAQ'91*, Healthy Buildings, pp 342-350, ASHRAE, Atlanta, GA (1991).

F.J. Offermann, J. Daisey, A. Hodgson, L. Gundell, and S. Loiselle, "Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air*, Vol 4, pp 497-512 (1992).

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance of Air Cleaners Installed in a Residential Forced Air System," *ASHRAE Journal*, pp 51-57, July, 1992.

F.J. Offermann and S. A. Loiselle, "Performance of an Air-Cleaning System in an Archival Book Storage Facility," *IAQ'92*, ASHRAE, Atlanta, GA, 1992.

S.B. Hayward, K.S. Liu, L.E. Alevantis, K. Shah, S. Loiselle, F.J. Offermann, Y.L. Chang, L. Webber, "Effectiveness of Ventilation and Other Controls in Reducing Exposure to ETS in Office Buildings," Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

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F.J. Offermann, S. A. Loiselle, G. Ander, H. Lau, "Indoor Contaminant Emission Rates Before and After a Building Bake-out," *IAQ'93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 157-163, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Hayward, S.B., Shah, S.B., Loiselle, S., and Offermann, F.J. "Tracer Gas Techniques for Determination of the Effectiveness of Pollutant Removal From Local Sources," *IAQ '93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 119-129, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Liu, L.E., Hayward, S.B., Offermann, F.J., Shah, S.B., Leiserson, K. Tsao, E., and Huang, Y., "Effectiveness of Ventilation in 23 Designated Smoking Areas in California Buildings," *IAQ '94*, Engineering Indoor Environments, pp 167-181, ASHRAE, Atlanta, GA, 1994.

L.E. Alevantis, Offermann, F.J., Loiselle, S., and Macher, J.M., "Pressure and Ventilation Requirements of Hospital Isolation Rooms for Tuberculosis (TB) Patients: Existing Guidelines in the United States and a Method for Measuring Room Leakage", Ventilation and Indoor air quality in Hospitals, M. Maroni, editor, Kluwer Academic publishers, Netherlands, 1996.

F.J. Offermann, M. A. Waz, A.T. Hodgson, and H.M. Ammann, "Chemical Emissions from a Hospital Operating Room Air Filter," *IAQ'96*, Paths to Better Building Environments, pp 95-99, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Professional Malpractice and the Sick Building Investigator," *IAQ'96*, Paths to Better Building Environments, pp 132-136, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Standard Method of Measuring Air Change Effectiveness," *Indoor Air*, Vol 1, pp.206-211, 1999.

F. J. Offermann, A. T. Hodgson, and J. P. Robertson, "Contaminant Emission Rates from PVC Backed Carpet Tiles on Damp Concrete", Healthy Buildings 2000, Espoo, Finland, August 2000.

K.S. Liu, L.E. Alevantis, and F.J. Offermann, "A Survey of Environmental Tobacco Smoke Controls in California Office Buildings", *Indoor Air*, Vol 11, pp. 26-34, 2001.

F.J. Offermann, R. Colfer, P. Radzinski, and J. Robertson, "Exposure to Environmental Tobacco Smoke in an Automobile", Indoor Air 2002, Monterey, California, July 2002.

F. J. Offermann, J.P. Robertson, and T. Webster, "The Impact of Tracer Gas Mixing on Airflow Rate Measurements in Large Commercial Fan Systems", Indoor Air 2002, Monterey, California, July 2002.

M. J. Mendell, T. Brennan, L. Hathon, J.D. Odom, F.J.Offermann, B.H. Turk, K.M. Wallingford, R.C. Diamond, W.J. Fisk, "Causes and prevention of Symptom Complaints

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in Office Buildings: Distilling the Experience of Indoor Environmental Investigators", submitted to Indoor Air 2005, Beijing, China, September 4-9, 2005.

F.J. Offermann, "Ventilation and IAQ in New Homes With and Without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

F.J. Offermann, "ASHRAE 62.2 Intermittent Residential Ventilation: What's It Good For, Intermittently Poor IAQ", IAQVEC 2010, Syracuse, CA, April 21, 2010.

F.J. Offermann and A.T. Hodgson, "Emission Rates of Volatile Organic Compounds in New Homes", Indoor Air 2011, Austin, TX, June, 2011.

P. Jenkins, R. Johnson, T. Phillips, and F. Offermann, "Chemical Concentrations in New California Homes and Garages", Indoor Air 2011, Austin, TX, June, 2011.

W. J. Mills, B. J. Grigg, F. J. Offermann, B. E. Gustin, and N. E. Spingarm, "Toluene and Methyl Ethyl Ketone Exposure from a Commercially Available Contact Adhesive", Journal of Occupational and Environmental Hygiene, 9:D95-D102 May, 2012.

F. J. Offermann, R. Maddalena, J. C. Offermann, B. C. Singer, and H, Wilhelm, "The Impact of Ventilation on the Emission Rates of Volatile Organic Compounds in Residences", HB 2012, Brisbane, AU, July, 2012.

F. J. Offermann, A. T. Hodgson, P. L. Jenkins, R. D. Johnson, and T. J. Phillips, "Attached Garages as a Source of Volatile Organic Compounds in New Homes", HB 2012, Brisbane, CA, July, 2012.

R. Maddalena, N. Li, F. Offermann, and B. Singer, "Maximizing Information from Residential Measurements of Volatile Organic Compounds", HB 2012, Brisbane, AU, July, 2012.

W. Chen, A. Persily, A. Hodgson, F. Offermann, D. Poppendieck, and K. Kumagai, "Area-Specific Airflow Rates for Evaluating the Impacts of VOC emissions in U.S. Single-Family Homes", Building and Environment, Vol. 71, 204-211, February, 2014.

F. J. Offermann, A. Eagan A. C. Offermann, and L. J. Radonovich, "Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

F. J. Offermann, "Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Building and Environment, Vol. 93, Part 1, 101-105, November, 2015.

F. J. Offermann, "Formaldehyde Emission Rates From Lumber Liquidators Laminate Flooring Manufactured in China", Indoor Air 2016, Belgium, Ghent, July, 2016.

F. J. Offermann, "Formaldehyde and Acetaldehyde Emission Rates for E-Cigarettes", Indoor Air 2016, Belgium, Ghent, July, 2016.

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OTHER REPORTS:

W.J.Fisk, P.G.Cleary, and F.J.Offermann, "Energy Saving Ventilation with Residential Heat Exchangers," a Lawrence Berkeley Laboratory brochure distributed by the Bonneville Power Administration, 1981.

F.J.Offermann, J.R.Girman, and C.D.Hollowell, "Midway House Tightening Project: A Study of Indoor Air Quality," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-12777, 1981.

F.J.Offermann, J.B.Dickinson, W.J.Fisk, D.T.Grimsrud, C.D.Hollowell, D.L.Krinkle, and G.D.Roseme, "Residential Air-Leakage and Indoor Air Quality in Rochester, New York," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-13100, 1982.

F.J.Offermann, W.J.Fisk, B.Pedersen, and K.L.Revzan, Residential Air-to-Air Heat Exchangers: A Study of the Ventilation Efficiencies of Wall- or Window- Mounted Units," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-14358, 1982.

F.J.Offermann, W.J.Fisk, W.W.Nazaroff, and R.G.Sextro, "A Review of Portable Air Cleaners for Controlling Indoor Concentrations of Particulates and Radon Progeny," An interim report for the Bonneville Power Administration, 1983.

W.J.Fisk, K.M.Archer, R.E.Chant, D.Hekmat, F.J.Offermann, and B.S. Pedersen, "Freezing in Residential Air-to-Air Heat Exchangers: An Experimental Study," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16783, 1983.

R.G.Sextro, W.W.Nazaroff, F.J.Offermann, and K.L.Revzan, "Measurements of Indoor Aerosol Properties and Their Effect on Radon Progeny," Proceedings of the American Association of Aerosol Research Annual Meeting, April, 1983.

F.J.Offermann, R.G.Sextro, W.J.Fisk, W.W. Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Control of Respirable Particles and Radon Progeny with Portable Air Cleaners," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16659, 1984.

W.J.Fisk, R.K.Spencer, D.T.Grimsrud, F.J.Offermann, B.Pedersen, and R.G.Sextro, "Indoor Air Quality Control Techniques: A Critical Review," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16493, 1984.

F.J.Offermann, J.R.Girman, and R.G.Sextro, "Controlling Indoor Air Pollution from Tobacco Smoke: Models and Measurements,", Indoor Air, Proceedings of the 3rd International Conference on Indoor Air Quality and Climate, Vol 1, pp 257-264, Swedish Council for Building Research, Stockholm (1984), Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-17603, 1984.

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"Ventilation Measurement Techniques," Presented at the Workshop on Sampling and Analytical Techniques, Georgia Institute of Technology, Atlanta, Georgia, September 26, 1986 and September 25, 1987.

"Buildings That Make You Sick: Indoor Air Pollution", Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 18, 1986.

"Ventilation Effectiveness and Indoor Air Quality", Presented to the American Society of Heating, Refrigeration, and Air Conditioning Engineers Northern Nevada Chapter, Reno, NV, February 18, 1987, Golden Gate Chapter, San Francisco, CA, October 1, 1987, and the San Jose Chapter, San Jose, CA, June 9, 1987.

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"Indoor Air Quality, Ventilation, and Energy in Commercial Buildings", Presented at the Building Owners &Managers Association of Sacramento, Sacramento, CA, July 21, 1988.

"Controlling Indoor Air Quality: The New ASHRAE Ventilation Standards and How to Evaluate Indoor Air Quality", Presented at a conference "Improving Energy Efficiency and Indoor Air Quality in Commercial Buildings," National Energy Management Institute, Reno, Nevada, November 4, 1988.

"A Study of Diesel Fume Entrainment Into an Office Building," Presented at Indoor Air '89: The Human Equation: Health and Comfort, American Society of Heating, Refrigeration, and Air Conditioning Engineers, San Diego, CA, April 17-20, 1989.

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"Building Ventilation and Indoor Air Quality", Presented to the San Joaquin Chapter of the American Society of Heating, Refrigeration, and Air Conditioning Engineers, September 7, 1989.

"How to Meet New Ventilation Standards: Indoor Air Quality and Energy Efficiency," a workshop presented by the Association of Energy Engineers; Chicago, IL, March 20-21, 1989; Atlanta, GA, May 25-26, 1989; San Francisco, CA, October 19-20, 1989; Orlando, FL, December 11-12, 1989; Houston, TX, January 29-30, 1990; Washington D.C., February 26-27, 1990; Anchorage, Alaska, March 23, 1990; Las Vegas, NV, April 23-24, 1990; Atlantic City, NJ, September 27-28, 1991; Anaheim, CA, November 19-20, 1991; Orlando, FL, February 28 - March 1, 1991; Washington, DC, March 20-21, 1991; Chicago, IL, May 16-17, 1991; Lake Tahoe, NV, August 15-16, 1991; Atlantic City, NJ, November 18-19, 1991; San Jose, CA, March 23-24, 1992.

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"Ventilation Standards for Office Buildings", Presented to the South Bay Property Managers Association, Santa Clara, May 9, 1990.

"Indoor Air Quality", Presented at the Responsive Energy Technologies Symposium & International Exposition (RETSIE), Santa Clara, CA, June 20, 1990.

"Indoor Air Quality - Management and Control Strategies", Presented at the Association of Energy Engineers, San Francisco Bay Area Chapter Meeting, Berkeley, CA, September 25, 1990.

"Diagnosing Indoor Air Contaminant and Odor Problems", Presented at the ASHRAE Annual Meeting, New York City, NY, January 23, 1991.

"Diagnosing and Treating the Sick Building Syndrome", Presented at the Energy 2001, Oklahoma, OK, March 19, 1991.

"Diagnosing and Mitigating Indoor Air Quality Problems" a workshop presented by the Association of Energy Engineers, Chicago, IL, October 29-30, 1990; New York, NY, January 24-25, 1991; Anaheim, April 25-26, 1991; Boston, MA, June 10-11, 1991; Atlanta, GA, October 24-25, 1991; Chicago, IL, October 3-4, 1991; Las Vegas, NV, December 16-17, 1991; Anaheim, CA, January 30-31, 1992; Atlanta, GA, March 5-6, 1992; Washington, DC, May 7-8, 1992; Chicago, IL, August 19-20, 1992; Las Vegas,

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NV, October 1-2, 1992; New York City, NY, October 26-27, 1992, Las Vegas, NV, March 18-19, 1993; Lake Tahoe, CA, July 14-15, 1994; Las Vegas, NV, April 3-4, 1995; Lake Tahoe, CA, July 11-12, 1996; Miami, Fl, December 9-10, 1996.

"Sick Building Syndrome and the Ventilation Engineer", Presented to the San Jose Engineers Club, May, 21, 1991.

"Duct Cleaning: Who Needs It ? How Is It Done ? What Are The Costs ?" What Are the Risks ?, Moderator of Forum at the ASHRAE Annual Meeting, Indianapolis ID, June 23, 1991.

"Operating Healthy Buildings", Association of Plant Engineers, Oakland, CA, November 14, 1991.

"Duct Cleaning Perspectives", Moderator of Seminar at the ASHRAE Semi-Annual Meeting, Indianapolis, IN, June 24, 1991.

"Duct Cleaning: The Role of the Environmental Hygienist," ASHRAE Annual Meeting, Anaheim, CA, January 29, 1992.

"Emerging IAQ Issues", Fifth National Conference on Indoor Air Pollution, University of Tulsa, Tulsa, OK, April 13-14, 1992.

"International Symposium on Room Air Convection and Ventilation Effectiveness", Member of Scientific Advisory Board, University of Tokyo, July 22-24, 1992.

"Guidelines for Contaminant Control During Construction and Renovation Projects in Office Buildings," Seminar paper at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Outside Air Economizers: IAQ Friend or Foe", Moderator of Forum at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Orientation to Indoor Air Quality," an EPA two and one half day comprehensive indoor air quality introductory workshop for public officials and building property managers; Sacramento, September 28-30, 1992; San Francisco, February 23-24, 1993; Los Angeles, March 16-18, 1993; Burbank, June 23, 1993; Hawaii, August 24-25, 1993; Las Vegas, August 30, 1993; San Diego, September 13-14, 1993; Phoenix, October 18-19, 1993; Reno, November 14-16, 1995; Fullerton, December 3-4, 1996; Fresno, May 13-14, 1997.

"Building Air Quality: A Guide for Building Owners and Facility Managers," an EPA one half day indoor air quality introductory workshop for building owners and facility managers. Presented throughout Region IX 1993-1995.

"Techniques for Airborne Disease Control", EPRI Healthcare Initiative Symposium; San Francisco, CA; June 7, 1994.

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"Diagnosing and Mitigating Indoor Air Quality Problems", CIHC Conference; San Francisco, September 29, 1994.

"Indoor Air Quality: Tools for Schools," an EPA one day air quality management workshop for school officials, teachers, and maintenance personnel; San Francisco, October 18-20, 1994; Cerritos, December 5, 1996; Fresno, February 26, 1997; San Jose, March 27, 1997; Riverside, March 5, 1997; San Diego, March 6, 1997; Fullerton, November 13, 1997; Santa Rosa, February 1998; Cerritos, February 26, 1998; Santa Rosa, March 2, 1998.

ASHRAE 62 Standard "Ventilation for Acceptable IAQ", ASCR Convention; San Francisco, CA, March 16, 1995.

"New Developments in Indoor Air Quality: Protocol for Diagnosing IAQ Problems", AIHA-NC; March 25, 1995.

"Experimental Validation of ASHRAE SPC 129, Standard Method of Measuring Air Change Effectiveness", 16th AIVC Conference, Palm Springs, USA, September 19-22, 1995.

"Diagnostic Protocols for Building IAQ Assessment", American Society of Safety Engineers Seminar: 'Indoor Air Quality – The Next Door'; San Jose Chapter, September 27, 1995; Oakland Chapter, 9, 1997.

"Diagnostic Protocols for Building IAQ Assessment", Local 39; Oakland, CA, October 3, 1995.

"Diagnostic Protocols for Solving IAQ Problems", CSU-PPD Conference; October 24, 1995.

"Demonstrating Compliance with ASHRAE 62-1989 Ventilation Requirements", AIHA; October 25, 1995.

"IAQ Diagnostics: Hands on Assessment of Building Ventilation and Pollutant Transport", EPA Region IX; Phoenix, AZ, March 12, 1996; San Francisco, CA, April 9, 1996; Burbank, CA, April 12, 1996.

"Experimental Validation of ASHRAE 129P: Standard Method of Measuring Air Change Effectiveness", Room Vent '96 / International Symposium on Room Air Convection and Ventilation Effectiveness"; Yokohama, Japan, July 16-19, 1996.

"IAQ Diagnostic Methodologies and RFP Development", CCEHSA 1996 Annual Conference, Humboldt State University, Arcata, CA, August 2, 1996.

"The Practical Side of Indoor Air Quality Assessments", California Industrial Hygiene Conference '96, San Diego, CA, September 2, 1996

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"Operating and Maintaining Healthy Buildings", April 3-4, 1996, San Jose, CA; July 30, 1997, Monterey, CA.

"IAQ Primer", Local 39, April 16, 1997; Amdahl Corporation, June 9, 1997; State Compensation Insurance Fund's Safety & Health Services Department, November 21, 1996.

"Tracer Gas Techniques for Measuring Building Air Flow Rates", ASHRAE, Philadelphia, PA, January 26, 1997.

"How to Diagnose and Mitigate Indoor Air Quality Problems"; Women in Waste; March 19, 1997.

"Environmental Engineer: What Is It?", Monte Vista High School Career Day; April 10, 1997.

"Indoor Environment Controls: What's Hot and What's Not", Shaklee Corporation; San Francisco, CA, July 15, 1997.

"Measurement of Ventilation System Performance Parameters in the US EPA BASE Study", Healthy Buildings/IAQ'97, Washington, DC, September 29, 1997.

"Operations and Maintenance for Healthy and Comfortable Indoor Environments", PASMA; October 7, 1997.

"Designing for Healthy and Comfortable Indoor Environments", Construction Specification Institute, Santa Rosa, CA, November 6, 1997.

"Ventilation System Design for Good IAQ", University of Tulsa 10th Annual Conference, San Francisco, CA, February 25, 1998.

"The Building Shell", Tools For Building Green Conference and Trade Show, Alameda County Waste Management Authority and Recycling Board, Oakland, CA, February 28, 1998.

"Identifying Fungal Contamination Problems In Buildings", The City of Oakland Municipal Employees, Oakland, CA, March 26, 1998.

"Managing Indoor Air Quality in Schools: Staying Out of Trouble", CASBO, Sacramento, CA, April 20, 1998.

"Indoor Air Quality", CSOOC Spring Conference, Visalia, CA, April 30, 1998.

"Particulate and Gas Phase Air Filtration", ACGIH/OSHA, Ft. Mitchell, KY, June 1998.

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"Building Air Quality Facts and Myths", The City of Oakland / Alameda County Safety Seminar, Oakland, CA, June 12, 1998.

"Building Engineering and Moisture", Building Contamination Workshop, University of California Berkeley, Continuing Education in Engineering and Environmental Management, San Francisco, CA, October 21-22, 1999.

"Identifying and Mitigating Mold Contamination in Buildings", Western Construction Consultants Association, Oakland, CA, March 15, 2000; AIG Construction Defect Seminar, Walnut Creek, CA, May 2, 2001; City of Oakland Public Works Agency, Oakland, CA, July 24, 2001; Executive Council of Homeowners, Alamo, CA, August 3, 2001.

"Using the EPA BASE Study for IAQ Investigation / Communication", Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

"Ventilation," Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

"Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

"Closing Session Summary: 'Building Investigations' and 'Building Design & Construction', Healthy Buildings 2000, Espoo, Finland, August 2000.

"Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care", BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

"Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad," University of California Berkeley, September 18, 2001.

"Mold Contamination: Recognition and What To Do and Not Do", Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

"Investigative Tools of the IAQ Trade", Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

"Finding Hidden Mold: Case Studies in IAQ Investigations", AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

"Assessing and Mitigating Fungal Contamination in Buildings", Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.

2-10 Cont.

"Use of External Containments During Fungal Mitigation", Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004, San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

"Mold Remediation: The National QUEST for Uniformity Symposium", Invited Speaker, Orlando, Florida, November 3-5, 2003.

"Mold and Moisture Control", Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

"Advanced Perspectives In Mold Prevention & Control Symposium", Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

"Building Sciences: Understanding and Controlling Moisture in Buildings", American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

"Indoor Air Quality Diagnostics and Healthy Building Design", University of California Berkeley, Berkeley, CA, March 2, 2005.

"Improving IAQ = Reduced Tenant Complaints", Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

"Defining Safe Building Air", Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

"Update on USGBC LEED and Air Filtration", Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

"Ventilation and Indoor air Quality in New California Homes", National Center of Healthy Housing, October 20, 2008.

"Indoor Air Quality in New Homes", California Energy and Air Quality Conference, October 29, 2008.

"Mechanical Outdoor air Ventilation Systems and IAQ in New Homes", ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

"Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

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"Ten Ways to Improve Your Air Quality", Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

"New Developments in Ventilation and Indoor Air Quality in Residential Buildings", Westcon meeting, Alameda, CA, March 17, 2010.

"Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ", ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

"Measured IAQ in Homes", ACI Home Performance Conference, Austin, TX, April 21, 2010.

"Respiration: IEQ and Ventilation", AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

"IAQ Considerations for Net Zero Energy Buildings (NZEB)", Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

"Energy Conservation and Health in Buildings", Berkeley High SchoolGreen Career Week, Berkeley, CA, April 12, 2011.

"What Pollutants are Really There ?", ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

"Energy Conservation and Health in Residences Workshop", Indoor Air 2011, Austin, TX, June 6, 2011.

"Assessing IAQ and Improving Health in Residences", US EPA Weatherization Plus Health, September 7, 2011.

"Ventilation: What a Long Strange Trip It's Been", Westcon, May 21, 2014.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Indoor Air 2014, Hong Kong, July, 2014.

"Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

"Chemical Emissions from E-Cigarettes", IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

"Chemical Emissions and Health Hazards Associated with E-Cigarettes", Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

"Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM", Harris Martin's Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.

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"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure", FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

"Creating Healthy Homes, Schools, and Workplaces", Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

"Diagnosing IAQ Problems and Designing Healthy Buildings", University of California Berkeley, Berkeley, CA, October 6, 2015.

"Diagnosing Ventilation and IAQ Problems in Commercial Buildings", BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

"A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products", AIHce2016, May, 21-26, 2016.

"Admissibility of Scientific Testimony", Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

"Indoor Air Quality and Ventilation", ASHRAE Redwood Empire, Napa, CA, December 1, 2016.

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EXHIBIT B

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

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Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

2-11 Cont.

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips,

reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

2-11 Cont.

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particular matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants, Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert

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on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

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[2] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

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B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

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C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.

[3] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

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- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.

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- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[4]

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The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

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Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

(DEIR, ES-10~16.)

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E. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an

impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

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1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project's GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency "should explain the limitations of the particular model or methodology selected for use." CEQA Guidelines § 15064.4(c).

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAPs should include the following features:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

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Collectively, the above-listed CAP features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

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(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT.

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The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

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F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

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Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal. App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

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B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

2-11 Cont.

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

The DEIR should be revised and recirculated with an affordable housing component.

2-11 Cont.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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/ / /

/ / /

[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

2-11
Cont.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

2-12

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

2-12 Cont.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

2

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added).[12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

2-12 Cont.

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

2-12 Cont.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

2-12 Cont.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

2-13

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

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Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

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Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

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Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case; No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

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In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

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In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

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EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:
California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:
Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 – 2003);

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- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989 – 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 - 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

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- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

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- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

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- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

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Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

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Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

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Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

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2-13 Cont.

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Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

2-13 Cont.

EXHIBIT D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

April 12, 2021

Greg Sonstein, Esq.
Mitchell M. Tsai, Attorney at Law
155 South El Molino Avenue Suite 104
Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site.

2-14

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

2-14 Cont.

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

2-14 Cont.

[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

3

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

2-14 Cont.

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

2-14 Cont.

[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

2-14 Cont.

[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

7

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

9

Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

2-14 Cont.

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

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[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

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Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

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[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

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project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

2-14 Cont.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

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First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

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Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

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[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

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[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

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concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

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[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

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An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

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(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

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2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

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[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

2-14 Cont.

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

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DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

2-14 Cont.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

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2-14 Cont.

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fillagn.pdf

2-14 Cont.

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

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CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

2-14 Cont.

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

2-14 Cont.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones

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2-14 Cont.

Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

2-14 Cont.

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• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

2-14 Cont.

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• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

2-14 Cont.

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Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

2-14 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

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Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

2-14 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

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ii.	The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
iii.	The Certification Statement signed and printed on the contractor's letterhead.
b.	The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes:
i.	Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
ii.	Any problems with the equipment or emission controls.
iii.	Certified copies of fuel deliveries for the time period that identify:
1.	Source of supply
2.	Quantity of fuel
3.	Quality of fuel, including sulfur content (percent by weight)

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

2-14 Cont.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

2-14 Cont.

Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
Total Emissions From Passenger and Light Duty Vehicles		
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) (Calc: (L1*L2))
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) (Calc: (L3 converted into lbs) / (365 days))
5	674	Service Population (618 residents + 56 long-term jobs)
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) (Calc: (L4/L5))
Daily VMT Per Capita From Passenger and Light Duty Vehicles		
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles (Calc: (L9/365))
11	674	Service Population (618 residents + 56 long-term jobs)
12	24.14	Daily VMT Per Capita ((Calc: L10/L11))

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

2-14 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

2-14 Cont.

Attachment C

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	318,800.00	0
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,057.00	0
Apartments Mid Rise	263.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.25	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	262.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.86	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.91
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NO_x	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7437	1.6700e-003	0.3952	0.0526	0.4477	0.1637	0.0485	0.2122	0.0000	150.2960	150.2960	0.0339	0.0000	151.1444
2022	1.3593	2.3980	2.6885	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1323	532.1323	0.0866	0.0000	534.2970
2023	0.3692	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8981	832.8981	0.1113	0.0000	835.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3423
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8981**	**832.8981**	**0.1113**	**0.0000**	**835.6806**

2-14 Cont.

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7436	1.6700e-003	0.0552	0.0526	0.0877	0.0337	0.0485	0.0722	0.0000	150.2959	150.2959	0.0039	0.0000	151.1442
2022	1.3593	2.9090	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0970	0.0963	0.1061	0.0000	592.1320	592.1320	0.0966	0.0000	594.2956
2023	0.3502	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	852.6977	852.6977	0.1113	0.0000	855.6802
2024	1.3711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3397	0.0765	0.0443	0.1208	0.0000	493.9749	493.9749	0.0547	0.0000	495.3431
Maximum	1.3593	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	852.6977	852.6977	0.1113	0.0000	855.6802

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.6789	0.6789
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6786	1.6786
6	1-1-2023	3-31-2023	0.9521	0.9521
7	4-1-2023	6-30-2023	0.8759	0.8759
8	7-1-2023	9-30-2023	0.7219	0.7219

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9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6806	0.6806
11	4-1-2024	6-30-2024	1.1803	1.1803
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.5788	1.5788

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

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Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	9	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	8	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1839
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.5900e-003	0.0293	9.0000e-005	3.2200e-003	7.0000e-005	3.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5000e-003**	**0.0000**	**28.3521**

2-14 Cont.

.2 Demolition - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6800e-003	0.0000	6.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6800e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-007	0.0529	0.0112	1.5000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1560	15.1560	7.0400e-007	0.0000	15.1699
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	3.9000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	5.5800e-003	2.5800e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.5000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

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3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.9300e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2661	5.2661	1.4000e-004	0.0000	5.2697
Total	**2.6000e-003**	**0.0123**	**0.0219**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0909	0.0000	0.0909	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0909**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0111	2.7600e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0995	0.0000	0.0995	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0995**	**0.0123**	**0.1118**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.0000e-004	0.0000	2.8121
Worker	3.8200e-003	2.9800e-003	0.0521	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0340**	**1.3000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3800e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3460e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

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3.4 Grading - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2198	0.1684	3.1000e-004		9.9800e-003	9.9800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2198**	**0.1684**	**3.1000e-004**	**0.0749**	**9.9800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3600e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7445
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

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3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-003	0.3694	0.0653	7.3000e-004	0.0104	4.5000e-004	0.0109	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3500e-003	0.0000	70.8929
Worker	0.0458	0.0326	0.3765	1.1900e-003	0.1264	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.0034	107.0034	2.7100e-003	0.0000	107.0712
Total	0.0536	0.4020	0.4418	1.9200e-003	0.1368	1.4300e-003	0.1402	0.0394	1.3300e-003	0.0407	0.0000	177.7875	177.7875	7.0600e-003	0.0000	177.9639

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3.5 Building Construction - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9318**	**225.9318**	**0.0541**	**0.0000**	**227.2850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2684	0.0663	7.3000e-004	0.0104	4.9000e-004	0.0109	6.3200e-003	4.7000e-004	6.7900e-003	0.0000	70.7641	70.7641	4.3500e-003	0.0000	70.8928
Worker	0.0458	0.0539	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3009**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1482**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5675**	**178.5675**	**7.0600e-003**	**0.0000**	**178.7639**

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3500e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7200e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	7.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

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3.6 Paving - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4158
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	3.6500e-003	7.0000e-005	3.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

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3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0986**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0389	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0389**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0986**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

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3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8831**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2500e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0239	1.5000e-004	0.0240	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	19.6277	19.6277	4.4000e-004	0.0000	19.6387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**53.7276**	**53.7276**	**2.4600e-003**	**0.0000**	**53.7890**

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3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.5000e-004	5.4900e-003	8.0000e-005	5.5700e-003	1.5100e-003	7.4000e-005	1.5900e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.5700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.1000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0310**	**2.9000e-004**	**0.0321**	**0.0108**	**2.7000e-004**	**0.0109**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

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3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.4800e-003	6.0000e-005	1.3900e-003	2.6000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.6000e-004	0.0000	5.1705
Worker	4.8800e-003	5.3200e-003	0.0382	1.3000e-004	0.0145	1.0000e-004	0.0146	3.9500e-003	9.0000e-005	3.9400e-002	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0205**	**0.0426**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.2000e-004**	**0.0000**	**16.8863**

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3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0162	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.9000e-004	0.0000	5.1709
Worker	4.6600e-003	3.2200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.1000e-003**	**0.0195**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.6000e-004**	**0.0000**	**16.8863**

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3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1690
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0183	3.0000e-004	0.0186	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	8.9800e-003	0.0000	75.4125
Vendor	8.4000e-004	0.0230	8.5100e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0897	3.3000e-004	0.0069	2.5000e-004	0.0071	1.8300e-003	2.4000e-004	2.0700e-003	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0278**	**5.9000e-004**	**0.0284**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0859**	**0.0000**	**54.7272**	**54.7272**	**0.0177**	**0.0000**	**55.1697**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.8000e-004	0.0163	3.0000e-004	0.0166	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.0900e-005	0.0000	75.4125
Vendor	8.4000e-004	0.0250	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0497	3.3000e-004	0.0369	2.6000e-004	0.0371	9.7900e-003	2.4000e-004	0.0100	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2917**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0824	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.6900e-003	0.0000	107.1718
Worker	0.0040	0.0574	0.0764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	0.0131	0.3722	0.7689	3.3400e-003	0.2769	2.1300e-003	0.2810	0.0747	1.9700e-003	0.0767	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	**0.1195**	**1.0933**	**1.2345**	**2.0500e-003**		**0.0532**	**0.0532**		**0.0500**	**0.0500**	**0.0000**	**176.1714**	**176.1714**	**0.0419**	**0.0000**	**177.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.6800e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	**0.0931**	**0.3722**	**0.7689**	**3.3400e-003**	**0.2769**	**2.1300e-003**	**0.2810**	**0.0727**	**1.9700e-003**	**0.0767**	**0.0000**	**309.2681**	**309.2681**	**0.0107**	**0.0000**	**309.5343**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8692	1.4600e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	**0.0809**	**0.7394**	**0.8692**	**1.4600e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5170**	**127.5170**	**0.0302**	**0.0000**	**128.2709**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.4000e-004	0.0206	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1782	77.1782	4.1800e-003	0.0000	77.2831
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3000e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8850	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	**0.0809**	**0.7394**	**0.8850**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5169**	**127.5169**	**0.0302**	**0.0000**	**128.2707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2751
Worker	0.0576	0.0378	0.4565	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	8.1000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	8.1000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0189	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1426	4.9000e-004	0.0956	4.6000e-004	0.0570	0.0160	4.3000e-004	0.0164	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1587**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4695	5.4695	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4695**	**5.4695**	**3.1000e-004**	**0.0000**	**5.4972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0292	0.0169	2.1000e-004	5.4300e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0566	4.0000e-004	0.0570	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2884
Total	**0.0197**	**0.0411**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4290**

2-14 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.8810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.8810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.94	1,204.49	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,680	1,352,680
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	308.60	171.62	554,221	554,221
Total	2,516.61	3,039.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.80	8.40	6.90	9.50	72.50	18.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0294	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0294	7.1000e-003	800.3011
NaturalGas Mitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0054e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.0248e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	9.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7807
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0054e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.0248e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	9.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7807
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.856456e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	82512	21.0301	7.6000e-004	1.9000e-004	21.1055
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.856456e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	82512	21.0301	7.6000e-004	1.9000e-004	21.1055
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

2-14 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

2-14 Cont.

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5108	0.6283	0.0156	121.9697
Unmitigated	101.5108	0.6283	0.0156	121.9697

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560347 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

2-14 Cont.

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560347 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2501	0.0000	94.3242
Unmitigated	38.0730	2.2501	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.86	24.5574	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9682	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5574	0.0920	0.0000	3.8573
Total		**38.0730**	**2.2501**	**0.0000**	**94.3242**

2-14 Cont.

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8418
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.87	1.5969	0.0920	0.0000	3.9573
Total		38.0730	2.2501	0.0000	94.3742

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	216,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	9,952.00	0
Apartments Mid Rise	263.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	19.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.98	5.04
tblVehicleTrips	SU_TR	181.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	26.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2-14 Cont.

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	12.5742	22.8867	67.6728	0.2109	15.5725	0.6456	16.2161	4.1658	0.6367	4.8025	0.0000	24,554.21 61	24,554.21 61	0.9549	0.1159	24,612.63 09

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	12.5742	22.8867	67.6728	0.2109	15.5725	0.6456	16.2161	4.1658	0.6367	4.8025	0.0000	24,554.21 61	24,554.21 61	0.9549	0.1159	24,612.63 09

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

2-14 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

2-14 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1403	4.6911	1.0364	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,503.775 6	1,503.775 6	0.1070		1,506.451 4
Vendor	0.0557	1.9875	0.4527	5.1000e-003	0.1289	3.8400e-003	0.1327	0.0368	3.6700e-003	0.0405		544.9769	544.9769	0.0339		545.7008
Worker	0.3377	0.2190	3.0138	8.8900e-003	0.8842	5.5800e-003	0.8898	0.2372	5.0800e-003	0.2422		885.3227	885.3227	0.0238		885.9182
Total	**0.5336**	**7.0976**	**4.5018**	**0.0288**	**1.3509**	**0.0256**	**1.3756**	**0.3666**	**0.0242**	**0.3908**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.670 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0386		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	**3.1651**	**31.4407**	**21.5650**	**0.0386**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

2-14 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1403	4.8911	1.0354	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.775 5	1,603.775 5	0.1070		1,606.451 4
Vendor	0.0667	1.9075	0.4627	5.1000e-003	0.1260	3.8400e-003	0.1318	0.0368	3.6700e-003	0.0406		544.6769	544.6769	0.0330		545.7009
Worker	0.3377	0.2190	3.0136	6.8900e-003	0.8042	6.5800e-003	0.8008	0.2372	6.0800e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.5336	7.0176	4.5038	0.0288	1.2680	0.0256	1.2856	0.3666	0.0242	0.3908		3,034.576 1	3,034.576 1	0.1638		3,038.670 6

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1703		826.1401	826.1401	0.0314		826.9244

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1703		826.1401	826.1401	0.0314		826.9244

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 5

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2190	3.0138	8.6800e-003	0.8842	6.5800e-003	0.8908	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0236		886.5192
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9482**	**8.5000e-003**	**0.9567**	**0.2536**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.369 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0270	0.9538	0.2263	2.5500e-003	0.0548	1.9200e-003	0.0568	0.0184	1.8400e-003	0.0203		272.4385	272.4385	0.0105		272.6505
Worker	0.3377	0.2190	3.0136	8.8900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0298		886.5182
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9502**	**8.5000e-003**	**0.9577**	**0.2556**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.368 7**

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9063	0.2139	2.5300e-003	0.0640	1.8600e-003	0.0657	0.0184	1.8000e-003	0.0202		270.0591	270.0591	0.0159		270.4568
Worker	0.3168	0.1978	2.7760	8.6700e-003	0.8842	6.3800e-003	0.9006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3429	1.1037	3.0007	0.0111	0.9482	8.2400e-003	0.9663	0.2556	7.6800e-003	0.2631		1,124.238 3	1,124.238 3	0.0374		1,125.173 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0251	0.9053	0.2139	2.5300e-003	0.0640	1.6600e-003	0.0657	0.0164	1.5900e-003	0.0180		270.0891	270.0891	0.0159		270.4858
Worker	0.3178	0.1979	2.7868	8.5700e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		864.1791	864.1791	0.0215		864.7174
Total	0.3429	1.1032	3.0007	0.0111	0.9582	0.0080	0.9663	0.2536	7.4800e-003	0.2611		1,134,268.3	1,134,268.3	0.0374		1,135,173.2

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554,333.6	2,554,333.6	0.6120		2,569,632.2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554,333.6	2,554,333.6	0.6120		2,569,632.2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.9800e-003	0.1976	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.078 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0783	2.7160	0.6417	7.5800e-003	0.1920	4.9800e-003	0.1970	0.0563	4.7700e-003	0.0601		810.1774	810.1774	0.0479		811.3673
Worker	0.4751	0.2988	4.1802	0.0125	1.3413	9.6900e-003	1.3509	0.3557	8.9300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	0.5534	3.0120	4.8219	0.0201	1.5333	0.0146	1.5479	0.4119	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9853	0.2139	2.5300e-003	0.0640	1.6800e-003	0.0657	0.0164	1.5500e-003	0.0200		270.8591	270.8591	0.0159		271.4566
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	0.1845	1.0843	1.6073	6.8200e-003	0.5111	4.8800e-003	0.5160	0.1370	4.5300e-003	0.1415		697.1487	697.1487	0.0266		697.8153

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0648	1.8600e-003	0.0667	0.0184	1.5900e-003	0.0200		270.0691	270.0691	0.0159		270.4660
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**5.0600e-003**	**0.5160**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1587**	**697.1587**	**0.0266**		**698.1145**

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4089	1.9136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	**49.0421**	**1.4089**	**1.9136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0103**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.8107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	6.3900e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.7200e-003**	**1.0319**	**0.2740**	**9.5700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0522	1.6187	0.4278	6.0600e-003	0.1288	3.3300e-003	0.1321	0.0368	3.1800e-003	0.0400		540.1183	540.1183	0.0317		540.9115
Worker	0.3168	0.1978	2.7866	8.5700e-003	0.6942	6.2600e-003	0.7005	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3690	2.0065	3.2146	0.0136	1.0229	9.7200e-003	1.0319	0.2740	9.0700e-003	0.2831		1,394.297 4	1,394.297 4	0.0533		1,395.628 9

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	2.0836	0.9975	3.0812	0.3170	0.9280	1.2450		3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0488		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 3	1,047.470 3	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	0.4942	4.4234	4.4741	0.0271	1.5427	0.0136	1.5563	0.4164	0.0127	0.4291		2,836.397 4	2,836.397 4	0.1266		2,839.596 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0369		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0369	2.0836	0.9975	3.0812	0.3170	0.9280	1.2450	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4619	0.4663	7.0100e-003	0.1689	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0464		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2589	3.8000e-003	0.2591	0.0737	3.5000e-003	0.0766		1,047.470 9	1,047.470 9	0.0553		1,048.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4541**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1260**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2143	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2143**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3699	0.3954	4.9000e-003	0.1230	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4693	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3683	0.3864	4.4000e-003	0.1260	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2595	3.9604	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	0.4857	1.6278	4.3468	0.0173	1.4673	0.0189	1.4802	0.3926	0.0101	0.4026		1,757.251 5	1,757.251 6	0.0568		1,758.671 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.9291		2,895.918 7

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2306	7.6512	2.4404	0.0357	0.0841	0.0142	0.0983	0.0223	0.0136	0.0359		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0389	1.3695	0.3754	4.9000e-003	0.1200	1.5400e-003	0.1295	0.0309	1.4700e-003	0.0323		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3680	5.1471	0.0165	1.7684	0.0125	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0388		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9729**	**0.0581**	**2.0805**	**0.0282**	**2.0287**	**0.7534**	**0.0265**	**0.7799**		**6,151.470 9**	**6,151.470 9**	**0.3196**		**6,159.459 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2306	7.6512	2.4404	0.0367	0.8841	0.0142	0.8983	0.2429	0.0136	0.2565		3,983.047 2	3,983.047 2	0.2530		3,989.373 3
Vendor	0.0389	1.3689	0.3654	4.8000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3580	5.1471	0.0165	1.7884	0.0125	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9529**	**0.0581**	**2.8005**	**0.0282**	**2.8287**	**0.7539**	**0.0265**	**0.7799**		**6,151.470 8**	**6,151.470 8**	**0.3196**		**6,159.459 6**

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,565.209 9	2,565.209 9	0.6079		2,570.406 1
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,565.209 9**	**2,565.209 9**	**0.6079**		**2,570.406 1**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1169	4.1088	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2357	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 6
Worker	1.1169	0.6713	9.6509	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2337	4.7779	10.8092	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1566		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0864	1.1230	0.0146	0.3940	4.5700e-003	0.3986	0.1106	4.3700e-003	0.1149		1,566.509 7	1,566.509 7	0.0917		1,567.552 8
Worker	1.0570	0.8119	9.0161	0.0299	3.3533	0.0230	3.3763	0.8993	0.0212	0.9206		2,982.626 8	2,982.626 8	0.0899		2,984.295 7
Total	1.1714	4.8982	10.1392	0.0445	3.7473	0.0276	3.7749	0.9099	0.0256	1.0354		4,549.136 5	4,549.136 5	0.1815		4,551.848 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4478	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4478	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0954	1.1230	0.0146	0.3848	4.5700e-003	0.3893	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0917		1,567.552 6
Worker	1.0570	0.6118	9.0151	0.0299	3.3639	0.0230	3.3763	0.8993	0.0212	0.9106		2,982.626 8	2,982.626 8	0.0988		2,984.295 7
Total	1.1714	4.7072	10.1382	0.0445	3.7373	0.0276	3.7649	0.9999	0.0256	1.0254		4,548.136 5	4,548.136 5	0.1905		4,551.848 3

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3655	0.3743	4.8700e-003	0.1260	1.5200e-003	0.1295	0.0359	1.4800e-003	0.0383		521.8365	521.8365	0.0272		522.5175
Worker	0.2819	0.1531	2.4040	7.9800e-003	0.8942	6.1800e-003	0.9004	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5286**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.203 7**	**1,317.203 7**	**0.0450**		**1,318.329 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	4.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4800e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.6456	0.4694	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2004	7.9688	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1800	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.6456	0.4694	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2004	7.9688	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01
Unmitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	66	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

2-14 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

2-14 Cont.

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	623A03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4853
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	280.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0185	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

6.0 Area Detail

6.1 Mitigation Measures Area

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2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.3314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6695	0.2805	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6768					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6685	0.2505	21.7005	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	219,900.00	0
Other Asphalt Surfaces	12.89	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,952.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

2-14 Cont.

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

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tblConstructionPhase	NumDays	230.00	105.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	28.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,962.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	180.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	299.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.06	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	8.66	5.18
tblVehicleTrips	WD_TR	127.16	178.80
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0686	18.6891	2.0506	20.7397	10.0975	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.8231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0696	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**6,828.756 8**	**6,828.756 8**	**1.2565**	**0.0000**	**6,860.167 9**

2-14 Cont.

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0686	18.6891	2.0506	20.7397	10.0975	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.8231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0696	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**6,828.756 8**	**6,828.756 8**	**1.2565**	**0.0000**	**6,860.167 9**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1519	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0360	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1919	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0350	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	3/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

2-14 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

2-14 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0389		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0389	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

2-14 Cont.

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1280	3.9800e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1003	529.1004	0.0364		529.9664
Worker	0.3680	0.2398	2.7688	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5710	7.0905	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931.745 6	2,931.745 6	0.1691		2,935.973 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

2-14 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9015	0.5066	4.9600e-003	0.1230	3.5800e-003	0.1320	0.0339	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2399	2.7083	8.3100e-003	0.8842	6.5800e-003	0.8908	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	**0.5711**	**7.0905**	**4.3263**	**0.0278**	**1.3680**	**0.0259**	**1.3960**	**0.3666**	**0.0246**	**0.3912**		**2,931.745 6**	**2,931.745 6**	**0.1691**		**2,935.973 6**

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.457 3**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9597	0.2553	2.4800e-003	0.0640	1.3900e-003	0.0650	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.8927	5.2000e-003	0.5639	4.1100e-003	0.5630	0.1492	3.7900e-003	0.1529		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1096	1.9480	7.6880e-003	0.6279	5.4990e-003	0.6280	0.1657	5.6890e-003	0.1733		782.3841	782.3841	0.0316		783.1736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.6882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.6882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9597	0.2533	2.4000e-003	0.0548	1.9000e-003	0.0568	0.0184	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.9339	517.9339	0.0139		518.1809
Total	**0.2599**	**1.1006**	**1.9460**	**7.6000e-003**	**0.6229**	**6.0900e-003**	**0.6290**	**0.1667**	**5.6900e-003**	**0.1723**		**782.3841**	**782.3841**	**0.0316**		**783.1736**

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										tons/yr					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.6575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.929 5	2,871.929 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.6575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.929 5**	**2,871.929 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.3982	1.1985	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2536	7.9800e-003	0.2635		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9268		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9268		2,895.149 5

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9507	0.2533	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.8000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7065	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.3982	1.1905	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2536	7.8600e-003	0.2615		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8651	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8651	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9269		2,895.260 4

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0225	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4988	6.0100e-003	0.8942	6.8900e-003	0.9008	0.2372	6.8900e-003	0.2430		798.8292	798.8292	0.0201		799.3306
Total	**0.3715**	**1.1182**	**2.7393**	**0.0105**	**0.9582**	**8.1100e-003**	**0.9663**	**0.2556**	**7.5300e-003**	**0.2631**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 4**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.0551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	**1.9486**	**20.0551**	**15.2737**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9269**		**2,895.260 4**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											tons/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0075	0.8017	0.2395	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0181		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4596	6.0100e-003	0.8942	5.3900e-003	0.9006	0.2372	5.2500e-003	0.2430		799.8292	799.8292	0.0201		799.3305
Total	0.3745	1.1182	2.7393	0.0105	0.9582	0.0100e-003	0.9663	0.2536	7.5300e-003	0.2631		1,061.023 4	1,061.023 4	0.0371		1,061.950 4

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											tons/yr				
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0024	2.7062	0.7105	7.3600e-003	0.1900	5.1600e-003	0.1972	0.0550	4.9300e-003	0.0602		786.5027	786.5027	0.0511		787.6798
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	9.5500e-003	1.3509	0.3557	8.6300e-003	0.3645		1,196.243 8	1,196.243 8	0.0301		1,198.995 8
Total	0.5229	3.0309	4.4602	0.0194	1.5313	0.0148	1.5481	0.4110	0.0139	0.4248		1,982.826 5	1,982.826 5	0.0812		1,986.855 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0259		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0259		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0824	2.7052	0.7195	7.3600e-003	0.1920	5.1500e-003	0.1972	0.0553	4.9300e-003	0.0602		786.5927	786.5927	0.0511		787.8698
Worker	0.5205	0.3249	3.7497	0.0120	1.3413	9.5900e-003	1.3509	0.3567	8.8300e-003	0.3646		1,199.243 0	1,199.243 0	0.0301		1,199.995 0
Total	0.6029	3.0299	4.4692	0.0194	1.5333	0.0148	1.5481	0.4119	0.0138	0.4249		1,984.826 5	1,984.826 5	0.0812		1,986.865 5

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2395	2.4500e-003	0.0548	1.7200e-003	0.0567	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6189
Worker	0.1735	0.1083	1.2409	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6853
Total	**0.2010**	**1.0100**	**1.4094**	**6.4600e-003**	**0.5111**	**4.9200e-003**	**0.5160**	**0.1370**	**4.5800e-003**	**0.1416**		**661.6088**	**661.6088**	**0.0271**		**662.2052**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1795	0.1068	1.2489	4.0100e-003	0.4471	3.2000e-003	0.4501	0.1186	2.9400e-003	0.1215		399.4145	399.4145	0.0100		399.6653
Total	0.2070	1.0100	1.4874	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	49.0421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8034	0.4790	4.9100e-003	0.1299	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3985	524.3985	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		798.8292	798.8292	0.0201		799.3305
Total	0.4019	2.0219	2.9700	0.0129	1.0222	9.8300e-003	1.0321	0.2740	9.1800e-003	0.2832		1,323.217 7	1,323.217 7	0.0541		1,324.570 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	49.0421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8034	0.4790	4.9100e-003	0.1299	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3985	524.3985	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8800e-003	0.2420		798.8292	798.8292	0.0201		799.3305
Total	0.4019	2.0219	2.9698	0.0129	1.0222	9.8300e-003	1.0321	0.2740	9.1800e-003	0.2832		1,323.217 7	1,323.217 7	0.0541		1,324.570 4

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9200	0.9200		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	2.0936	0.9975	3.0912	0.3170	0.9200	1.2450		3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0494	1.4687	0.4506	6.8000e-003	0.1689	2.7300e-003	0.1717	0.0463	2.5600e-003	0.0489		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7202	0.8471	9.5100e-003	0.2560	3.2300e-003	0.2592	0.0737	3.0900e-003	0.0768		1,017.446 6	1,017.446 6	0.0580		1,018.920 9
Worker	0.4091	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8640
Total	0.5365	4.4337	4.2176	0.0260	1.5427	0.0138	1.5565	0.4164	0.0129	0.4293		2,725.643 2	2,725.643 2	0.1306		2,728.932 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6438	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4044	19.6438	0.0388	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4505	6.6800e-003	0.1589	2.7800e-003	0.1617	0.0463	2.6600e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0920	2.7262	0.8471	9.5100e-003	0.2590	3.2300e-003	0.2622	0.0737	3.0900e-003	0.0768		1,017.446 8	1,017.446 8	0.0599		1,018.940 9
Worker	0.4091	0.2448	2.8709	9.6400e-003	1.1179	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8618
Total	**0.5465**	**4.4397**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4164**	**0.0129**	**0.4293**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.953 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3681	0.4795	4.7600e-003	0.1260	1.5100e-003	0.1275	0.0359	1.5400e-003	0.0374		506.7233	506.7233	0.0295		509.4604
Worker	0.4808	0.2938	3.4559	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	0.5319	1.6538	3.8795	0.0163	1.4693	0.0110	1.4803	0.3926	0.0101	0.4027		1,662.279 0	1,662.279 0	0.0566		1,663.693 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.8595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.8595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3801	0.4295	3.7600e-003	0.1269	1.6100e-003	0.1286	0.0389	1.5400e-003	0.0404		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2936	3.4569	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,163.555 7	1,163.555 7	0.0271		1,164.233 2
Total	0.5319	1.6738	3.8795	0.0153	1.4683	0.0110	1.4793	0.3926	0.0101	0.4027		1,672.279 0	1,672.279 0	0.0566		1,673.693 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.0291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.0291		2,895.918 2

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6871	2.5078	0.0360	0.0841	0.0146	0.0986	0.0233	0.0139	0.0372		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.0200	1.6100e-003	0.0216	5.7400e-003	1.5400e-003	7.2800e-003		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.6079	0.0154	1.7584	0.0125	1.7709	0.4743	0.0115	0.4858		1,538.074 3	1,538.074 3	0.0361		1,538.977 6
Total	**0.9329**	**9.4389**	**7.5392**	**0.0562**	**1.8625**	**0.0286**	**1.8911**	**0.7534**	**0.0269**	**0.7804**		**5,956.065 8**	**5,956.065 8**	**0.3274**		**5,964.249 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3374	7.6871	2.8678	0.0350	0.8941	0.0146	0.9088	0.2423	0.0139	0.2562		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4236	4.7600e-003	0.1280	1.5100e-003	0.1295	0.0369	1.5400e-003	0.0384		509.7233	509.7233	0.0285		509.4604
Worker	0.6545	0.3317	4.8079	0.0164	1.7484	0.0125	1.7609	0.4743	0.0115	0.4858		1,536.074 3	1,536.074 3	0.0361		1,538.977 6
Total	0.9329	9.4389	7.5992	0.0562	2.8805	0.0206	2.8991	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0800	1.3705	0.0147	0.3640	4.6400e-003	0.3686	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0096		1,526.409 3
Worker	1.2272	0.7344	8.6396	0.0269	3.3533	0.0234	3.3767	0.8693	0.0215	0.8908		2,883.889 3	2,883.889 3	0.0679		2,885.583 0
Total	1.3502	4.8146	9.9105	0.0432	3.7173	0.0282	3.7455	0.9799	0.0261	1.0060		4,410.059 2	4,410.059 2	0.1562		4,413.964 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0803	1.2705	0.0143	0.3940	4.8400e-003	0.3989	0.1105	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0885		1,528.381 1
Worker	1.2272	0.7944	8.6396	0.0289	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		2,883.889 3	2,883.889 3	0.0579		2,885.333 0
Total	1.3502	4.8746	9.9101	0.0432	3.7473	0.0342	3.7775	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1463		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1284	4.0714	1.2342	0.0142	0.3940	4.7700e-003	0.3988	0.1106	1.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0970		1,523.154 1
Worker	1.1849	0.8650	8.0553	0.0280	3.3533	0.0238	3.3763	0.8893	0.0212	0.9105		2,788.867 6	2,788.867 6	0.0520		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0422	3.7473	0.0278	3.7751	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1490		4,313.572 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.2342	0.0142	0.3840	4.7700e-003	0.3888	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0870		1,523.154 1
Worker	1.1849	0.6990	8.0583	0.0280	2.3533	0.0230	2.3763	0.6895	0.0212	0.7106		2,788.867 8	2,788.867 8	0.0620		2,790.416 3
Total	1.2053	4.7703	9.2925	0.0422	2.7373	0.0278	2.7651	0.8000	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1490		4,313.572 4

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	4.7400e-003	0.1200	1.5800e-003	0.1295	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0280		507.7180
Worker	0.3108	0.1784	2.1491	7.4600e-003	0.8842	6.1500e-003	0.9004	0.2372	5.6600e-003	0.2429		743.6880	743.6880	0.0165		744.1115
Total	**0.3508**	**1.5355**	**2.5605**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.681 1**	**1,250.681 1**	**0.0445**		**1,251.829 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6256	0.0226		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.398 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6256**	**0.0226**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.398 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	4.7400e-003	0.1260	1.5900e-003	0.1276	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0250		507.7180
Worker	0.3106	0.1784	2.1481	7.4600e-003	0.8942	6.1800e-003	0.9004	0.2372	5.6800e-003	0.2428		743.6980	743.6980	0.0195		744.1135
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.691 1**	**1,250.691 1**	**0.0455**		**1,251.829 6**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.0101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

2-14 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.0052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

2-14 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.0052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7865	41.3513	0.1665	15.5725	0.1253	15.6978	4.1648	0.1163	4.2811		17,222.03 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7865	41.3513	0.1665	15.5726	0.1253	15.6979	4.1650	0.1163	4.2813		17,222.03 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,736	6,508,736

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	96	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

2-14 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0890	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.7404	1,303.7404	0.0250	0.0239	1,311.4879
NaturalGas Unmitigated	0.1195	1.0890	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.7404	1,303.7404	0.0250	0.0239	1,311.4879

2-14 Cont.

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4863
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	3807.76	0.0305	0.2753	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3246	330.3246	6.3300e-003	6.0600e-003	332.2877
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7049	4.7049	9.0000e-005	9.0000e-005	4.7329
Total		0.1195	1.0890	0.5574	6.5100e-003		0.0826	0.0826		0.0826	0.0826		1,303.7404	1,303.7404	0.0250	0.0239	1,311.4879

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

6.0 Area Detail

6.1 Mitigation Measures Area

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0920	5,080.842 9
Unmitigated	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0920	5,080.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.623 5	5,018.623 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7805	1.1500e-003		0.1205	0.1205		0.1205	0.1205		31.2480	31.2480	0.0379		31.1950
Total	**8.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,050.071 6**	**5,050.071 6**	**0.1341**	**0.0920**	**5,080.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	0.3314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,019.823 5	5,019.823 5	0.0962	0.0920	5,049.647 9
Landscaping	0.6505	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2400	39.2400	0.0079		40.1950
Total	8.5499	4.1919	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1041	0.0920	5,089.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

2-14 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

2-14 Cont.

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

```
Anemometer Height:   10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type:    Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON



AERSCREEN output file:

2021.04.05_PacificCoastCommons_Operation.out



*** AERSCREEN Run is Ready to Begin



No terrain used, AERMAP will not be run

**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

2-14 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

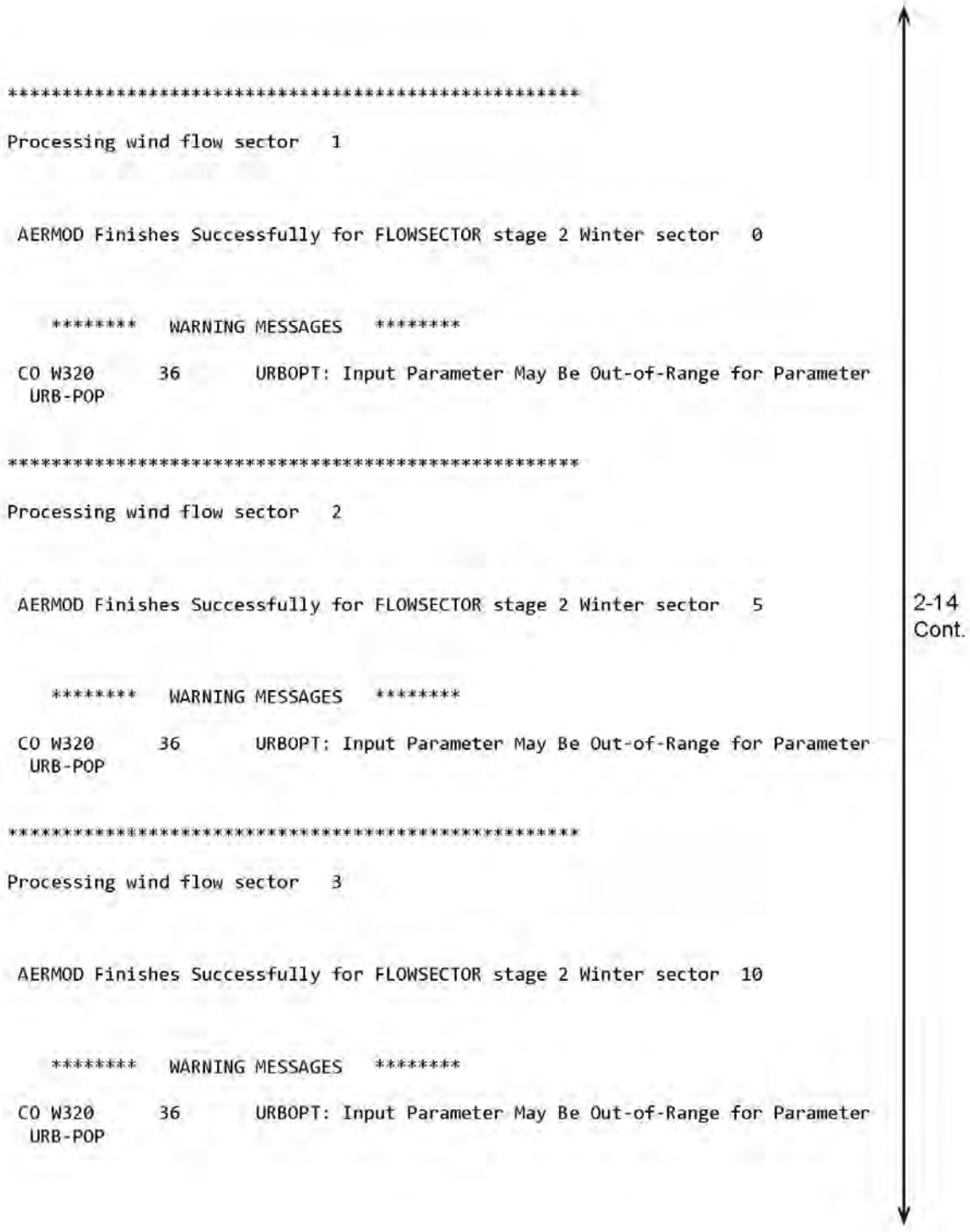
Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1
```

2-14 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

2-14 Cont.

```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
**************************************************
```

2-14 Cont.

```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

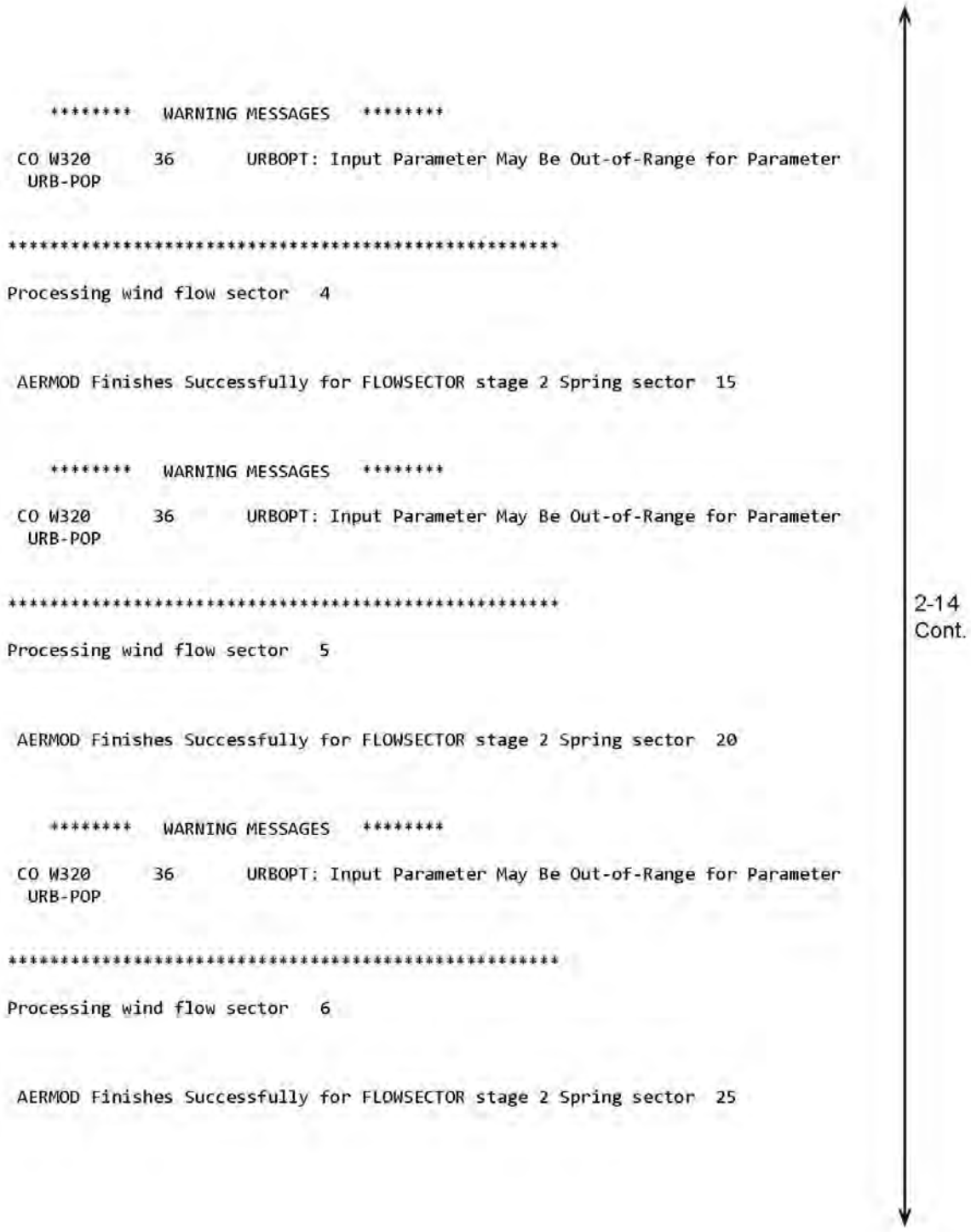
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

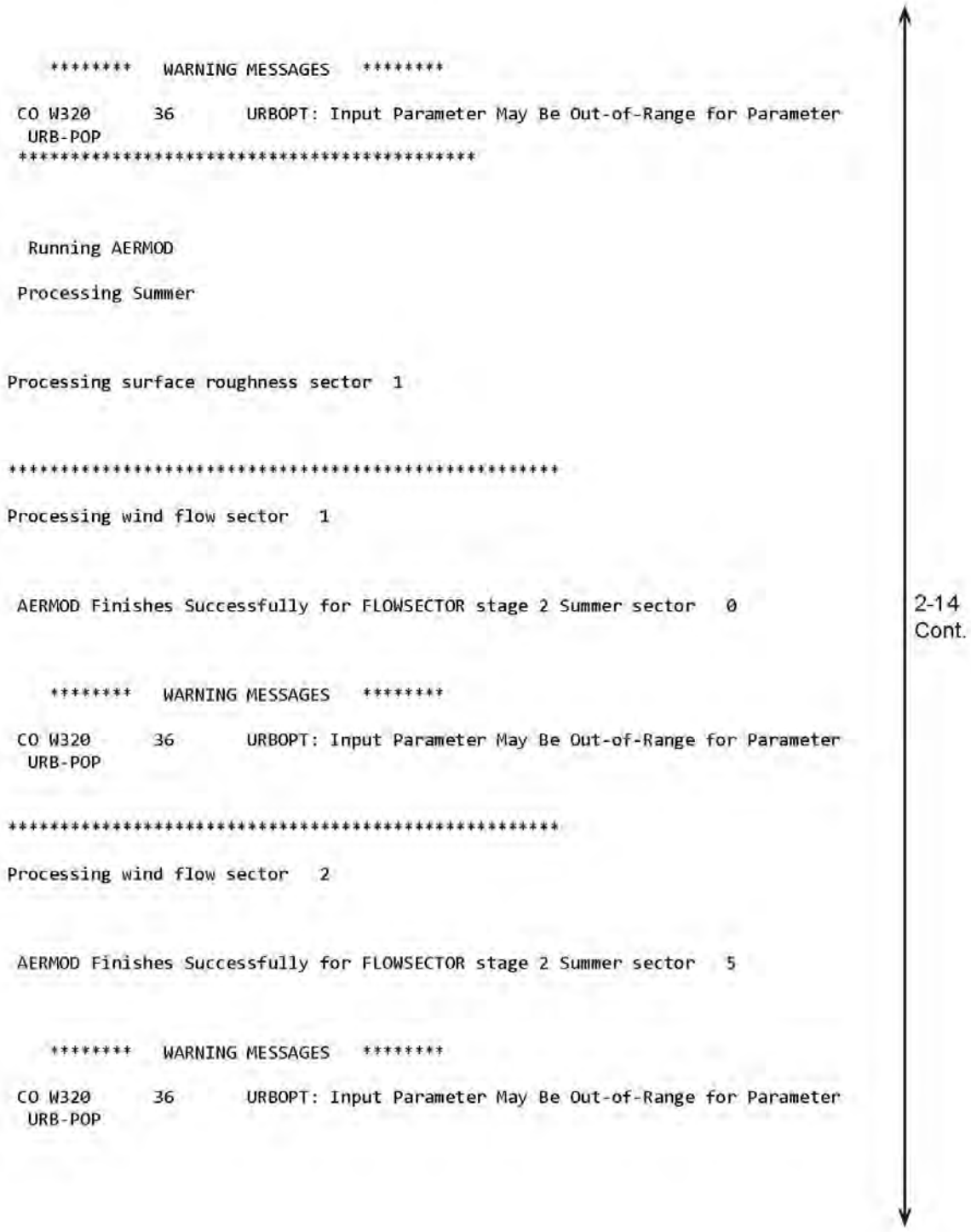
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

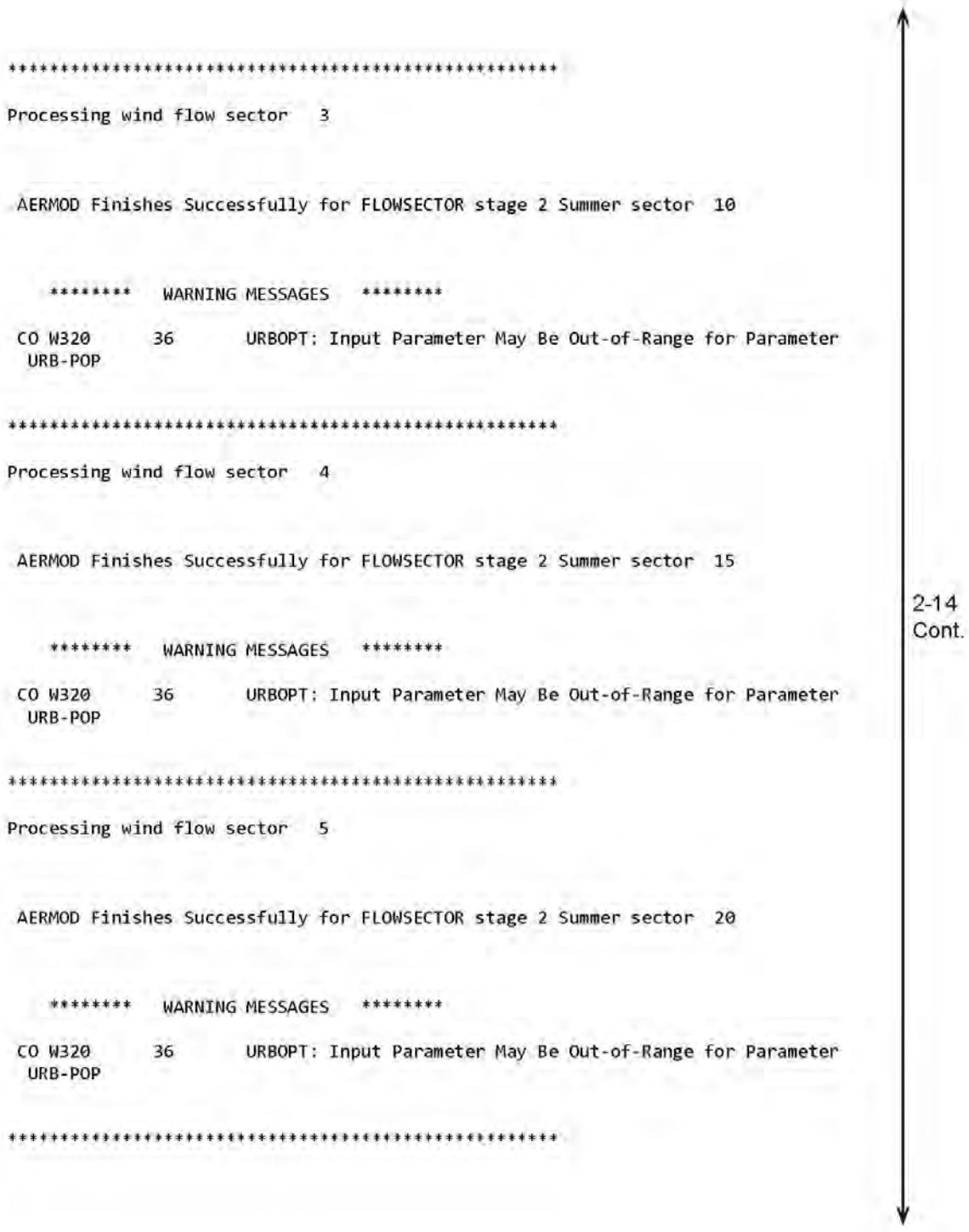
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

2-14 Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

2-14
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

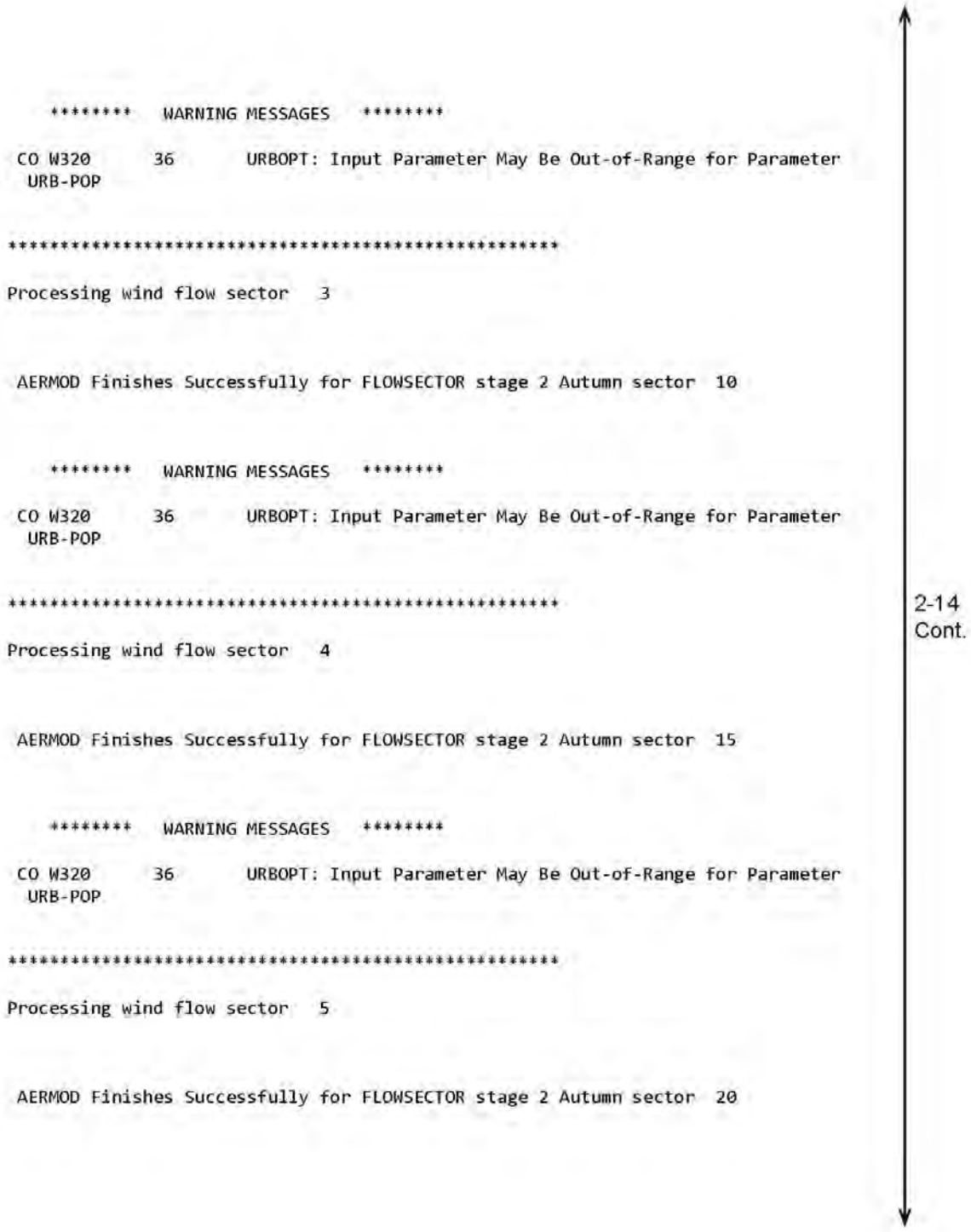
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

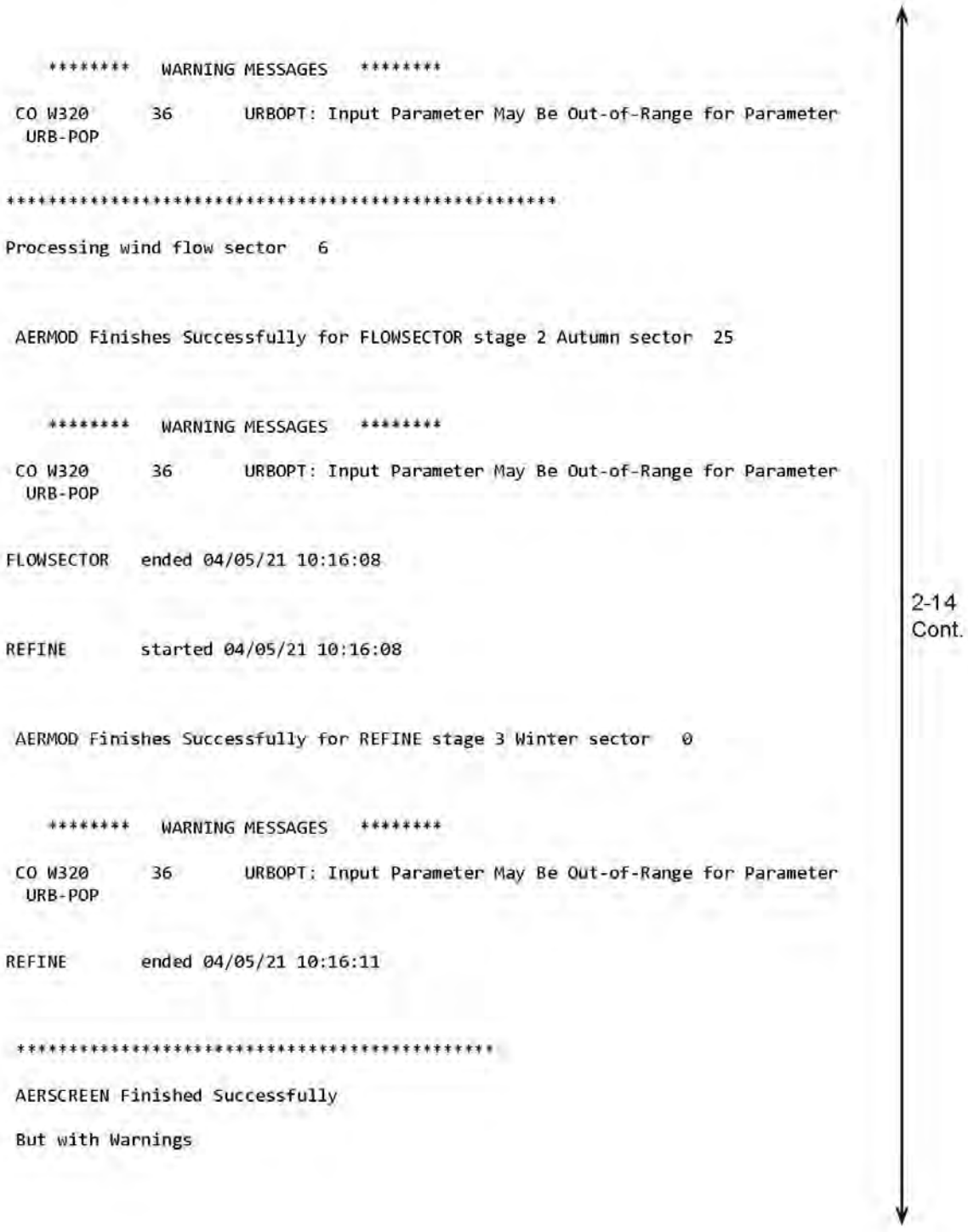
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

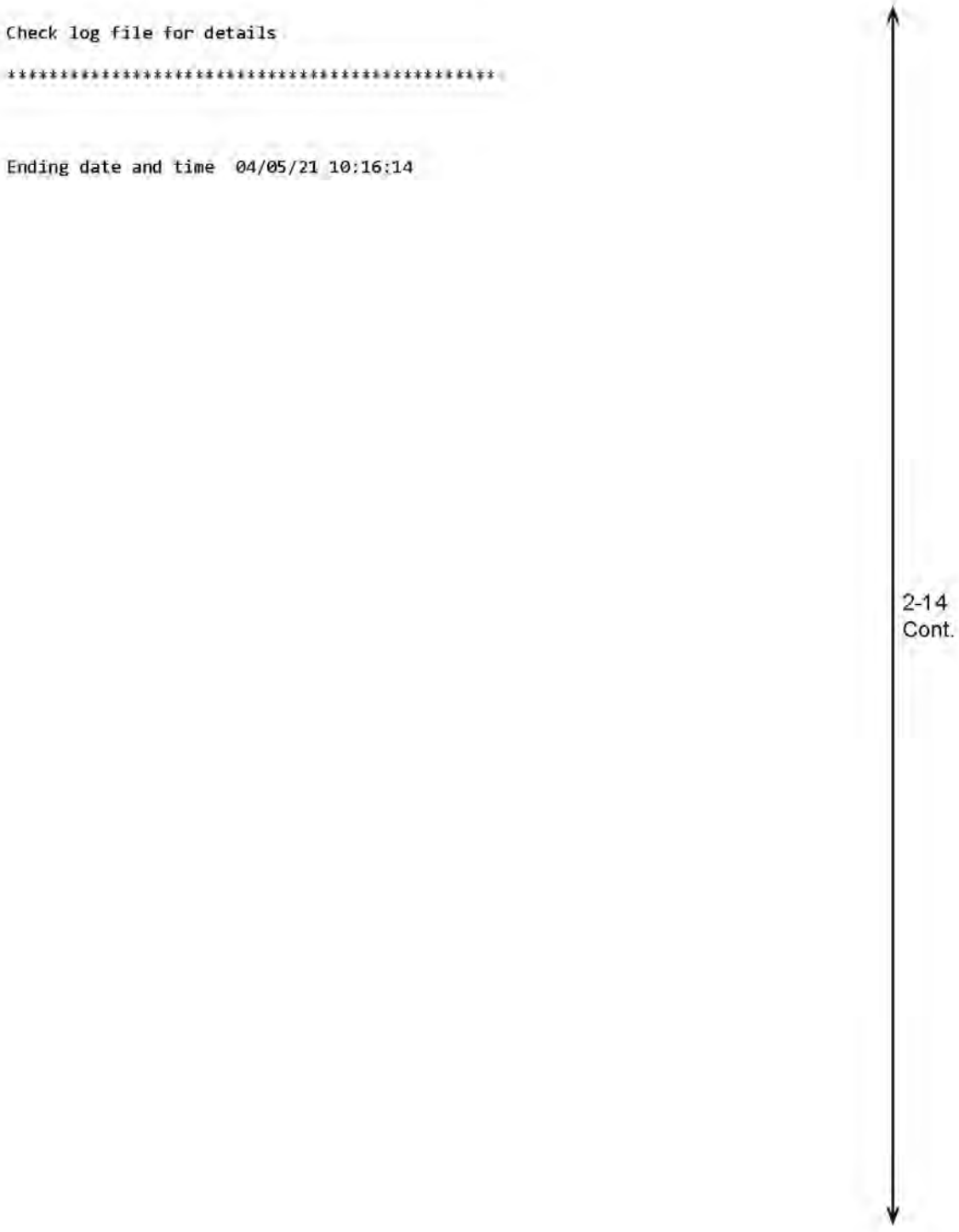
REFINE       ended 04/05/21 10:16:11


 ***********************************************

 AERSCREEN Finished Successfully

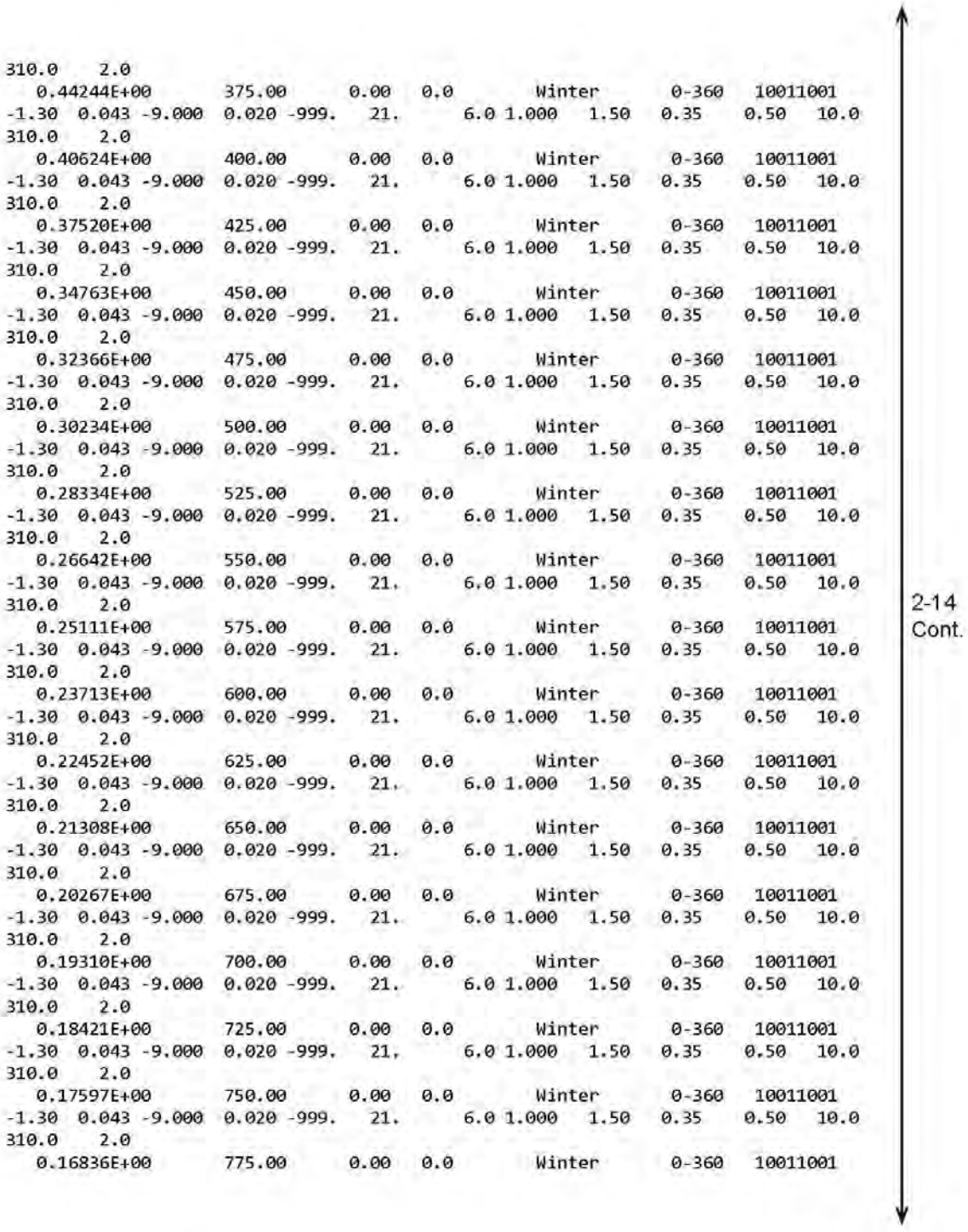
 But with Warnings
```

2-14
Cont.


Check log file for details
****
Ending date and time 04/05/21 10:16:14
2-14
Cont.

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.



```
310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
```

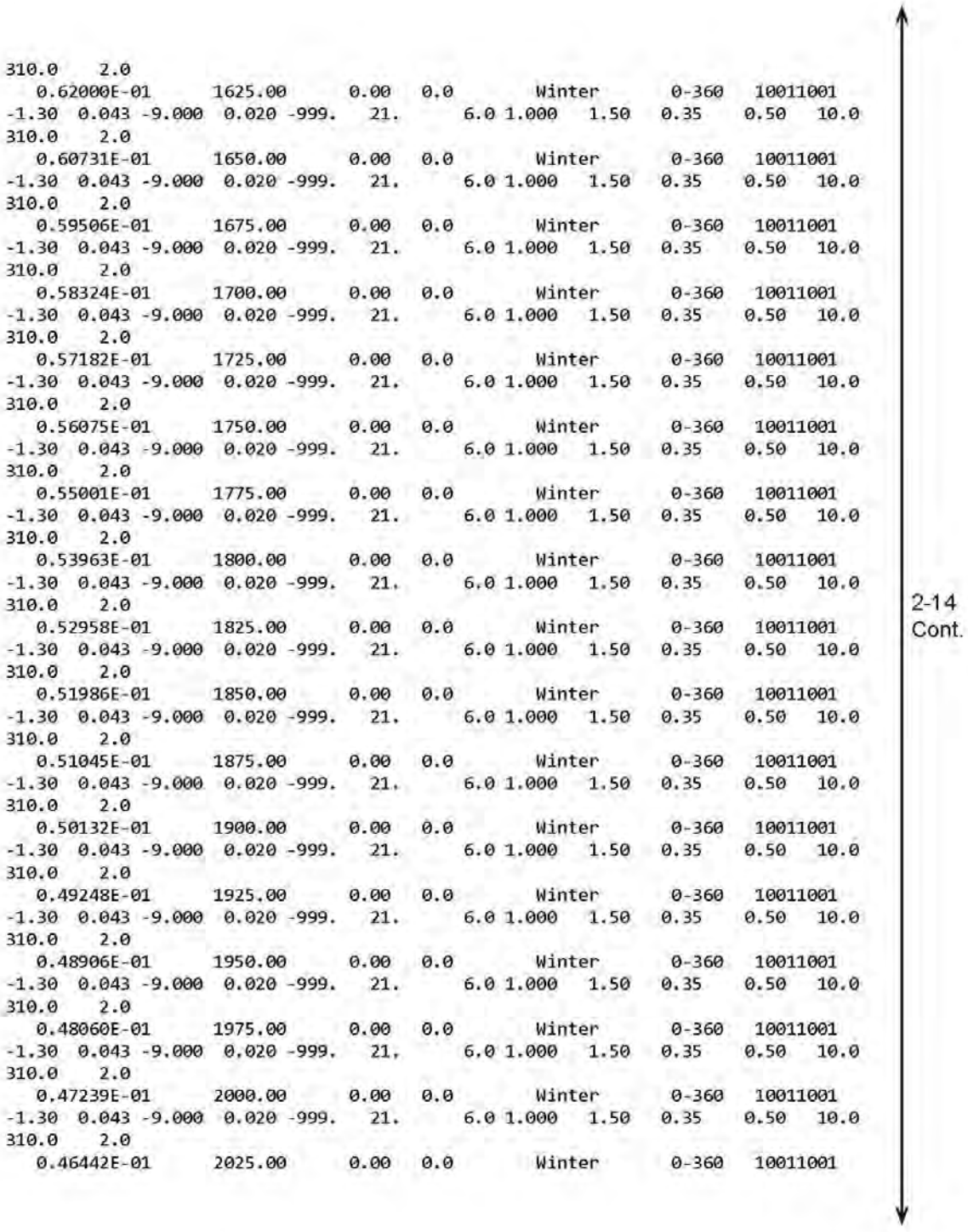
2-14
Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

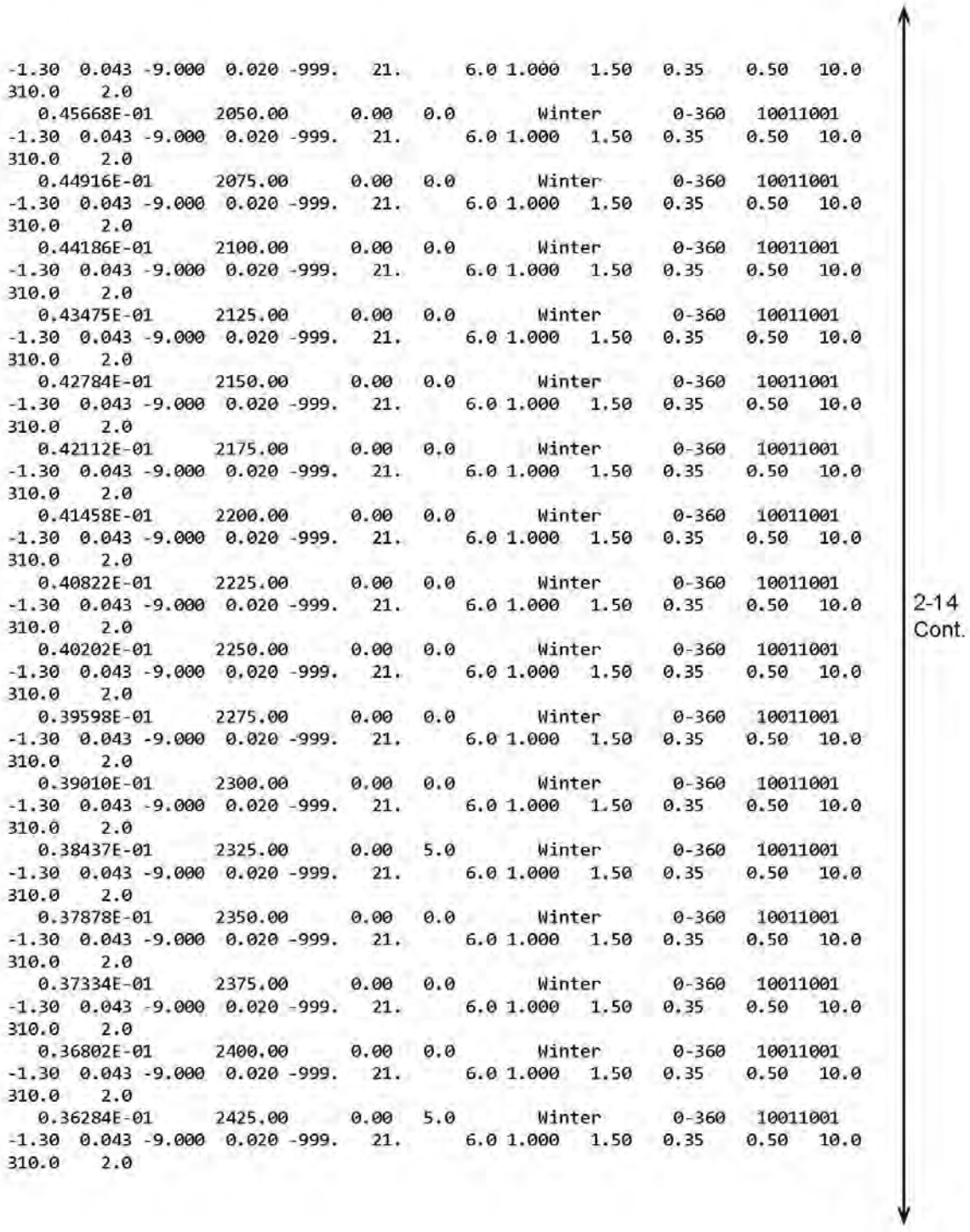
```
   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.



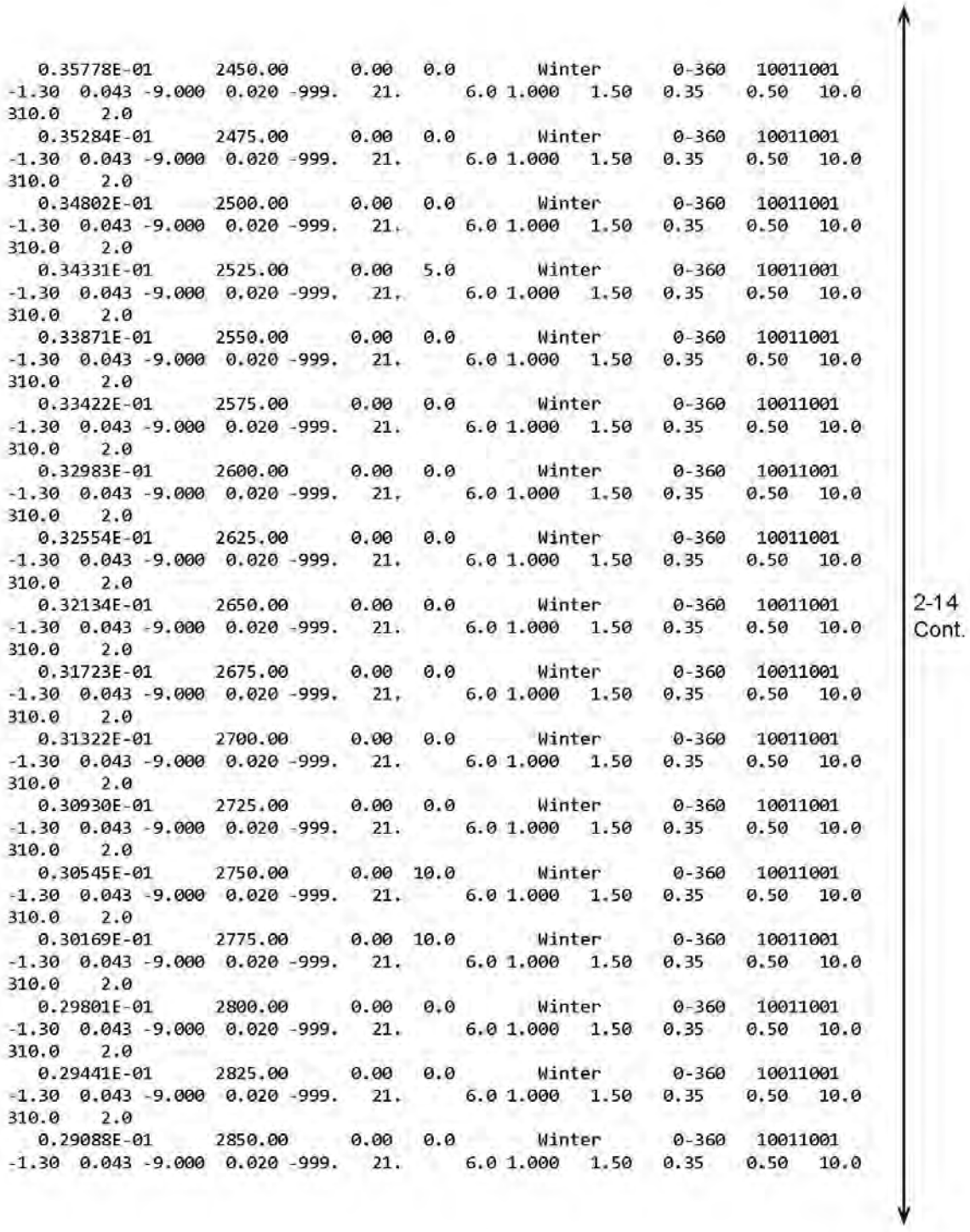
```
310.0    2.0
   0.62000E-01      1625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46442E-01      2025.00      0.00   0.0        Winter       0-360   10011001
```

2-14 Cont.



```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45668E-01      2050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

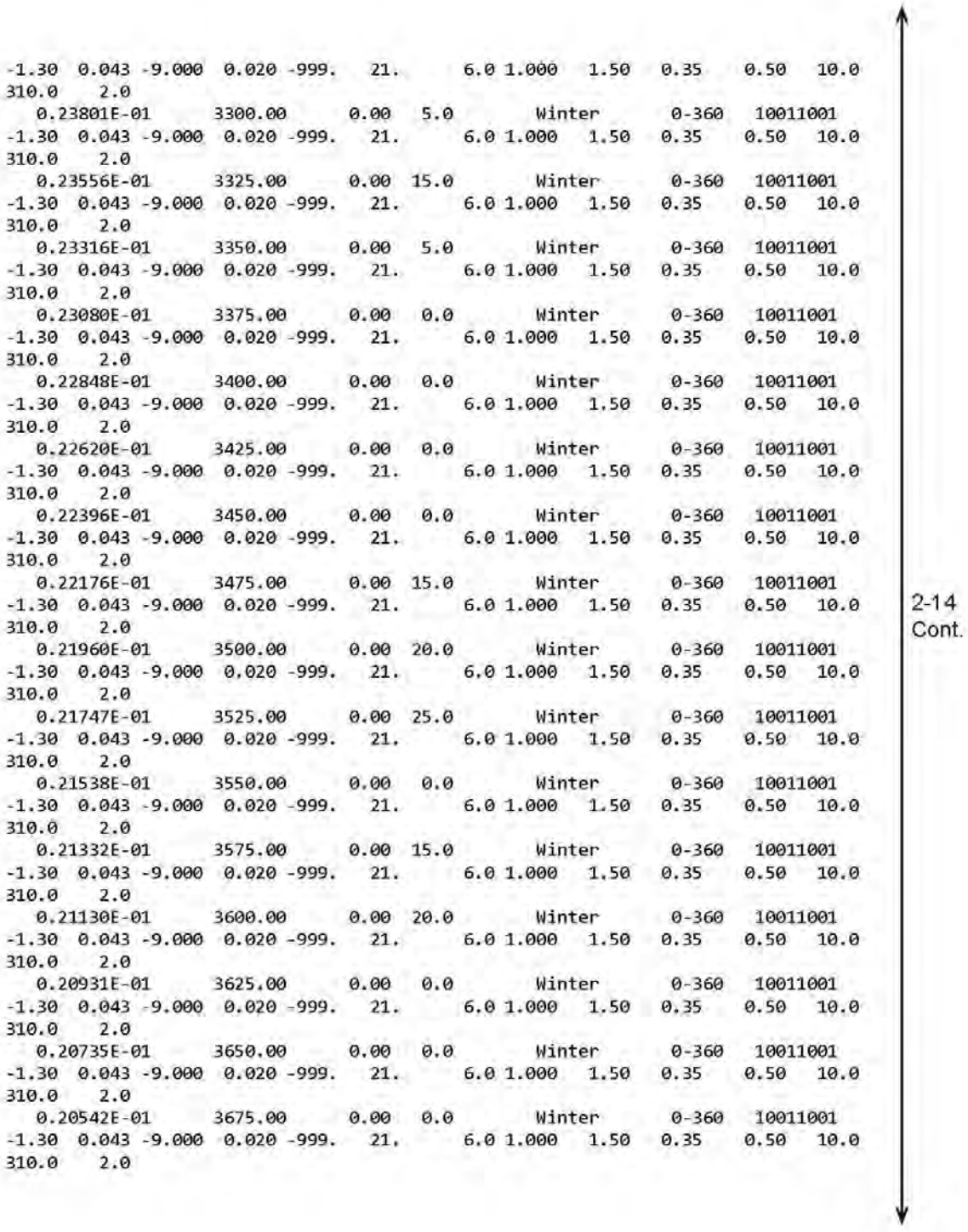


```
   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.

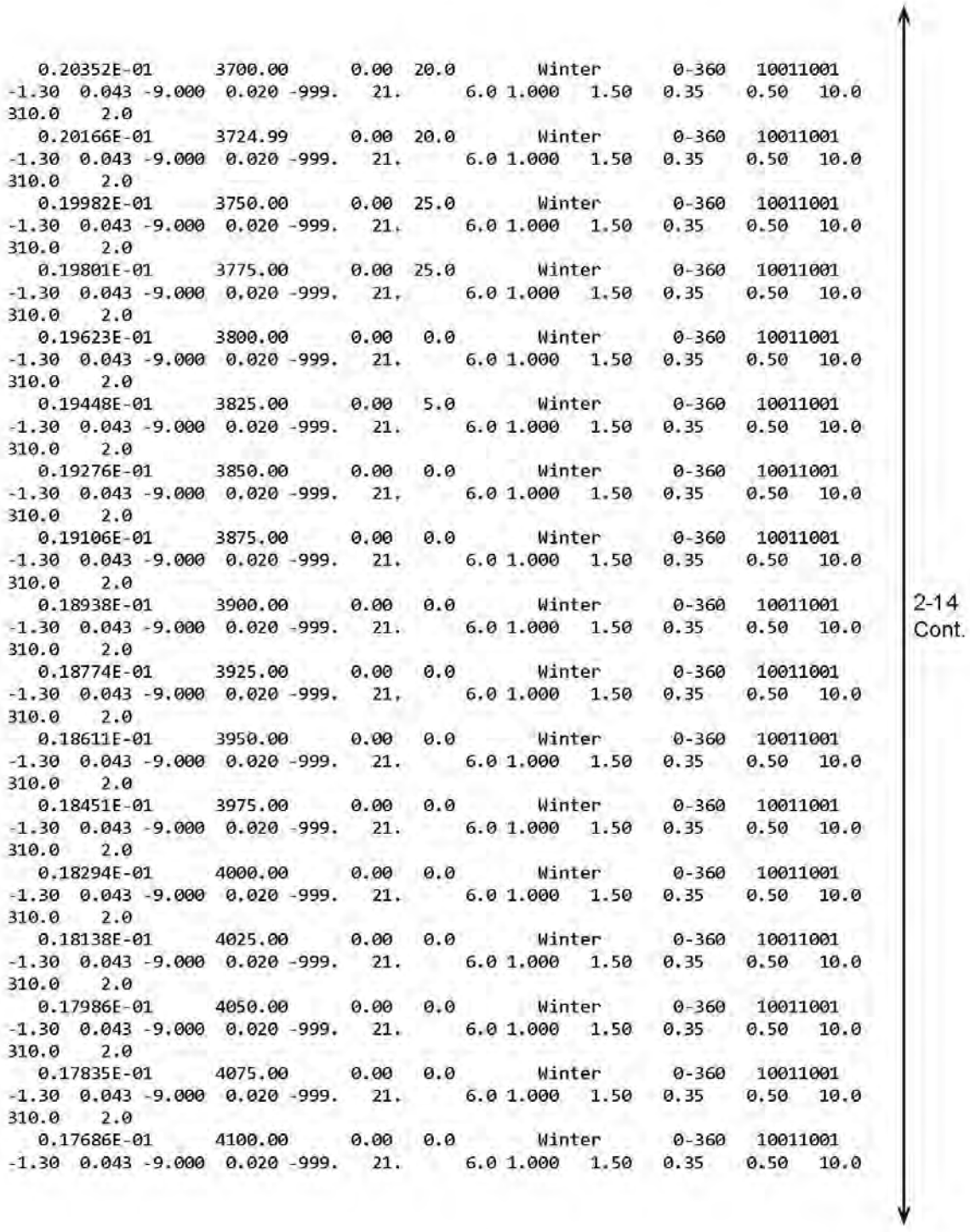
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310.0    2.0
   0.28742E-01      2875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter      0-360   10011001
```

2-14 Cont.



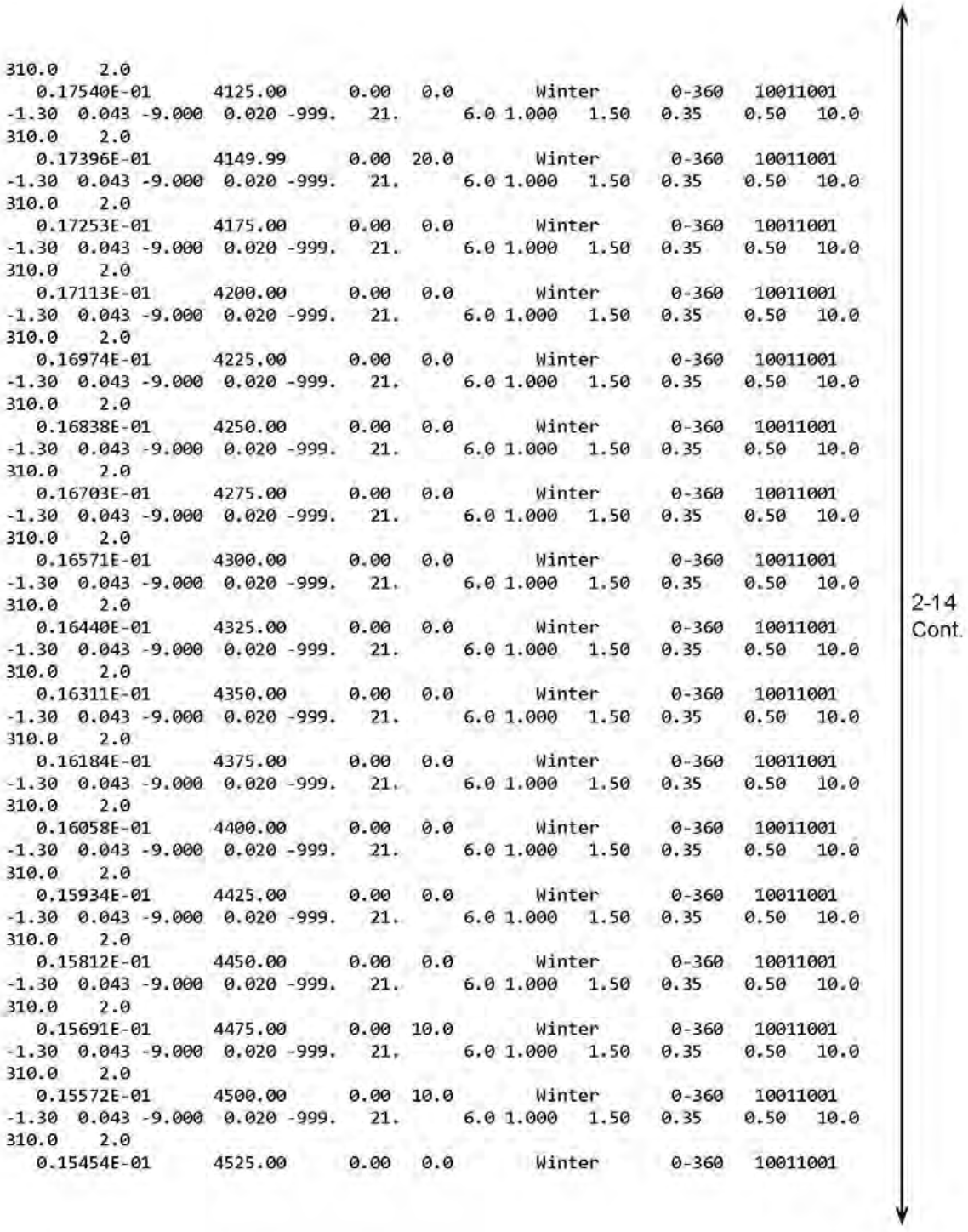
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14
Cont.



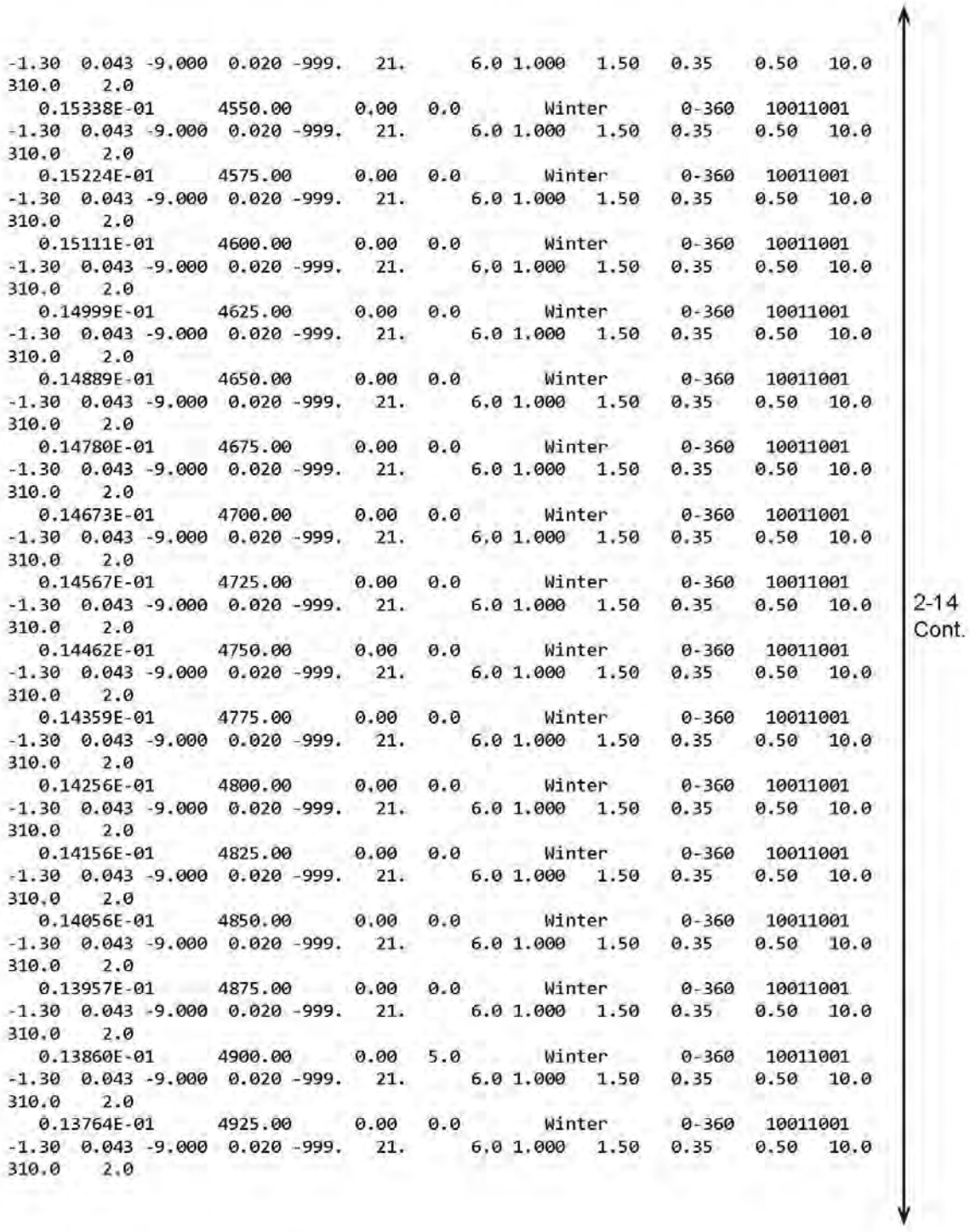
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   0.20352E-01      3700.00      0.00  20.0        Winter       0-360   10011001
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310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.17540E-01      4125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter       0-360   10011001
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2-14 Cont.



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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

Attachment E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

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Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

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Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

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Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

2-15 Cont.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost. *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

2-15 Cont.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association, Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

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Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

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In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Mentor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

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Attachment F

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:
California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:
Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

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- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

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- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

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public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

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principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

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Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

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Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

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Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

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Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

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Response to Comment Letter 2

Supporters Alliance for Environmental Responsibility
("SAFER", via Lozeau Drury LLP)
December 9, 2021

2-1 In summary, this comment includes an introductory statement for the comment letter and asserts the Final EIR does not adequately inform about or analyze environmental impacts, and does not impose feasible mitigation measures to reduce impacts. Additionally, the comment notes further comments within Comment Letter 2 were prepared with the assistance of Francis "Bud" Offermann, P.E., CIH (included as Comments 2-9 and 2-10). Please see Response to Comments 2-9 and 2-10 for more discussion. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-2 In summary, this comment correctly summarizes the Project Description for the proposed Project. However, the comment states the site is bound by Los Angeles International Airport (LAX) to the north. For informational purposes, LAX is not located immediately adjacent to the Project site, but instead 0.5-mile to the north. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-3 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations. The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-4 In summary, this comment states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, the commenter speculates on indoor air quality associated with finishes used on building material and furniture. Indoor air quality does not rise to the level of substantial evidence because it is generalized and does not address the specific impacts of this Project. Building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins, and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor PM2.5 concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and PM2.5 emissions. The commenter is speculating in the assertion that composite wood materials would be used in the interior of the building. Indoor building materials will not be known until the building permit stage, and as stated above, these materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

2-5 In summary, this comment states that the SWRCC included a memorandum which concluded that there is Substantial Evidence that the Project will have significant adverse air quality, health risk, and GHG impacts.

The SWRCC letter has been responded to in full in Response to Comment Letter 1 (see Responses to Comments 1-1 through 1-53) in this document. As discussed in these responses, all comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-6 The commenter states that there is substantial evidence that the Project may have a significant health impact as a result of DPM.

The SWRCC letter included similar assertions regarding DPM-related health risk. See Comment Letter 1 (Response to Comment 1-42) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-7 The commenter states that they believe that the impact conclusions contained in the Draft EIR are inadequate. Specifically, the commenter states that the Project would result in significant impacts based on 1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air

model; 2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; 3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; 4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; and; 5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-43) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-8 This comment notes the aforementioned comments (included as Comments 2-4 through 2-7) as reasons why the EIR is inadequate. Additionally, the comment expresses opposition to the proposed Project. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

2-9 The commenter states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Please see Response to Comment 2-4.

2-10 This comment includes the curriculum vitae of Francis "Bud" J. Offermann II, P.E., CIH. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-11 In summary, the comment states that the Draft EIR did not support its findings with substantial evidence.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-8 through 1-25). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-12 The commenter provides technical modeling to discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project is anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[3] On-site sources of GHG emissions include off-road equipment and off-

[3] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction

site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years, consistent with SCAQMD guidance which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

2-13 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-14 The commenter states that the input parameters of the air quality and GHG modeling are unsubstantiated.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-28 through 1-51). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-15 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Verbal Comment 1

Verbal Comment 1

Nino Mascolo
Property Owner
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Water supply

The environmental impact report addresses and describes the capacity to provide water adequately however, does not address the topic of water quantity and water supply. There is a "will serve" letter from the utility, but that's all. There is analysis of the water supply. We have been in a drought for the last two years and the state is considering fines for those users not reducing their water consumption.

The environmental impact report did not address the drought. It did not address whether there will be incremental use increase or to what extent the project will use more water compared to the current water use under baseline conditions. Given the need to decrease water consumption statewide, that is a critical issue. This project increases water consumption, so the burden should fall on the developer not on the community to obtain additional water.

1-1

Parking

The environmental impact report appendices state that there will be a before and after parking study which is a good idea. But any impacts that occur because of the development impose a burden on the property owners, their guests, and the public to figure out what to do. The environmental impact report does not require the project developer to address any of those parking impacts. There is a suggestion that a parking permit program be implemented, but I don't know how practical it will be. I propose that the project's residents and employees be the ones required to obtain parking passes. They should be the ones ticketed for parking next to Washington Park, which is a popular destination, and not the existing residents in the neighborhood. It's not fair for property owners and their guests to be burdened. The staff report states that the project will have to meet less strict parking requirements. The project residents and users will not park in a parking structure (within the project area) that is far from their units. Instead, they will choose to park on the street which is more convenient.

1-2

Traffic

EIR Section 4.1 3.4 talks about intersections. It states that five intersections will remain at level E or worse with the project. The project should be mitigating those impacts. We should be asking the developer to make things a little better and not impose worse conditions on the neighbors. Appendix J says there will be 2,500 additional daily trips caused by the project but parking is not being addressed.

1-3

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Response to Verbal Comment 1

Nino Mascolo
Individual
December 9, 2021

1-1 In summary, this comment states the Draft EIR does not adequately address water quality and water supply under drought conditions. Additionally, the comment expresses concern with the Project's water consumption.

The commenter was not specific in their concerns related to water quality. Please see Draft EIR Section 4.8, Hydrology and Water Quality, for discussion related to existing regulations and Project-specific analysis related to water quality standards.

In summary, this comment states the Draft EIR does not analyze Project impacts to water supply. As mentioned by the commenter, a Water Supply Will Serve Letter (included as Appendix G-2 of the Draft EIR) was referenced in the Draft EIR's analysis. Appendix G-2 was prepared by the City's Water Department to support the analysis contained within Section 4.15, Utilities and Service Systems, of the Draft EIR and represents assurance for the Project's anticipated water demands by providing and requiring potable water connections. In return, the City will charge the Project Applicant various fees for providing potable water and wastewater services to serve the proposed Project (Draft EIR page 4.15-21). Additionally, the Draft EIR summarizes applicable components and cites the City's Urban Water Management Plan (UWMP), which provides scenarios for anticipated water supply and demand, including availability to serve during normal, dry, and multiple dry years. As detailed further in Section 4.15, it was determined that the City would be able to meet the demand proposed by the Project and result in less than significant impacts (Draft EIR pages 4.15-19 through 4.15-22). No change or addition to the EIR's environmental analyses are required.

1-2 In summary, this comment states comments related to parking. The comment expresses support for Appendix J-2 of the Draft EIR's conclusion suggesting the following:

> "A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street." (Appendix J-2 page 14)

Moreover, the comment correctly states impacts to parking are not within the scope of the environmental analysis as required by CEQA. Nevertheless, this suggestion to provide parking permits for residents and employees will be provided to City decision makers for their review and consideration.

Additionally, the commenter suggests the Project's future residents and users would not park in the proposed parking structure, stating the structure is too far from the proposed units. For clarification, each area within the Project site would provide parking spaces as shown in Table 3-2, Conceptual Site Plan and Specific Plan Buildout Summary, within Chapter 3, Project Description, of the Draft EIR. No change or addition to the EIR's environmental analyses are required.

1-3 This comment notes discussion within the Section 4.13, Transportation, of the Draft EIR which states five study intersections are projected to operate at a level of service (LOS) E or worse during AM or PM peak periods under Future Plus Project conditions (Draft EIR pages 4.13-19 and 4.13-20). Moreover, the comment suggests mitigation should be incorporated to reduce impacts.

As discussed in Draft EIR Section 4.13, Project improvements are planned for the eastbound lane of Mariposa Avenue at PCH (see Development Standard C.1 of the Specific Plan), which would be reconfigured as a part of the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane. This infrastructure improvement has been taken into account for the plus-Project scenarios of the environmental analysis. The plus-Project scenarios of the impact analysis have also been analyzed without the Project improvement to show its potential benefit when compared to the baseline conditions (Draft EIR page 4.13-15). The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1 of the Draft EIR) (Draft EIR page 4.13-19).

However, the commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines. No change or addition to the EIR's environmental analyses are required.

Verbal Comment 2

Verbal Comment 2

Byron Washum
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I intend to provide written comments addressing parking and traffic impacts as well as the transformative change resulting from the project 2-1

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Response to Verbal Comment 2

Byron Washum
Individual
December 9, 2021

2-1 In summary, this comment states an intention to provide written comments addressing parking and traffic impacts as well as "transformative changes" resulting from the Project. Without specific comments related to the adequacy of the Draft EIR, no response is required.

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Verbal Comment 3

Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

> I am here on behalf of the Southwest Regional Carpenters union. We recommend hiring our members who live in the area to work on this and other projects, which helps to reduce impacts such as greenhouse gases. Our union helps provide a careers, training, a living wage and other benefits to local residents. 3-1

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Response to Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

3-1 The commenter notes his representation with the Southwest Regional Carpenters union, and states hiring local members to work on the proposed Project would help reduce impacts to greenhouse gas emissions. The comment further details example benefits of the union. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Nevertheless, the comment will be provided to City decision makers for their review and consideration.

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Verbal Comment 4

Verbal Comment 4

Paul Morrison
421 Indiana Street
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live across from the proposed parking structure. 4-1

Displacement of residents

Table ES 1 in the environmental impact report which contains a summary of impacts states that the project will not displace a substantial number of people.

Noise and vibration will cause displacement

I believe that the project will have a lot of construction impacts such as noise, vibration, and air quality impacts from the use of heavy machinery, such as pile drivers and beams. As a result I and other nearby residents may be displaced by the project. The City may benefit economically from the project. I am a retired resident of 24 years. My rents today is very low. If I am displaced by the construction, I will be effectively banished from El Segundo because I will not be able to afford rent in the area after I return post construction. 4-2

The developer and the City have a moral obligation to long-term residents like myself. The City should consider mitigation for residents like me with lower incomes. Maybe we can revisit this project every six months or every year so we can track the potential impact on residents like myself. 4-3

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Response to Verbal Comment 4

Paul Morrison
Individual
December 9, 2021

4-1 This comment notes that he lives across for the proposed parking structure and expresses concerns with Project-related impacts, detailed below. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Please see Responses to Comments 4-2 through 4-3 for more discussion.

4-2 This comment raises concern for the displacement of residents due to construction-related impacts associated with noise, vibration, and air quality, which would displace nearby residents. The Draft EIR analyzed impacts related to noise and vibration as well as air quality within Sections 4.10, Noise and 4.2, Air Quality, respectively. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and air quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of the assumptions underlying the Air Quality Management Plan. However, construction-related impacts associated with these environmental topic areas are not applicable to Threshold 4.11(b) regarding displacement of "substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere." Displacement refers to the physical displacement of people or housing. As described in Draft EIR Section 4.11, Population and Housing, no housing uses are located on the Project site and Project implementation would not require demolition of existing housing or displace people or housing. Construction-related impacts associated with the Project would not physically displace residents surrounding the Project site. No change or addition to the environmental analysis found within the Draft EIR is required.

4-3 In summary, this comment states the Project Applicant and the City should consider mitigation for residents with lower incomes. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Furthermore, impacts to rents, for example, are outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment."

In conclusion, the comment suggests periodic evaluation of the potential impacts as a result of the proposed Project. In accordance with CEQA Guidelines Section 15097, to ensure that the mitigation measures identified in the EIR are implemented, the City must adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant environmental effects. The "mitigation monitoring and reporting program" is monitored by the City to ensure that all mitigation measures have been implemented to the satisfaction of the City. Additionally, the comment regarding periodic evaluation will be provided to City decision makers for their review and consideration.

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Verbal Comment 5

Verbal Comment 5

Amalia Fuentes
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Indoor air quality

Referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations. 5-1

Diesel emissions

In addition to interior air quality impacts, the project will have diesel particulate matter impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold. 5-2

Greenhouse emissions

In addition, the environmental impact report has flaws in the calculations of greenhouse gas emissions from the project. 5-3

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Response to Verbal Comment 5

Amalia Fuentes
Supporters Alliance for Environmental Responsibility ("SAFER")
Individual
December 9, 2021

5-1 The commenter referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor $PM_{2.5}$ concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and $PM_{2.5}$ emissions. Furthermore, building materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

5-2 The commenter states the Project will have DPM impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold.

Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors, which represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis assumes a construction start date of October 2021, which represented the earliest date of construction when air quality and GHG assessments were initiated.[4] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024). Please refer to the US EPA's Nonroad Compression-Ignition Engines: Exhaust Emission Standards for details (available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1000A05.pdf).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the

[4] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

5-3 The commenter states that the Draft EIR has flaws in the calculations of GHG from the Project.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-29) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

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Verbal Comment 6

Verbal Comment 6

Maria Barron
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live at 1628 E. Palm Ave. 6-1

Noise, pollution and parking

I concur with all the concerns that were mentioned by the previous speakers. I am concerned about noise, pollution, and parking. 6-2

Parking permits.

However, I disagree with the suggestion that the project residents should get the parking permits. Instead I think it will be best for existing residents in the area to have parking permits so they can park on the street. 6-3

Noise and pollution from the project will be unbearable for nearby residents. 6-4

The City previously had a program to provide double-paned windows to residents and my residence qualified for this program. However, the program ran out of funds. So, we won't be getting them. I recommend that the city revisit the program to provide a double-paned windows for residents. 6-5

I believe the project proposes too many apartment units and the proposed buildings and parking structures are too tall. 6-6

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Response to Verbal Comment 6

Maria Barron
Individual
December 9, 2021

6-1 This comment provided the resident's address, which is within the vicinity of the Project site. However, this comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required.

6-2 The comment expresses similar concerns as mentioned by other speakers related to noise, pollution, and parking. The comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. For informational purposes, the Sections 4.10 (Noise), 4.2 (Air Quality), 4.8 (Hydrology and Water Quality), and 4.13 (Transportation) address the aforementioned areas of concern. No further response is required.

6-3 This comment disagrees with the suggestion made by Nino Mascolo (see Response to Comment 1-2) regarding parking permits for Project residents. Instead, this comment suggests parking permits should be given to existing residents surrounding the Project site to allow for parking on the street. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-4 In summary, this comment states Project-related impacts associated with noise and pollution will be "unbearable" for nearby residents. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. As mentioned above, Sections 4.10 (Noise), 4.2 (Air Quality), and 4.8 (Hydrology and Water Quality) address the aforementioned environmental topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise, air quality, and hydrology and water quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of assumptions used for the SCAQMD's Air Quality Management Plan. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-5 This comment notes a City program that provided double-paned windows to residents. However, the comment states the program ended and asks for the program to be restored. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-6 In summary, this comment states opposition to the Project's proposed residential unit count and proposed height. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

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Verbal Comment 7

Verbal Comment 7

Matthew Klemp
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Corner of Washington Street and Elm Avenue.

I previously submitted two letters commenting on the environmental impact report but I have not received a response other than that they will be included in the record. 7-1

My concerns related to noise, parking, and traffic.

The Environmental impact report makes some questionable key assumptions. A lot hinges on a lot of people walking to the downtown, or walking to mass transit, or taking mass transit. But that has not been the case here in El Segundo or in the Los Angeles area. It would be great if we had mass transit available, but it is not here. 7-2

Reduced parking requirements

In addition, a lot hinges on the assumption that two people living in one unit will use only a single car. That does not meet El Segundo's current parking standards. In addition, no one really walks from Pacific Coast Highway to downtown El Segundo. In addition, traffic on Mariposa Avenue is backed up especially when making a left turn onto Pacific Coast Highway. So, the additional traffic will make things worse on Mariposa Avenue. In addition, the environmental impact report excludes single-family homes from the sensitive receptors of unwanted noise. 7-3

High density and traffic/parking

The project brings high density residential to this neighborhood that already has a parking and traffic problem. Adding all those units in this small area will make park parking and traffic is much worse 7-4

Alternative sites.

Why can't we rezone somewhere else in the city to accommodate all these new residents. 95% of residents in the city live in approximately 25% of the city's area. South of Grand Avenue and east of Pacific Coast Highway would be appropriate places to rezone and would take away a lot of the objections to the project if those alternative site where evaluated and developed. 7-5

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Response to Verbal Comment 7

Matthew Klemp
Individual
December 9, 2021

7-1 In summary, this comment states he lives nearby the Project site. In addition, the commenter notes two previously submitted letters on the Draft EIR but states no response other than they would be included in the administrative record was made. Please see Response to Comment I-21 within Chapter 2, Responses to Comments, of the Final EIR for more discussion on previously submitted comments from "Matthew Klemp".

Additionally, the comment expresses concern related to noise, parking, and traffic. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. Sections 4.10 (Noise) and 4.13 (Transportation) address the aforementioned topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and transportation were reduced to be less than significant. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No further response is required.

7-2 In summary, this comment questions the Draft EIR's assumptions of walkability and transit of current and future residents and visitors of the city. The following response includes portions of Response to Comment Letter I-21 (included within Chapter 2, Responses to Comments, of the Final EIR):

The EIR evaluates the environmental impacts of the proposed Project based on the existing conditions of the Project site and area; applicable standards that are in place at the local, regional, state, and national levels; and, conservative assumptions based on default data from similar project types. While the availability of transit and the mixed-use nature of the Project and its surroundings may present a potential environmental benefit and are features discussed in the EIR, the environmental conclusions in the EIR do not hinge upon widespread use of alternative transport modes amongst the future residents, employees, guests, and visitors of the proposed Project. Rather, the analysis assumes that a majority of the future residents, employees, guests, and visitors would use single-occupancy vehicles.

Regarding the Project's proximity to downtown El Segundo, the distance is approximately 1.5 miles, which equates to an approximately 30-minute walk. While the potential for walking to downtown is mentioned in the EIR and is set forth as part of one of the Project objectives, the analysis in the EIR is not based on the potential for future Project residents to walk to downtown El Segundo. Rather, a conservative trip credit for alternative transport modes was taken for the purposes of the Project's vehicle trip calculations. The trip credit is minimal (5% of the Project's total vehicle trips) and is based on the mixed-use nature of the Project and Project area, combined with proximity to transit.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. However, U.S. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. As such, data collected in the Project area indicates that the assumptions in the EIR analysis for use of alternative transportation modes are conservative in nature and that the EIR assumes reduced use of alternative transportation modes relative to current rates of use in the surrounding community. While

the EIR describes the transit-oriented nature of the proposed Project and its proximity to existing businesses and services, the quantitative analyses (e.g., traffic generation, traffic-related noise generation) remain conservative with respect to vehicle use versus alternative transportation use. Furthermore, no additional walk/bike/transit trip generation credit was taken in the Draft EIR for the Project's proximity to Downtown El Segundo.

The comment also states that there is a lack of reliable transit in the Los Angeles area. However, the Metro C Line Mariposa Station is 0.51-mile from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 also run along Pacific Coast Highway with stops near the Project site. Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR). The distance between the Project site and the Mariposa Station equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours. Nevertheless, as described above, the trip credits taken in the EIR analysis for transit use are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Finally, the Project site is adjacent to a transit-priority area, which is an area delineated by SCAG to identify locations where transit use is practical and where transit-oriented development is encouraged. Plans and policies are in place at the local, regional, and state level to encourage increased use of alternative modes of transportation and to support mixed-used and higher density housing near transit. The proposed Project is supportive of these policies, as it would locate higher density housing and mixed-use development in proximity to transit. As these plans and policies are carried out, the use of alternative modes of transportation is also expected to increase over time, particularly in urbanized areas.

7-3 In summary, this comment questions the Draft EIR's assumptions of vehicles per unit for future residents of the proposed Project. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR. No change or addition is required of the Draft EIR's environmental analysis. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

Additionally, the comment asserts walkability assumptions within the Draft EIR. For more discussion on walkability, please see Response to Comment 7-2, above.

The comment also raises concerns for traffic congestion on Mariposa Avenue and Pacific Coast Highway. The commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic

congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines.

Finally, the comment asserts the Draft EIR excludes single-family homes as sensitive receptors to noise. This comment is similar to Comment I21-8 (included within Chapter 2, Responses to Comments, of the Final EIR). The comment incorrectly states that single-family homes were not included in the noise analysis for the Draft EIR. As noted in Section 4.10, Noise, of the Draft EIR:

> "Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary), those receptors would be less impacted by noise and vibration levels than the above-listed sensitive receptors" (Draft EIR pages 4.10-5 and 4.10-6).

Therefore, single-family homes were not excluded from the Draft EIR as noise-sensitive receptors; the nearest sensitive receptors are analyzed to provide the most conservative analysis. No change or addition is required of the Draft EIR's environmental analysis.

7-4 In summary, this comment states opposition to the Project's proposed density, trip generation, and parking. The comment asserts the proposed Project would exacerbate existing parking and traffic conditions. For discussion on the Project's impacts to parking and traffic, see Response to Comment 7-3, above. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

7-5 In summary, this comment states alternative sites should be considered for the proposed Project. This comment is similar to Comment I21-12 (included within Chapter 2, Responses to Comments, of the Final EIR). As such, following response includes portions of Response to Comment I21-12:

Alternatives to the proposed Project, including alternate locations, are evaluated in Chapter 6 of the Draft EIR. Alternate locations to the proposed Project site were ultimately rejected as infeasible. The reasons for this conclusion are summarized below, followed by a description as to why the commenter's specific suggestions for alternate locations are determined to be infeasible.

Infeasibility of Alternate Locations

1) Alternate locations would not avoid or reduce the Project's environmental impacts. As stated in Section 15126.6(f)(2)(A) of the CEQA Guidelines, the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that require mitigation. Rationale for this determination is provided in Section 6.4 of the Draft EIR.
2) No known sites are available within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative, as defined in the CEQA

Guidelines, is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The City evaluated the possibility for other sites, and this evaluation is summarized in Section 6.4 of the Draft EIR. The City determined that potential alternate locations were not suitable due to a variety of factors (land use designations, hazardous site conditions, and/or property ownership.)

Suggested Alternate Locations

The commenter's specific suggestions for alternate locations are addressed as follows:

- **East of Pacific Coast Highway or south of Grand Avenue.** The commenter suggests developing the proposed Project on the east side of Pacific Coast Highway and/or to the south of Grand Avenue. The commenter presents the option of rezoning a site on the east side of Pacific Coast Highway to accommodate mixed-use residential. As stated in Section 6.4 of the Draft EIR, development of the Project on another site along Pacific Coast Highway could provide a transition from the City's offices to the east and residential uses to the west, similar to the proposed Project site. However, other sites along Pacific Coast Highway were determined to be infeasible because no such sites are under control by the Project applicant, which is a factor for feasibility under CEQA. Additionally, other sites along Pacific Coast Highway may not be considered by the City to be appropriate for the increased height and density that is proposed for the Project. Furthermore, locating residential uses east of Pacific Coast Highway would place new residents farther away from services and amenities, such as parks, City Hall, the police station, and schools. This may result in increased vehicle trips within the City and/or increased development impacts, in the event that new public services and amenities need to be developed elsewhere in the City. Residents would also be required to cross Pacific Coast Highway to access public services, which could present increased traffic safety effects. The City did consider a parcel located near Pacific Coast Highway and Rosecrans Avenue, between The Point Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses. In general, the areas south of Grand Avenue are highly industrialized, and adding residences to this area would likely introduce an incompatible land use.

In conclusion, the City acknowledges the comment and it will be provided to City decision makers for their review and consideration.

3 Changes to the Draft EIR

3.1 Introduction

The comments received by Pacific Coast Commons Specific Plan during the public review period for the Draft EIR included information that has resulted in several minor revisions to the text of the Draft EIR. Additionally, typographical errors have been identified in the Draft EIR. These revisions are shown below and are categorized by section number and page number. Errors which require multiple revisions throughout the Draft EIR are categorized at the beginning of Section 3.2, Errata, below, with a summary of the change and subsequent section number and page number provided. Text from the Draft EIR that has been removed is shown in bold strikethrough (i.e., ~~**strikethrough**~~), and text that has been added as part of the Final EIR is shown as bold underlined (i.e., **underline**). Revisions are shown with surrounding sentences for context. These errata merely clarify and corrects minor facts and does not constitute "substantial revisions" requiring recirculation of the Draft EIR, as set forth in CEQA Guidelines, Section 15073.5.

3.2 Errata

California Building Code Reference

The following are typographical revisions where the year referenced for a citation of the California Building Code was erroneously recorded as "2016" rather than "2019".

Section 4.1, Aesthetics, Page 4.1-7

City of El Segundo Municipal Code

The California Building Code, ~~**2016**~~**2019** edition, published at Title 24, Part 2, of the California Code of Regulations, including Appendices F, H, and I, and is adopted by reference pursuant to Chapter 13-1-1 of the City of El Segundo Municipal Code (ESMC).

Section 4.5, Geology and Soils, Page 4.5-10

City of El Segundo Municipal Code

The California Building Code, ~~**2016**~~**2019** edition, published at CCR Title 24, Part 2, including Appendices F, H, and I, and is adopted by reference pursuant to Chapter 13-1-1 of the El Segundo Municipal Code (ESMC).

Pacific Coast Commons Design Package Reference

The following are typographical errors in the citation of the Pacific Coast Commons Design Package, which have been corrected throughout the EIR for consistency.

Chapter 2, Environmental Setting, Section 2.6, References, Page 2-9

Withee Malcom Architects. 2020. "Pacific Coast Commons Design Package." ~~September 17, 2020~~January 2021

Chapter 3, Project Description, Section 3.3.3, Conceptual Site Plan, Page 3-11

Source: ~~Withee Malcom Architects~~Pacific Coast Commons Specific Plan ~~2020~~2021; Appendix B

Street Name Clarification

The intersection noted for the Pacific Corporate Towers is improperly referenced as "Lincoln and Grand Avenues." Lincoln Avenue is not a street located in the City of El Segundo. As a result, the street cited as Lincoln Avenue has been revised to Pacific Coast Highway, as shown below.

Section 4.3, Cultural Resources, Section 4.3.1, Existing Conditions, Subsection Historic Period Overview, Historical Overview of El Segundo, Page 4.3-4

Beginning in the 1980s, commercial and office buildings began to appear along Sepulveda Boulevard, between Grand Avenue and El Segundo Boulevard. In 1980, a large business park on the northeast corner of Grand Avenue and Sepulveda Boulevard (Pacific Coast Highway) was established with three large, concrete and tinted-glass buildings. One of the most notable developments was the construction of the Pacific Corporate Towers at ~~Lincoln~~Pacific Coast Highway and Grand Avenue~~s~~, built in 1983. That same year, 144 additional commercial properties were built in El Segundo, totaling over 1 million square feet of commercial space. In 1990, toy company, Mattel, moved its world headquarters to El Segundo, also just off Sepulveda Boulevard. In the late 1990s, strip malls with anchoring groceries stores filled in the remaining available space along Sepulveda Boulevard (Appendix D).

Appendix D, Cultural Resources Technical Report, Historical Overview of El Segundo, Pages 34 and 35

Beginning in the 1980s, commercial and office buildings began to appear along Sepulveda Boulevard, between Grand Avenue and El Segundo Boulevard. In 1980, a large business park on the northeast corner of Grand Avenue and Sepulveda Boulevard (Pacific Coast Hwy) was established with three large, concrete and tinted glass buildings. One of the most notable developments was the construction of the Pacific Corporate Towers at ~~Lincoln~~Pacific Coast Highway and Grand ~~Avenues~~Avenue, built in 1983. That same year, 144 additional commercial properties were built in El Segundo, totaling over 1 million square feet of commercial space. In 1990, toy company, Mattel, moved its world headquarters to El Segundo, also just off Sepulveda Boulevard. In the late 1990s, strip malls with anchoring groceries stores filled in the remaining available space along Sepulveda Boulevard (Commercial Café 2020; El Segundo Chamber of Commerce 2017).

Zone Text Amendment Section Number

Subsequent to the release of the Draft EIR for public review, the City of El Segundo adopted the Lakes Specific Plan, which was codified as Section 15-3-2(A)(11) of the El Segundo Municipal Code (ESMC). The following are required

typographical revisions in the Draft EIR to correct the assumed Zone Text Amendment ESMC section, if the proposed Project is approved by the City.

Chapter 1, Introduction, Page 1-5

- Approval of a General Plan Amendment (No. GPA 19-01) to change the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use Map change.
- Zone Text Amendment (No. ZTA 19-08) to add a new El Segundo Municipal Code (ESMC) Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)."
- Zone Change (No. ZC 19-01) to rezone the property from "General Commercial (C-3)" and "Parking (P)" to "Pacific Coast Commons Specific Plan (PCCSP)" and an accompanying Zoning map change.

Chapter 3, Project Description, Page 3-20

- Zone Text Amendment (No. ZTA 19-08) to add a new El Segundo Municipal Code (ESMC) Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)."
- Zone Change (No. ZC 19-01) to rezone the property from "General Commercial (C-3)" and "Parking (P)" to "Pacific Coast Commons Specific Plan (PCCSP)" and an accompanying Zoning map change.

Section 4.9, Land Use and Planning, Page 4.9-33

Amendments to the Zoning Code

As described in Section 3.7, Discretionary Actions, in Chapter 3 of this Draft EIR, the Project requests a Zone Text Amendment No. ZTA 19-08 to add a new ESMC Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)". As such, the Project would be required to follow the procedures outlined in Section 4.9.2, above. Approval of the proposed Project, in accordance with the provisions outlined in Title 15 of the ESMC, would ensure compliance with applicable zoning standards. Additionally, through the application process, the City would thoroughly review all plans for the proposed Project to ensure compliance with the ESMC, and other relevant plans, policies, and regulations.

Chapter 1, Introduction

Section 1.4.1, City of El Segundo, Page 1-5

The last item listed on the discretionary actions the City will consider as part of the proposed Project should be deleted as the dedications are being provided now.

- Shared Parking Agreement in conjunction with the Parking Demand Study and Shared Parking Analysis, to replace the previous approval of Off-Site Parking Covenant Nos. MISC 14-03 and MISC 14-06.
- Reciprocal Access Agreements for driveways and drive aisles accessing multiple parcels.
- Street dedication waiver requests for a portion of the dedication requirements for Mariposa Avenue and Indiana Street. ~~Future street dedication for Holly Avenue and Palm Avenue would be provided through irrevocable offers to dedicate land.~~

Chapter 2, Environmental Setting

Section 2.5, Cumulative Projects, Page 2-8

The following is a revision to Table 2-3, List of Cumulative Projects, from the Draft EIR.

Table 2-3. List of Cumulative Projects

Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size
1	2101 Pacific Coast Highway	No	Office	10.12	KSF
2	2205 N. Sepulveda Boulevard	No	General Office	4.70	KSF
		Yes	Existing Hair Salon	1.04	KSF
3	2100 E El Segundo Boulevard	Yes	Office	1751.92	KSF
			Warehouse	73.58	KSF
			Industrial	168.00	KSF
			Retail	148.96	KSF
4	305 S. Sepulveda Boulevard, 330 S. Sepulveda Boulevard, Hermosa Beach Sites	No	Design Center	100.30	KSF
			Executive Offices	19.21	KSF
			General Office	57.50	KSF
			Existing Office	8.42	KSF
5	750 South Douglas Street	Yes	Industrial	4.99	KSF
6	1000 N Sepulveda Boulevard	No	Supermarket	27.50	KSF
			Restaurant	52	Seats
			Bank	7.00	KSF
			Existing Auto Center	32.72	KSF
7	3200–3600 N. Sepulveda Boulevard	No	Shopping Center	110.00	KSF
8	3920 Highland Avenue	No	Condominium	2	DU
			Studio	3.00	KSF
9	540 E Imperial Avenue	Yes	Residential	58	DU
10	400 Duley Road	Yes	Medical Office	63.54	KSF
11	123 Nevada Street	Yes	Office	15.00	KSF
12	2125 Campus Drive	Yes	Office	153.53	KSF
13	140 Sheldon Street	Yes	Office/warehouse	7.12	KSF
			Existing Industrial	1.76	KSF
14	740 Pacific Coast Highway	No	Drive-thru Restaurant	5.00	KSF
			Existing Bank	8.10	KSF
15	500 S Douglas & 2330 Utah Avenue	Yes	General Office	78.00	KSF
16	1700 East Imperial Avenue	Yes	Office	86.52	KSF
17	445 N. Douglas Street	Yes	Office	155.66	KSF
18	455 Continental Boulevard & 1995 E Grand Avenue	Yes	Office	300.00	KSF
19	700–860 PCH; 2001–2015 E. Park Place; 700–740 Allied Way	Yes	Shopping Center	18.85	KSF
20	1301 El Segundo Boulevard	Yes	Office	6.274	KSF
			Warehouse	5.88	KSF
21	400 Pacific Coast Highway	Yes	Driving Range	65.00	KSF
			Existing Golf Course	2.50	KSF
22	2021 E Rosecrans Avenue	Yes	Office	240.00	KSF

Table 2-3. List of Cumulative Projects

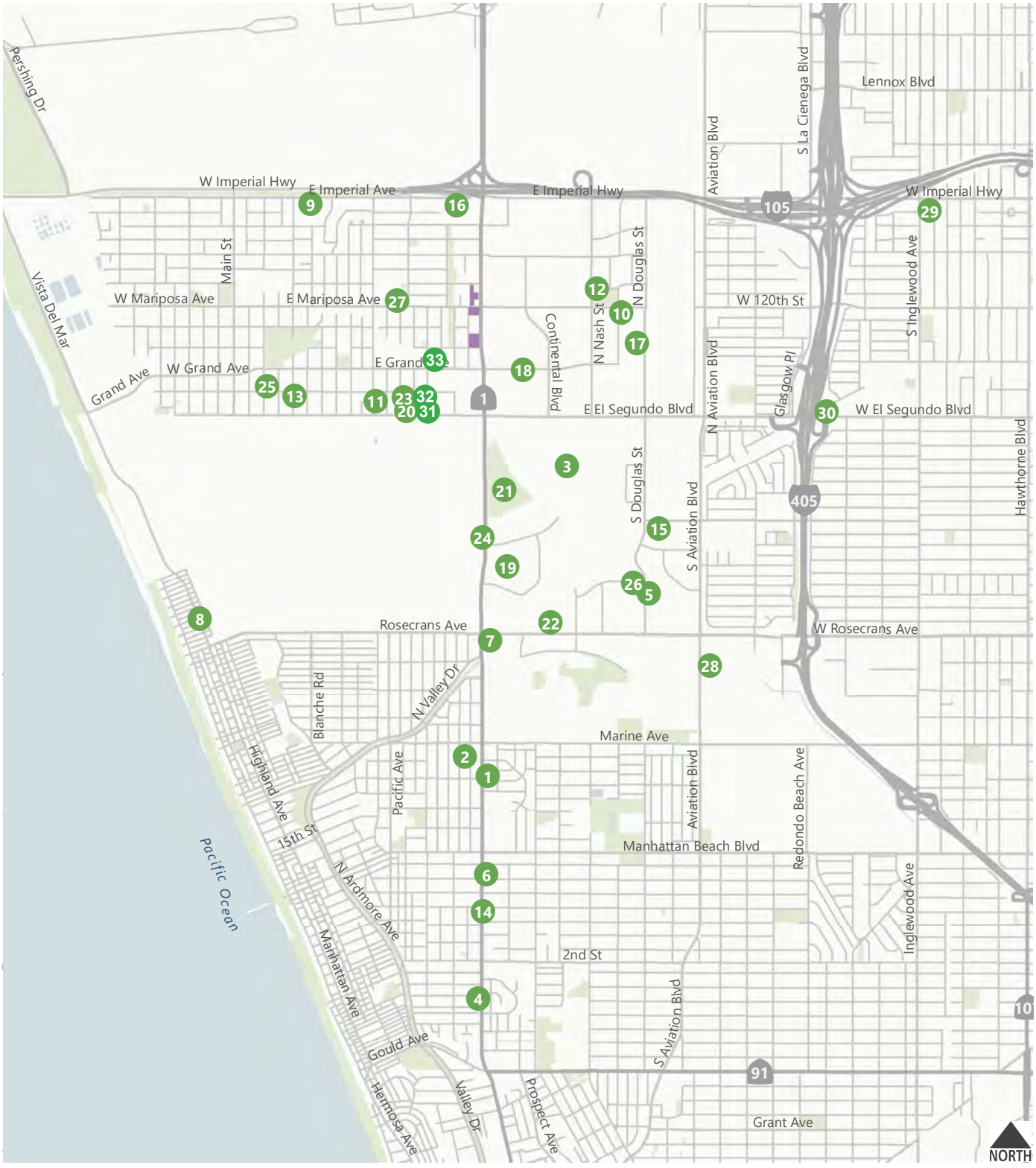
Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size
			Studio and Production	66.00	KSF
			Retail	7.00	KSF
23	140 Oregon Street	Yes	Office	70.00	KSF
24	401–615 Pacific Coast Highway (Project Site)	Yes Yes	Residential	263	DU
			Retail	11.00	KSF
25	212 Eucalyptus Drive	Yes	Office	13.49	KSF
			Restaurant	0.63	KSF
			Existing Waterhouse	5.35	KSF
26	2221 Park Place	Yes	Office	27.48	KSF
27	1225 Mariposa Avenue	Yes	Condominium	15	DU
			Existing Residential	5	DU
28	14500 Aviation Boulevard	No	Credit Union	3.60	KSF
29	11416 Inglewood Avenue	No	Condominium	13	DU
30	5151 El Segundo Boulevard	No	Hotel	129	Rooms
31	1475 El Segundo Boulevard	Yes	Office	47.84	KSF
			Residential	4	DU
32	1320-1330 Franklin Avenue	Yes	Office	47.25	KSF
			Residential	4	DU
33	243 and 330 Kansas Street	Yes	Office	243.22	KSF

Source: Appendix J-1
DU = dwelling unit; KSF = thousand square feet

Figure 2-5, Cumulative Project Location Map, Page 2-19

The following is a revision to Figure 2-5, Cumulative Project Location Map, which provides an illustration of the City's related projects with the addition of three related projects (Location ID 31, 32, and 33).

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Project Site

Related Project

SOURCE: Fehr and Peers, 2021

FIGURE 2-5

Cumulative Project Location Map

Pacific Coast Commons Specific Plan EIR Project

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Chapter 3, Project Description

Section 3.3.1, Land Use Plan, Subsection Circulation Plan, Vehicular Circulation, Pages 3-7 through 3-9

Information regarding a new right-turn lane on Mariposa Avenue has been included for clarity with reference to another section in Chapter 3, Project Description, of the Draft EIR.

Development within the Specific Plan site would also provide infrastructure and facilitate access for various modes of travel including automobiles, bicycles, and pedestrians. Pedestrian and handicap access would be provided between buildings and to public sidewalks on the five street frontages along the site. Proposed improvements associated with the adjacent roadways are summarized below.

- **Pacific Coast Highway.** PCH is a California Department of Transportation (Caltrans) facility and an existing public major arterial street that abuts the property on its eastern edge. No other right-of-way improvements are proposed as part of the development allowed in the Specific Plan. No additional curb cuts besides the three existing curb cuts that provide access to the two existing hotels may be allowed along PCH in the Specific Plan area. The two existing driveways that access the north parking lot at 629 North PCH would be removed.
- **Mariposa Avenue.** Mariposa Avenue is an existing public two-lane collector street that abuts the property between the northern and southern blocks of the Specific Plan area. Some additional right-of-way improvements **(i.e. new right-turn lane on Mariposa Avenue; see below under Section 3.3.6, "Off-Site Improvements", on page 3-16)** are required as a result of the development allowed in the Specific Plan. A waiver is requested for a portion of the street dedication requirements on the south side of Mariposa Avenue. No additional curb cuts besides the one existing curb cut on the north side of the street (which also serves as a fire lane) may be allowed along the north side of Mariposa Avenue in the Specific Plan area. No curb cuts may be allowed along the south side of Mariposa Avenue within the Specific Plan area.

Section 4.2, Air Quality

Introduction, Page 4.2-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing air quality conditions of the Pacific Coast Commons Specific Plan Project (Specific Plan or Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's criteria air pollutant emissions from both construction and operations. In addition, a Health Risk Assessment (HRA) was performed to determine the potential cancer risk and non-cancer health impacts to existing sensitive residential receptors in proximity to the proposed Project due to toxic air contaminant (TAC) emissions from construction activities using the American Meteorological Society/Environmental Protection Agency Regulatory Model

(AERMOD) Version 19191 and the Hotspots Analysis and Reporting Program Version 2 (HARP2). For the relevant data, refer to the following appendix:

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Construction Emissions, Page 4.2-24

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Emissions from the construction phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on CalEEMod default values, which were adjusted to more accurately reflect long-term buildout of the proposed Project.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Page 4.2-27

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Emissions from the construction phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on CalEEMod default values, which were adjusted to more accurately reflect long-term buildout of the proposed Project.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Page 4.2-27

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA ~~2017~~2021). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For parking lot land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Area Sources, Pages 4.2-27 and 4.2-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential and nonresidential surface coatings based on the VOC emission factor, the building

square footage, the assumed fraction of surface area, and the reapplication rate. The proposed Project would use low VOC paint in construction and regular maintenance activities. Low VOC paint is generally considered to contain less than 50 grams of VOC per liter, which was assumed for both interior and exterior painting. Consistent with CalEEMod default values, a VOC content of 100 was assumed for the parking structures. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA ~~2017~~2021).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days (CAPCOA ~~2017~~2021). By design, the proposed Project would limit turf, and the proposed landscaped area would be minimal and any landscape equipment used is anticipated to be powered by electricity, when needed. Nonetheless, emissions associated with potential landscape maintenance equipment were included and no emission reduction features related to electric landscape equipment was assumed to conservatively capture potential Project operational emission sources.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Energy Sources, Page 4.2-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

The energy use from nonresidential land uses (natural gas usage per square foot per year) is calculated in CalEEMod based on the California Commercial End-Use Survey database. CalEEMod default values for both residential and nonresidential land uses energy consumption were revised. CalEEMod assumes compliance with the ~~2016~~2019 Title 24 Building Energy Efficiency Standards~~. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards~~, which became effective on January 1, 2020. Per the CEC Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings, are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively. The first-year savings for multi-family buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the prior 2016 standards, the multi-family, savings are 2% of electricity, 8% of demand and 5% of gas.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Mobile Sources, Page 4.2-29

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-7. Project Trip Rate Assumptions

Land Use	CalEEMod Land Use Surrogate	Revised Trip Rate		
		Weekday	*Saturday*	*Sunday*
Residential Units	Apartments Mid-Rise	5.16	~~4.96~~ 4.66	~~4.55~~ 3.88
Commercial/Retail	Regional Shopping Center	~~35.89~~ 36.02	~~42.00~~ 44.00	~~20.13~~ 20.13
Fast Casual Restaurant	High Turnover Sit Down Restaurant	~~239.73~~ 239.73	~~261.57~~ 261.57	~~248.57~~ 304.82

Source: Appendix C-1.

Section 4.2.4, Impact Analysis, Threshold 4.2b, Construction Emissions, Page 4.2-34

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2021	~~4.15~~ 4.11	~~41.60~~ 41.22	~~25.54~~ 25.66	0.06	~~3.48~~ 3.51	~~2.61~~ 2.62
2022	~~2.32~~ 2.26	~~21.97~~ 21.55	~~21.45~~ 21.45	~~0.05~~ 0.04	~~2.36~~ 2.37	~~1.31~~ 1.32
2023	~~49.34~~ 3.09	~~29.16~~ 28.57	~~27.05~~ 27.63	~~0.08~~ 0.07	4.47	2.13
2024	~~49.34~~ 49.05	~~18.18~~ 16.37	~~27.18~~ 27.73	0.07	4.52	~~1.60~~ 1.61
Maximum daily emissions	~~49.34~~ 49.05	~~14.60~~ 41.22	~~27.18~~ 27.63	~~0.08~~ 0.07	4.52	~~2.61~~ 2.62
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

Section 4.2.4, Impact Analysis, Threshold 4.2b, Operational Emissions, Page 4.2-35

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	~~8.23~~ 8.49	4.18	23.43	0.03	0.44	0.44
Energy	0.12	1.00	0.53	~~<0.01[a]~~ 0.01	0.08	0.08
Mobile	~~3.12~~ 5.93	~~13.94~~ 5.38	~~29.83~~ 45.96	~~0.12~~ 0.09	~~10.00~~ 10.03	~~2.73~~ 2.72
Project Total	~~11.47~~ 14.54	~~19.12~~ 10.56	~~53.79~~ 69.92	~~0.15~~ 0.13	~~10.52~~ 10.55	~~3.25~~ 3.24
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
~~[a] <0.01 = value less than reported 0.01 pounds per day.~~

Section 4.2.4, Impact Analysis, Threshold 4.2a, Operational Emissions, Pages 4.2-35

The following revised text clarifies the level of significance for the proposed Project's operational cumulative impacts.

As shown in Table 4.2-10, the combined daily area, energy, mobile, vehicle testing, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with Project-generated operational criteria air pollutant emissions would be less than significant.

Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. The maximum daily PM_{10} and $PM_{2.5}$ emissions would not exceed the significance thresholds during proposed Project construction activities. Fugitive dust, as well as vehicle and equipment exhaust, generated during Project construction would contribute to the SCAB's nonattainment designation for PM_{10} and $PM_{2.5}$; however, this contribution would not be considered cumulatively considerable.

With regard to operational cumulative impacts associated with nonattainment pollutants, ~~in general, if a project is consistent with the community and/or general plans, it has been accounted for in the attainment demonstration contained within the state implementation plan and would therefore not cause a cumulatively significant impact on the ambient air quality. As addressed in the first impact criterion, the proposed Project would be consistent with the growth projections anticipated in SCAQMD's 2016 AQMP.~~ project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Projects that exceed the SCAQMD project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. As presented in Table 4.2-10, the proposed Project's operational emissions would not exceed the SCAQMD significance thresholds. Accordingly, the proposed Project would not result in a cumulatively considerable contribution to the nonattainment pollutants in the SCAB.

Based on the preceding considerations, the proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

Section 4.2.4, Impact Analysis, Threshold 4.2c, Localized Significance Threshold, Page 4.2-37

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction emissions	~~40.50~~ 27.52	~~21.15~~ 18.24	~~2.80~~ 1.58	~~2.44~~ 1.23
SCAQMD LST	91	664	5	3
LST exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix C-1, Construction (Summer) and Construction (Winter) output, for complete results.
Localized significance thresholds are shown for 1-acre project sites corresponding to a distance to a sensitive receptor of 25 meters. These estimates implementation of the proposed Project's fugitive dust control strategies, including watering of an active site two times per day.

Section 4.2.8, References, Page 4.2-42

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA. ~~2017~~2021. *California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0* Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. ~~October 2017~~May 2021. http://www.caleemod.com.

Section 4.4, Energy

Introduction, Page 4.4-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing energy conditions of the Pacific Coast Commons Specific Plan (Specific Plan or Project) vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's energy consumption from both construction and operations. For the relevant data, refer to the following appendix:

Section 4.4.3, Thresholds of Significance, Approach and Methodology, Page 4.4-13

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

> CalEEMod Version ~~2016.3.2~~2020.4.0 (CAPCOA ~~2017~~2021) was used to estimate the potential proposed Project-energy consumption during construction and operation. Construction of the proposed Project would result in petroleum consumption primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details specific to construction and operation are discussed in Section 4.2, Air Quality, specifically in Approach and Methodology (Construction Emissions and Operational Emissions), are also applicable for the estimation of construction-related energy consumption. Potential energy consumption from proposed Project operations were estimated for area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. Construction of the proposed Project is anticipated to commence in July 2021 and reach completion in April 2024, lasting a total of 34 months. Additional details from each category are discussed in the Air Quality section, in Section 4.2.3.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Electricity, Operations, Pages 4.4-13 and 4.4-14

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

> The operational phase would require electricity for multiple purposes including building heating and cooling, lighting, appliances, electronics, and water and wastewater conveyance. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), CalEEMod default values for electricity consumption for the proposed Project's land uses were ~~revised to account for compliance with the~~used, which reflects compliance with the 2019 Title 24 standards. ~~It was assumed that multi-family residential savings are 2% of electricity from the 2016 standards. For non-residential buildings, the savings are 10.7% of electricity.~~ Table 4.4-1 presents the anticipated electricity demand for the proposed Project.

Table 4.4-1. Operational Electricity Demand – Proposed Project

Land Use	kWh/Year
Building and Lighting Electricity Demand	
Residential	~~1,044,560~~ 1,008,300
Retail	~~81,249~~ 84,054
Fast Casual Restaurant	~~131,535~~ 131,535
Parking Garage	~~1,660,290~~ 1,723,390
Building Total	~~2,917,634~~ 2,947,279
Other Electricity Demand	
All Land Uses – Water/Wastewater Total	226,277
Total	~~3,143,911~~ 3,173,556

Source: Appendix C-3.
kWh = kilowatt-hour.

As shown in Table 4.4-1, buildout of the proposed Project is estimated to have a total electrical demand of ~~3,143,911~~3,173,556 kWh per year (or ~~203~~ million kWh per year) for proposed Project usage. As previously discussed, the County's annual electricity use was approximately 68 billion kWh in 2018. Therefore, the proposed Project's electrical consumption would be a small percentage (0.005%) of the County's annual use. SCE forecasts that its total energy consumption in 2024 (the Project buildout year) will be approximately 120,000 gigawatt hours of electricity (CEC 2018b). Based on the Project's estimated electrical consumption of 3,143,911 kWh/year, the Project would account for approximately 0.0026% of SCE's total projected consumption during 2024 for the Project's buildout year.[3]

Section 4.4.4, Impact Analysis, Threshold 4.4a, Natural Gas, Operations, Page 4.4-15

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Natural gas consumption during proposed Project operation would be required for various purposes, including building heating and cooling. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), default natural gas generation rates in CalEEMod for the proposed Project were ~~revised~~ used, ~~to account for~~which reflect compliance with the 2019 Title 24 standards. ~~It was assumed that multi-family residential savings are 5% of natural gas from the 2016 standards. For non-residential buildings, the savings are 1% of natural gas.~~ Table 4.4-2 presents the natural gas demand for the proposed Project.

Table 4.4-2. Operational Natural Gas Demand

Land Use	kBTU/Year
Residential	~~2,927,690~~ 2,932,350
Retail	~~14,527~~ 15,029
Fast Casual Restaurant	~~956,561~~ 956,561
Total	~~3,898,778~~ 3,903,940

Notes: kBTU = thousand British thermal units.
Source: Appendix C-3.

As shown in Table 4.4-2, buildout of the proposed Project would consume approximately ~~3,898,778~~3,903,940 kBTU per year. As previously discussed, SoCalGas customers annual natural gas consumption is estimated to be 7,876 million therms per year. Therefore, the proposed Project's estimated natural gas consumption of ~~3,898,778~~3,903,940 kBTU (or ~~38,988~~39,039 therms) per year would be a small percentage (0.0005%) of SoCalGas' annual supply to customers. In addition, the proposed Project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains energy measures that are applicable to the proposed Project. The proposed Project would be required to meet Title 24 requirements applicable at that time, as required by state regulations through the plan review process. Therefore, due to the inherent increase in efficiency

of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of natural gas. Impacts related to operational natural gas use would be less than significant.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Construction, Page 4.4-16

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-4. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	6	35.70	10.21	3,496.65
Phase 1 - Site Preparation	7	36.78	10.21	3,602.27
Phase 1 - Grading	6	57.32	10.21	~~5,614.03~~ 5,614.04
Phase 1 - Building Construction	9	225.93	10.21	~~22,128.48~~ 22,128.51
Phase 1 - Paving	6	44.06	10.21	4,315.44
Phase 1 - Application of Architectural Coatings	1	5.62	10.21	550.17
Phases 2 and 3 - Demolition	6	71.38	10.21	6,991.51
Phases 2 and 3 - Site Preparation	7	36.80	10.21	3,603.89
Phases 2 and 3- Grading	6	54.73	10.21	5,360.16
Phases 2 and 3 - Building Construction	9	303.69	10.21	29,744.23
Phases 2 and 3 - Paving	6	43.06	10.21	4,217.14
Phases 2 and 3 - Application of Architectural Coatings	1	5.49	10.21	537.66
			Total	~~90,161.59~~ 90,161.66

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Construction, Pages 4.4-17 and 4.4-18

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-5. Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	1,760	~~8.03~~ 7.69	8.78	~~914.29~~ 875.95
Phase 1 - Site Preparation	1,100	~~5.26~~ 5.04	8.78	~~598.64~~ 573.53
Phase 1 - Grading	3,440	~~8.11~~ 15.87	8.78	~~1,882.89~~ 1,808.06
Phase 1 - Building Construction	23,400	~~107.80~~ 103.79	8.78	~~12,278.29~~ 11,821.21

Table 4.4-5. Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Paving	1,800	~~8.11~~ 7.81	8.78	~~923.50~~ 889.11
Phase 1 - Application of Architectural Coatings	3,600	~~16.22~~ 15.61	8.78	~~1,846.99~~ 1,778.23
Phases 2 and 3 - Demolition	4,300	~~18.63~~ 18.03	8.78	~~2,121.61~~ 2,053.56
Phases 2 and 3 - Site Preparation	2,640	~~11.71~~ 11.33	8.78	~~1,333.59~~ 1,290.82
Phases 2 and 3- Grading	6,720	~~29.80~~ 28.85	8.78	~~3,394.58~~ 3,285.71
Phases 2 and 3 - Building Construction	78,600	~~343.79~~ 333.29	8.78	~~39,155.80~~ 37,959.81
Phases 2 and 3 - Paving	3,440	~~17.75~~ 14.34	8.78	~~1,680.51~~ 1,632.85
Phases 2 and 3 - Application of Architectural Coatings	10,320	~~44.26~~ 43.01	8.78	~~5,041.54~~ 4,898.53
			Total	~~71,172.23~~ 68,867.37

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-6. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	440	~~5.13~~ 4.03	10.21	~~502.16~~ 394.32
Phase 1 - Site Preparation	220	~~2.69~~ 2.11	10.21	~~263.04~~ 206.55
Phase 1 - Grading	430	~~5.35~~ 4.16	10.21	~~523.87~~ 407.86
Phase 1 - Building Construction	5,850	~~70.78~~ 54.59	10.21	~~6,932.82~~ 5,346.35
Phase 1 - Paving	450	~~5.32~~ 4.11	10.21	~~521.44~~ 402.12
Phase 1 - Application of Architectural Coatings	900	~~10.65~~ 8.21	10.21	~~1,042.89~~ 804.24
Phases 2 and 3 - Demolition	1,720	~~19.72~~ 14.95	10.21	~~1,930.95~~ 1,464.21
Phases 2 and 3 - Site Preparation	440	~~5.16~~ 3.92	10.21	~~505.73~~ 383.49
Phases 2 and 3- Grading	840	~~9.86~~ 7.47	10.21	~~965.48~~ 732.11
Phases 2 and 3 - Building Construction	15,720	~~184.20~~ 139.04	10.21	~~18,041.39~~ 13,618.18
Phases 2 and 3 - Paving	860	~~10.06~~ 7.54	10.21	~~984.98~~ 738.77
Phases 2 and 3 - Application of Architectural Coatings	1,720	~~20.11~~ 15.09	10.21	~~1,969.94~~ 1,477.53

Table 4.4-6. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
			Total	~~34,184.68~~ 25,975.71

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-7. Construction Haul Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	200	~~7.47~~ 6.19	10.21	~~731.34~~ 606.06
Phase 1 - Site Preparation	0	0.00	10.21	0.00
Phase 1 - Grading	0	0.00	10.21	0.00
Phase 1 - Building Construction	0	0.00	10.21	0.00
Phase 1 - Paving	0	0.00	10.21	0.00
Phase 1 - Application of Architectural Coatings	0	0.00	10.21	0.00
Phases 2 and 3 - Demolition	200	~~7.09~~ 5.70	10.21	~~694.04~~ 558.67
Phases 2 and 3 - Site Preparation	0	0.00	10.21	0.00
Phases 2 and 3- Grading	1,720	~~60.94~~ 49.05	10.21	~~5,968.74~~ 4,804.53
Phases 2 and 3 - Building Construction	0	0.00	10.21	0.00
Phases 2 and 3 - Paving	0	0.00	10.21	0.00
Phases 2 and 3 - Application of Architectural Coatings	0	0.00	10.21	0.00
			Total	~~7,394.11~~ 5,969.27

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.4-5 through 4.4-7, the proposed Project is estimated to consume approximately ~~202,913~~190,974 gallons of petroleum during the construction phase. For disclosure, by comparison, approximately 81 billion gallons of petroleum would be consumed in California over the course of the proposed Project's construction phase, based on the California daily petroleum consumption estimate of approximately 78.6 million gallons per day (EIA 2019c). Thus, the total expected petroleum use from the proposed Project's construction represents approximately ~~0.0003~~0.0002% of California's consumption of petroleum over the construction duration. In accordance CARB's Airborne Toxics Control Measure, the proposed Project would be required to restrict heavy-duty diesel vehicle idling time to 5 minutes, which would reduce petroleum usage. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be less than significant.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Operations, Page 4.4-19

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-8. Petroleum Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon[a]	Gallons
Gasoline	~~1,633.12~~ 1,298.75	8.78	~~186,004.17~~ 147,921.06
Diesel	~~133.81~~ 106.42	10.21	~~13,106.20~~ 10,422.79
		Total	~~199,110.37~~ 158,343.85

Source: Appendix C-1.
MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

As depicted in Table 4.4-8, mobile sources from buildout of the proposed Project would result in approximately ~~199,110~~158,344 gallons of petroleum fuel usage per year. For disclosure, by comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year (EIA 2019c). Los Angeles County had 3,659 million gallons of gasoline and 301 million gallons of diesel fuel sold in 2017 (Los Angeles County 2020). Therefore, the proposed Project would consume (at buildout), approximately ~~0.005~~0.004% of the gasoline and ~~0.062~~0.003% of the diesel sold within the County (in 2017).

Section 4.4.8, References, Page 4.4-21

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA (California Air Pollution Control Officers Association). ~~2017~~2021. California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0. Prepared by Trinity Consultants and the California Air Districts. ~~November 2017~~May 2021. http://www.caleemod.com.

Section 4.6, Greenhouse Gas Emissions

Introduction, Page 4.6-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing greenhouse gas (GHG) emissions conditions of the Pacific Coast Commons Specific Plan Project (Specific Plan or Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's GHG emissions from both construction and operations. For the relevant data, refer to the following appendix:

Section 4.6.1, Existing Conditions, Global Warming Potential, Page 4.6-4

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

The current version of CalEEMod (Version ~~2016.3.2~~2020.4.0) (CAPCOA ~~2017~~2021) assumes that the GWP for CH4 is 25 (so emissions of 1 MT of CH4 are equivalent to emissions of 25 MT of CO2), and the GWP for N2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed Project.

Section 4.6.3, Thresholds of Significance, Approach and Methodology, Page 4.6-26

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Construction Emissions

CalEEMod Version ~~2016.3.2~~2020.4.0 (CAPCOA ~~2017~~2021) was used to estimate potential Project-generated GHG emissions during construction. Construction of the proposed Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 4.2.3, Thresholds of Significance (Approach and Methodology, Construction Emissions, in Section 4.2, Air Quality, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 4.2.3 in Section 4.2, Air Quality, for a discussion of construction emissions calculation methodology and assumptions used in the GHG emissions analysis.

Operational Emissions

Emissions from the operational phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Operational year 2025 was assumed, consistent with the construction schedule.

Section 4.6.4, Impact Analysis, Threshold 4.7a, Construction Emissions, Page 4.6-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.6-3. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2021	~~142.60~~ 138.12	0.03	0.00	~~143.44~~ 139.77
2022	~~532.13~~ 506.49	~~0.09~~ 0.08	0.00	~~534.30~~ 512.64
2023	~~811.25~~ 755.30	~~0.11~~ 0.10	0.00	~~814.00~~ 767.10
2024	~~483.97~~ 451.45	0.05	0.00	~~485.34~~ 457.66
			Total	~~1,977.08~~ 1,877.17

Notes: CO_2 = carbon dioxide; CH_4 = methane; GHG = greenhouse gas; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. See Appendix C-1 for complete results.

As shown in Table 4.6-3, the estimated total GHG emissions during construction of would be approximately ~~1,977~~1,877 MT CO2e over the construction period.

Section 4.6.4, Impact Analysis, Threshold 4.7a, Operational Emissions, Pages 4.6-28 and 4.6-29

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	~~951.51~~ 959.34	0.03	0.01	~~955.38~~ 963.24
Mobile	~~1,764.82~~ 1,381.33	~~0.08~~ 0.11	0.00	~~1,766.93~~ 1,405.16
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	~~65.90~~ 62.57
			Total Emissions	~~2,920.93~~ 2,563.72
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	**No**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Section 4.6.8, References, Page 4.6-49

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA. ~~2017~~2021. California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0 Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. ~~October 2017~~May 2021. http://www.caleemod.com.

Section 4.9, Land Use and Planning

The date referenced for the Circulation Element has erroneously cited as last updated in 1992; however, the Draft EIR's analysis is based on the 2004 Circulation Element, which is consistent with the most recent update to the element since the 1992 General Plan was first adopted. As such, a corrected citation has been made under Section 4.9.8, References, of the Draft EIR.

Section 4.9.2, Relevant Plans, Policies, and Ordinances, Subsection City of El Segundo General Plan, Circulation Element, Pages 4.9-5 and 4.9-6

The purpose of the Circulation Element is to assist the City in providing a safe, convenient, and efficient circulation system. State law requires that a circulation element be incorporated into the General Plan. The Circulation Element identifies a system capable of responding to growth occurring consistent with the policies and Land Use Plan presented in the Land Use Element. The Circulation Element identifies physical improvements that will be needed to attain the Circulation goals and objectives, as well as alternative techniques to improve the City's circulation system. The circulation system is one of the most important of all urban systems in determining the form and quality of the El Segundo environment. The circulation modes used, location of routes, operational policies and the operating levels of service influence the nature of urban development, the physical organization of the City, and can enhance or limit the social and economic activity within the City (City of El Segundo ~~1992~~2004).

Section 4.9.8, References, Page 4.9-35

City of El Segundo. 2004. *City of El Segundo Circulation Element of the General Plan*. Adopted September 2004. https://www.elsegundo.org/home/showpublisheddocument/1958/637237747168070000.

Section 4.10, Noise

Section 4.10.4, Impact Analysis, Threshold 4.10a, Subsection Construction Noise (Short-Term Impacts), Page 4.10-16

The following text edits were made to correct typographical errors.

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (West of Indiana Street)	59.0	56.1	59.5	55.5	-4.0
ST2 (Northwestern Project Boundary)	55.0	55.9	55.2	55.7	0.9
ST3 (Eastern Project Boundary Approximately 50 Feet from PCH)	69.5	68.2	70.3	68.7	~~1.6~~ -1.6
ST4 (Northeast Corner of E Mariposa Avenue and Illinois Court)	63.0	62.7	~~63.3~~ 63.4	62.9	~~0.4~~ -0.5
ST5 (Norther Project Boundary approximately 30 feet from E Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6	69.5	69.6	70.2	70.2	0.1

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
(Eastern Project Boundary approximately 50 feet from PCH)					

dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

Section 4.11, Population and Housing

Section 4.11.2, Relevant Plans, Policies, and Ordinances, Subsection Regional and Local, Regional Housing Needs Allocation (RHNA), Page 4.11-9

Subsequent to the release of the Draft EIR for public review, the City's fair share allocation for the 2021-2029 RHNA planning period was revised from 491 to 492.

Table 4.11-7. SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology

Total	Very-Low Income	Low Income	Moderate Income	Above Moderate Income
SCAG Region				
1,341,827	351,796	206,807	223,957	559,267
Los Angeles County				
~~813,082~~ 812,060	~~217,565~~ 217,273	~~123,171~~ 123,022	~~131,532~~ 131,381	~~340,814~~ 340,384
City of El Segundo				
~~491~~ 492	189	88	~~83~~ 84	131

Source: SCAG 2020d

Section 4.11.4, Impact Analysis, Threshold 4.3a, Subsection Long-Term Operational Impacts, Employment Projections, Page 4.11-16

The table has been revised to revise a typographical error.

Table 4.11-8. Employment Estimate

Land Use/Structure	Size	Employee Generation Factor	Number of Employees
Retail-Community	7,552 square feet	1 employee per 600 square feet	12.6
Restaurant-Fast Food	3,700 square feet	1 employee per 100 square feet	37

Table 4.11-8. Employment Estimate

Land Use/Structure	Size	Employee Generation Factor	Number of Employees
Residential	~~236~~263 units	1 Site Manager, 1 Leasing Agent, 1 Collections, 1 Lead Maintenance, 2 Maintenance Technicians	6
		Total	**55.6**

Source: South Florida Regional Planning Council 2006

[a] Assumes "Neighborhood Shopping Center" commercial category

[b] Assumes carry-out with seating generally a fast food operation where the food is partially ready before serving.

Section 4.11.4, Impact Analysis, Threshold 4.3a, Subsection Long-Term Operational Impacts, Housing Projection Analysis, Page 4.11-17

Subsequent to the release of the Draft EIR for public review, the City's fair share allocation for the 2021-2029 RHNA planning period was revised from 491 to 492.

> Table 4.11-7 provides the 6th Cycle RHNA allocation for 2021 to 2029 as set forth in the Connect SoCal 2020–2045 RTP/SCS. Because the proposed Project will be occupied within the timeframe of the 6th Cycle, it is most relevant to the analysis. The City's fair share allocation for the planning period is ~~491~~492 units. This indicates that between the years 2021 to 2029, the City needs to accommodate at least ~~491~~492 housing units, consisting of a variety of housing types to accommodate extremely low, very low, low, moderate, and above moderate-income households to keep pace with housing demand. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation.

Section 4.11.8, References, Page 4.11-19

The following text edit was made in response to comments based on the revisions made in Section 4.11.2 detailed, above.

> SCAG. 2020d. ***SCAG 6th Cycle Final*** *RHNA* ~~***Estimated***~~ *Allocation*~~***s Plan***~~***.*** ~~**Updated September 3, 2020**~~**Approved by HCD on March 22, 2021 and modified on July 1, 2021**. ~~**https://scag.ca.gov/sites/main/files/file-attachments/rhna-draft-allocations-090320-updated.pdf?1602188695**~~ **https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899**.

Section 4.13, Transportation

Section 4.13.4, Impact Analysis, Threshold 4.13a, Subsection Level of Service Analysis for General Plan Consistency, Page 4.13-19

The following text edit was made with the addition of three cumulative projects as shown in the Table 2-3, List of Cumulative Projects, above.

Future Plus Project Traffic Conditions

According to Tables 8A and 8B of the TIA (Appendix J-1), the same five study intersections projected to operate at LOS E or worse during the AM or PM peak periods under Future Base conditions are also projected to operate at LOS E or worse during the AM or PM peak periods with the addition of Project traffic. These intersections are as follows:

1. PCH and Imperial Highway (LOS E during PM)
5. PCH and Grand Avenue (LOS E during AM and LOS F during PM)
6. PCH and El Segundo Boulevard (**LOS E during AM and** LOS F during PM)
13. PCH and Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
14. PCH and Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

The Future plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Future Base and Future plus Project with improvement conditions at Mariposa Avenue (as described under Approach and Assumptions). The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1).

Section 4.13.4, Impact Analysis, Threshold 4.13c, Subsection Project Access, Page 4.13-22

The building height recorded for PCC-Fairfield Parking was cited as 50 feet in height. However, the text within the Draft EIR did not clarify which elevation was cited; from Pacific Coast Highway (PCH) or from Indiana Street. The revised text reflects the proposed building height of 63 feet from Indiana Street. This is consistent with Figure 3-5C, Conceptual PCC-Fairfield Parking Section, which depicts a section view of the proposed parking structure. Although, the building height for PCC-Fairfield is 50 feet at PCH, as illustrated in Figure 3-5C as well as Figure 4.1-6, Conceptual Site Plan Building Heights from Elevation of PCH, clarification was added to the text to provide the maximum height at PCC-Fairfield. Furthermore, the building height of the proposed parking garage was provided to quantify the height in feet of the five-level structure. As such, the text revision does not substantially change the intent and purpose of the discussion.

Project Access

Project access would not substantially increase hazards due to design features or incompatible uses. The driveway configurations for the individual sites are as follows and illustrated in Figure 4.13-5:

- PCC-South would provide eight levels of parking garage (i.e. approximately two levels of subterranean and six levels above ground, depending on elevation grade). The parking garage would provide 165 parking spaces exclusively for residential tenant use, and 171 spaces would be shared between residential guest parking, commercial use, and for overflow if needed from other sites, resulting in a total of 336 parking spaces within the multi-level parking structure. Ingress/egress into the parking structure would be via driveways on PCH and Indiana Street.

- PCC-Fairfield Parking includes a five-level parking garage (~~50~~63 feet in height from Indiana Street) with 215 replacement parking spaces for the Fairfield Inn and Suites Hotel, which would be shared between the hotel and the commercial/retail uses. Ingress to the parking structure would be provided via a driveway on PCH.

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4 Mitigation Monitoring and Reporting Program

California Public Resources Code Section 21081.6 requires that, upon certification of an EIR, "the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

This chapter contains the mitigation monitoring and reporting program (MMRP) that has been developed for the Pacific Coast Commons Specific Plan Project (Specific Plan or Project). This MMRP has been developed in compliance with Public Resources Code Section 21081.6 and Section 15097 of the CEQA Guidelines. The mitigation measures in the table are coded by alphanumeric identification consistent with the EIR. The following items are identified for each mitigation measure:

- **Mitigation Monitoring.** This section of the MMRP lists the stage of the proposed project during which the mitigation measure would be implemented and the stage during which proper implementation would be monitored and verified. It also lists the agency that is responsible for ensuring that the mitigation measure is implemented and that it is implemented properly.
- **Verification of Compliance.** This section of the MMRP provides a location for the implementing party and/or enforcing agency to make notes and to record their initials and the compliance date for each mitigation measure.

The City of El Segundo (City) must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Air Quality						
MM-AQ-1. To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the Project, the Construction Contractor's contract specifications shall require compliance with the following: Prior to the start of construction activities, the Construction Contractor shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines. An exemption from this requirement may be granted if equipment with Tier 4 Interim engines are not reasonably available and the required corresponding reductions in criteria air pollutant emissions can be achieved from other combinations of construction equipment, such as using equipment with Tier 4 Final engines. Before an exemption may be granted, the City's Construction Contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Interim equipment could not be located within Los Angeles County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using CalEEMod and documentation provided to the City to confirm that Project-generated emissions do not exceed applicable localized significance thresholds (LST) for nitrogen dioxide (NO2), carbon monoxide (CO), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM2.5), and the	Prior to commencement of construction activities	Construction Contractor shall ensure that CARB-certified Tier 4 Interim engines are being utilized	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
SCAQMD carcinogenic (cancer) risk threshold. If these requirements cannot be met, construction activities at the Project site shall be postponed until CARB-certified Tier 4 Interim engines are available for use.						
Cultural Resources						
MM-CUL-1. Prior to commencement of construction activities for all phases of Project implementation, the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of El Segundo for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the	Prior to commencement of construction activities for all phases of Project implementation; Upon discovery of any archaeologic resources	Project applicant; Project archaeologist for meeting attendance and preparation of a mitigation plan	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
immediate contact of the site supervisor and archaeological monitor.						
MM-CUL-2. If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of El Segundo for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South-Central Coastal Information Center (SCCIC).	During construction activities; Upon discovery of any archaeologic resources	City of El Segundo Development Services Department; Project archaeologist	City of El Segundo Development Services Department			
Geology and Soils						
MM-GEO-1. Prior to commencement of any grading activity on-site, the Project applicant/Developer shall retain a qualified paleontologist per the Society of Vertebrate	Prior to grading activities	Project applicant; Project	City of El Segundo Development Services			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project for review and approval by the City. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site below a depth of 5 feet below the existing ground surface or depth of documented artificial fill (based on construction plans and/or geotechnical reports), procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. At a minimum, the PRIMP shall require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, Pleistocene Sand Dune deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the PRIMP shall require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources.		paleontologist	Department			
Hazards and Hazardous Materials						
MM-HAZ-1. The Project applicant/Developer shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous material, hazardous wastes, and	During demolition activities	Project applicant; Demolition contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
universal waste items. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance of a building permit for PCC-Fairfield Parking. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.						
MM-HAZ-2. Prior to commencement of any earthwork or construction activities at PCC-North, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and soil vapor associated with the 76 Station adjacent to PCC-North. The HMCP shall include training procedures for identification of contamination, and shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations. Contaminated soils shall be managed and disposed of in accordance with local and state regulations. The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The applicant or its designee shall implement the HMCP during construction activities for the proposed Project.	Prior to commencement of any earthwork or construction activities at PCC-North	Project applicant or its designee	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Noise						
MM-NOI-1. Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures: a) To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating activities during Phase 2, temporary noise barriers of sufficient height and extent along the Project's western site boundary shall be installed and shall be confirmed to achieve (depending on construction phase activity and involved equipment) at least 5 dBA and as much as 20 dBA of barrier noise insertion loss. The temporary barrier elements should resemble an outdoor-use vinyl-covered acoustical blanket comprising one or more materials that demonstrate a sound	Prior to issuance of a demolition or grading permit; During site preparation, grading, building construction, architectural coating, and/or paving activities associated with Phases 1, 2, and 3; Two (2) weeks prior to any construction phase commencement	Project applicant or approved Construction Contractor; Project acoustical consultant or noise control engineer; Project concrete saw operator and/or Construction Contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
transmission class (STC) of 30 or better. The Project Applicant/Developer shall retain the services of a qualified acoustical consultant or noise control engineer to advise on or review the design, installation, and expected performance of such temporary barriers when used during Project construction. Anticipated locations, horizontal extents, heights, and durations of installation of the temporary sound barriers over the course of Project phased buildout shall be part of the CNMP submitted to the City for review. b) Operation of a concrete saw during the demolition phase shall include some form of proximate and portable solid-walled partial enclosure, acoustical-blanket tent, or comparably-performing shroud that can reliably deliver 10 dBA of noise reduction—separate from the temporary barrier insertion loss need described in MM-NOI-1(a) above. Alternately, slotted low-noise saw blades may be used to yield some or all of this noise reduction, so that operation of the concrete saw at a distance of 50 feet does not exceed 80 dBA. If this limit cannot be wholly achieved due to saw operation noise control or localized sound abatement (i.e., partial enclosure), then the balance of needed attenuation shall be provided by either the temporary noise barrier per MM-NOI-1(a) or by limiting duration of saw operation within an hour: each halving of duration should yield a 3 dB						

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
reduction to the hourly noise level produced by the saw. c) Residents within 200 feet of the Project shall be informed at least two (2) weeks in advance when construction phase activities will occur. An information telephone hotline and/or website shall be established and managed to receive resident complaints, and the Applicant and its contractors shall respond to received complaints and document their investigations and any complaint resolutions in regular reports to the City Building Safety division.						
Transportation						
MM-TRA-1. Prior to the issuance of demolition or grading permits, the Project Applicant/Developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City and Manual on Uniform Traffic Control Devices guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or	Prior to the issuance of demolition or grading permits	Project Applicant	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
rerouting of construction trucks away from congested streets or sensitive receptors						
Tribal Cultural Resources						
MM-TCR-1. Should a potential tribal cultural resource (TCR) (as defined by PRC Section 21074) be inadvertently encountered during construction activities, consistent with the process required by MM-CUL-2, all construction work occurring within 100 feet of the find shall immediately stop and the City shall be notified of the discovery. The City shall notify Native American tribes that have been identified by the Native American Heritage Commission to be traditionally and culturally affiliated with the geographic area of the Project. Any affected tribe shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible.	In the event that a tribal cultural resource is encountered during any and all construction activities associated with any and all Project Phases	Construction Contractor; Native American Heritage Commission (NAHC) identified Native American tribes; Project archeologist	City of El Segundo Development Services Department; NAHC			

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SECTION PAGE NO.

4 MITIGATION MONITORING AND REPORTING PROGRAM 1

Tables

Table 4-1. Mitigation Monitoring and Reporting Program 2

Appendix A

Revised Future Analysis

FEHR PEERS

Memorandum

Date: August 11, 2021

To: Kristin Starbird, Dudek

From: Tom Gaul and Vivian Lee

Subject: Revised Future Analysis for Pacific Coast Commons

LA18-3078

This memorandum summarizes the results of the revised intersection level of service analysis conducted for the Pacific Coast Commons (Project) in response to comments on the Draft Environmental Impact Report (DEIR). This analysis is supplemental to the previous report, *Pacific Coast Commons Transportation Impact Analysis*, dated November 2020. This memorandum is to be included as an appendix to the Project's Final Environmental Impact Report (FEIR).

Based on public and agency review and comment on the DEIR, three additional related projects were added to the original list. As a result, the following revised supplemental analysis was conducted:

- Future Intersection Level of Service Analysis
- Future plus Project Intersection Level of Service Analysis
- Future Peak Hour Signal Warrant Analysis
- Future plus Project Peak Hour Signal Warrant Analysis
- Future plus Project Driveway Level of Service Analysis
- Future plus Project Driveway Queueing Analysis

Revised Future Year 2027 Traffic Conditions

To reevaluate the potential effects of the proposed Project on future (Year 2027, Project Opening Year) conditions, it was necessary to revise estimates of future traffic conditions in the area both without and with project traffic. First, estimates of traffic growth were revised for the study area to forecast future conditions without the Project. These revised forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the Project (related projects), including the three additional related projects.

These projected traffic volumes, identified herein as the revised Future Base conditions, represent the future conditions without the proposed Project. The traffic generated by the proposed Project was then assigned to the surrounding street system and added to the revised Future Base conditions to form the revised Future plus Project traffic conditions.

Revised Related Projects Trip Generation

Future Base traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the proposed Project prior to the buildout date of the proposed Project. Three additional related projects were identified by the City of El Segundo to be added to the original list of 30 that were previously identified in the study area. These three additional projects are listed in **Table 1**. Revised related projects traffic volumes are shown in **Figure 1**.

Revised Future Year 2027 Base Traffic Volumes

Revised Future year 2027 base weekday AM and PM peak hour traffic volumes and lane geometries for the analyzed intersections are shown in **Figure 2**. The Future Base traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and the related projects' traffic from the original list as well as the three additional projects.

Revised Future plus Project Traffic Projections

The proposed Project traffic volumes were added to the revised Future Base traffic projections, resulting in the revised Future plus Project AM and PM peak hour traffic volumes. As shown in **Figure 3**, the revised Future plus Project scenario presents future traffic conditions with the completion of the proposed Project.

Revised Future Intersection Level of Service Analysis

Revised Future Base Traffic Conditions

The revised Future Base peak hour traffic volumes were analyzed to determine the projected V/C ratio and delay and LOS for each of the analyzed intersections. **Tables 2A and 2B** summarize the revised future LOS for the signalized and unsignalized intersections, respectively. Five of the 16 study intersections analyzed are projected to operate at LOS E or worse during the AM or the PM peak period under Future Base conditions. These intersections include:

1. Pacific Coast Highway & Imperial Highway (LOS F during PM)
5. Pacific Coast Highway & Grand Avenue (LOS E during AM and LOS F during PM)
6. Pacific Coast Highway & El Segundo Boulevard (LOS E during AM and LOS F during PM)

A. Pacific Coast Highway & Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
B. Pacific Coast Highway & Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

Pacific Coast Highway & El Segundo Boulevard (intersection 6) was originally projected to operate at LOS D during the AM peak period but is now projected to operate at LOS E. However, these are the same five intersections that were projected to operate at LOS E or worse during the peak periods under Future Base conditions as reported in the DEIR. The previous results are shown in Tables 7A and 7B of the transportation impact analysis report.

Revised Future plus Project Traffic Conditions

The revised Future (year 2027) plus Project peak hour traffic volumes, shown in **Figure 3**, were analyzed to determine the projected future operating conditions with the addition of the proposed Project traffic. The results of the revised Future plus Project analysis are presented in **Tables 3A and 3B** with analysis sheets provided in **Attachment A**. The same five study intersections projected to operate at LOS E or worse during the AM or PM peak periods under Future Base conditions are also projected to operate at LOS E or worse during the AM or PM peak periods with the addition of Project traffic. These intersections are:

1. Pacific Coast Highway & Imperial Highway (LOS F during PM)
5. Pacific Coast Highway & Grand Avenue (LOS E during AM and LOS F during PM)
6. Pacific Coast Highway & El Segundo Boulevard (LOS E during AM and LOS F during PM)

A. Pacific Coast Highway & Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
B. Pacific Coast Highway & Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

Pacific Coast Highway & El Segundo Boulevard (intersection 6) was originally projected to operate at LOS D during the AM peak period but is now projected to operate at LOS E. However, these are the same five intersections that were projected to operate at LOS E or worse during the peak periods under Future plus Project conditions as reported in the DEIR. The previous results are shown in Tables 8A and 8B of the transportation impact analysis report.

Revised Signal Warrant Analysis

A revised signal warrant analysis was conducted at two of the four unsignalized intersections analyzed for the Pacific Coast Commons project: PCH & Palm Avenue (Intersection A) and PCH & Holly Avenue (Intersection B).

Both of these intersections have a projected delay increase of over four seconds for the stop-controlled movements with the inclusion of project related trips. Due to the intersections being two-way-stop-controlled, the addition of even one vehicle results in a large increase in delay at the stop-sign controlled approach. Therefore, a signal warrant analysis was conducted to see if these two intersections trigger the potential need for a traffic signal. Using the Manual on Uniform Traffic Control Devices (MUTCD) methodology, these two intersections were tested to see if their volumes meet signal warrants. The peak hour signal warrant was used for this analysis, and it is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Neither the PCH & Palm Avenue intersection nor the PCH & Holly Avenue intersection trigger a signal warrant for the revised Future plus Project scenario. These results are the same as what was reported in the DEIR. **Table 4** summarizes this analysis. The previous results are shown in Table 9 of the transportation impact analysis report.

Analysis sheets for signal warrants can be found in **Attachment B**.

Revised Level of Service Analysis for Project Driveways

A revised level of service analysis was conducted to evaluate the ability of the Project access plan to accommodate the anticipated traffic levels at the driveway access points. This analysis was only conducted for the Pacific Coast Commons South driveway on PCH, as Indiana Street is a local road and driveway turns are not anticipated to materially affect operations. The Fairfield Parking site driveway on PCH provides inbound access only and is also not anticipated to affect operations.

The Pacific Coast Commons South driveway on PCH will be unsignalized and stop-controlled and was analyzed using the two-way stop-controlled HCM 6th Edition methodology. The revised driveway analysis LOS worksheets are included in **Attachment A**. **Table 5** shows the results of the revised Future plus Project LOS analysis at the unsignalized driveway. The previous results are shown in Table 10 of the transportation impact analysis report.

As shown, the Pacific Coast Commons South driveway approach to PCH is projected to operate at LOS D in the AM peak period and LOS E in the PM peak period under the Future plus Project (2027) scenario. A queuing analysis was also reconducted for the driveway approach to show the estimated length of queues for vehicles exiting the Project site. While the delay is high enough to operate at LOS E under the Future plus Project (2027) scenario, queues are anticipated to be minimal given the volume of outbound project trips at this driveway. Queue results are shown in **Table 6**. These results are the same as what was reported in the DEIR. The previous results are shown in Table 11 of the transportation impact analysis report.

Summary

The various future analyses that were revised to include the three additional related projects identified by the City of El Segundo did not result in a change to any of the conclusions that were reported in the DEIR.

TABLE 1
PACIFIC COAST COMMONS PROJECT
ADDITIONAL RELATED PROJECTS
TRIP GENERATION ESTIMATES

No.	Project Location	Land Use [a]	Size		Trip Generation					
					AM Peak Hour			PM Peak Hour		
					IN	OUT	TOTAL	IN	OUT	TOTAL
1	243 Kansas Street and 330 Kansas Street	Office	243.22	ksf	243	39	282	45	235	280
		Café	0.89	ksf						
2	1475 E El Segundo Blvd	Office	47.84	ksf	48	8	55	9	46	55
3	1320-1330 E Franklin	Office	47.25	ksf	47	8	55	9	46	54

Notes:
ksf = one thousand square feet
Trip Generation Estimates based on *Trip Generation, 10th Edition,* Institute of Transportation Engineers, 2017, unless otherwise noted.
[a] Project details based on related project information provided by Paul Samaras at El Segundo, June 2021.

TABLE 2A
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE INTERSECTION LEVELS OF SERVICE
SIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)	
			V/C	LOS
1	Pacific Coast Hwy &	AM	0.875	D
	Imperial Hwy	PM	1.139	F
2	Pacific Coast Hwy &	AM	0.752	C
	Walnut Ave	PM	0.697	B
3	Pacific Coast Hwy &	AM	0.703	C
	Maple Ave	PM	0.751	C
4	Pacific Coast Hwy &	AM	0.782	C
	Mariposa Ave	PM	0.882	D
5	Pacific Coast Hwy &	AM	0.972	E
	Grand Ave	PM	1.027	F
6	Pacific Coast Hwy &	AM	0.901	E
	El Segundo Blvd	PM	1.170	F
7	Nash St &	AM	0.699	B
	Imperial Hwy	PM	0.574	A
8	Lairport St &	AM	0.424	A
	Mariposa Ave	PM	0.417	A
9	Nash St &	AM	0.463	A
	Mariposa Ave	PM	0.595	A
10	Kansas St &	AM	0.319	A
	Grand Ave	PM	0.368	A
11	Continental Blvd &	AM	0.547	A
	El Segundo Blvd	PM	0.587	A
12	Nash St &	AM	0.638	B
	El Segundo Blvd	PM	0.702	C

TABLE 2B
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE INTERSECTION LEVELS OF SERVICE
UNSIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)	
			Delay	LOS
A	Pacific Coast Hwy &	AM	265.0	F
	Palm Ave	PM	156.1	F
B	Pacific Coast Hwy &	AM	**	F
	Holly Ave	PM	**	F
C	Indiana St &	AM	11.4	B
	Mariposa Ave	PM	13.2	B
D	Indiana St &	AM	7.4	A
	Holly Ave	PM	7.7	A

** Indicates oversaturated conditions. Delay exceeds 300 seconds.

TABLE 3A
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE PLUS PROJECT INTERSECTION LEVEL OF SERVICE
SIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)		FUTURE + PROJECT	
			V/C	LOS	V/C	LOS
1	Pacific Coast Hwy &	AM	0.875	D	0.878	D
	Imperial Hwy	PM	1.139	F	1.158	F
2	Pacific Coast Hwy &	AM	0.752	C	0.756	C
	Walnut Ave	PM	0.697	B	0.706	C
3	Pacific Coast Hwy &	AM	0.703	C	0.709	C
	Maple Ave	PM	0.751	C	0.763	C
4 [a]	Pacific Coast Hwy &	AM	0.782	C	0.749	C
	Mariposa Ave	PM	0.882	D	0.864	D
5	Pacific Coast Hwy &	AM	0.972	E	0.983	E
	Grand Ave	PM	1.027	F	1.034	F
6	Pacific Coast Hwy &	AM	0.901	E	0.908	E
	El Segundo Blvd	PM	1.170	F	1.172	F
7	Nash St &	AM	0.699	B	0.699	B
	Imperial Hwy	PM	0.574	A	0.574	A
8	Lairport St &	AM	0.424	A	0.424	A
	Mariposa Ave	PM	0.417	A	0.417	A
9	Nash St &	AM	0.463	A	0.464	A
	Mariposa Ave	PM	0.595	A	0.595	A
10	Kansas St &	AM	0.319	A	0.319	A
	Grand Ave	PM	0.368	A	0.368	A
11	Continental Blvd &	AM	0.547	A	0.549	A
	El Segundo Blvd	PM	0.587	A	0.590	A
12	Nash St &	AM	0.638	B	0.640	B
	El Segundo Blvd	PM	0.702	C	0.705	C

[a] As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.

TABLE 3B
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE PLUS PROJECT INTERSECTION LEVEL OF SERVICE
UNSIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)		FUTURE + PROJECT	
			Delay	LOS	Delay	LOS
A [a]	Pacific Coast Hwy &	AM	265.0	F	**	F
	Palm Ave	PM	156.1	F	237.1	F
B [a]	Pacific Coast Hwy &	AM	**	F	**	F
	Holly Ave	PM	**	F	**	F
C	Indiana St &	AM	11.4	B	11.5	B
	Mariposa Ave	PM	13.2	B	13.5	B
D	Indiana St &	AM	7.4	A	7.5	A
	Holly Ave	PM	7.7	A	7.7	A

[a] A signal warrant analysis was conducted to test the need for traffic signals at intersections with a delay increase of greater than four seconds.
** Indicates oversaturated conditions. Delay exceeds 300 seconds.

TABLE 4
PACIFIC COAST COMMONS PROJECT
REVISED PEAK HOUR SIGNAL WARRANT ANALYSIS

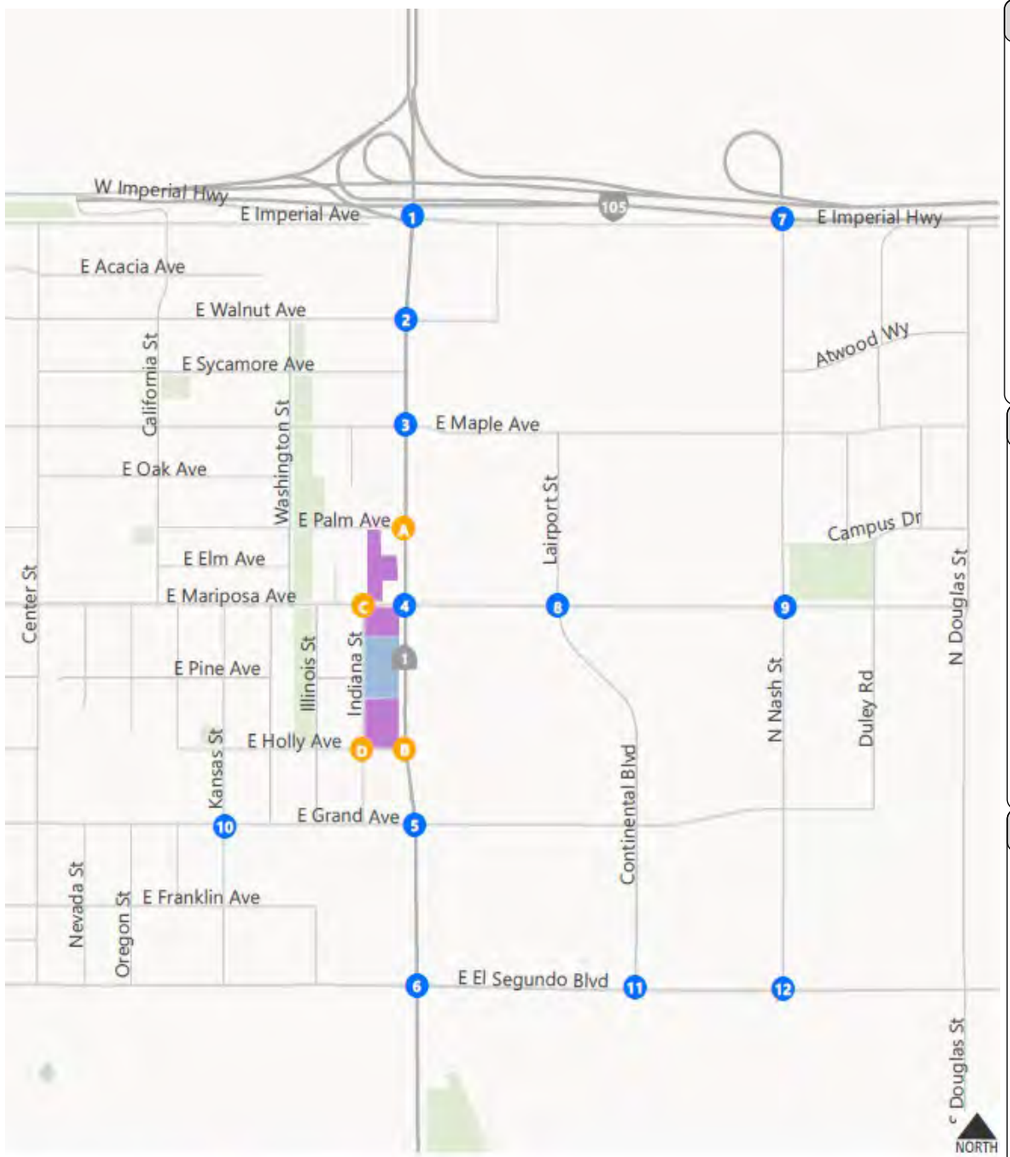
No.	INTERSECTIONS	PEAK HOUR	FUTURE 2027 SIGNAL WARRANT MET	FUTURE 2027 PLUS PROJECT SIGNAL WARRANT MET
A	Pacific Coast Highway & Palm Avenue	AM	NO	NO
		PM	NO	NO
B	Pacific Coast Highway & Holly Avenue	AM	NO	NO
		PM	NO	NO

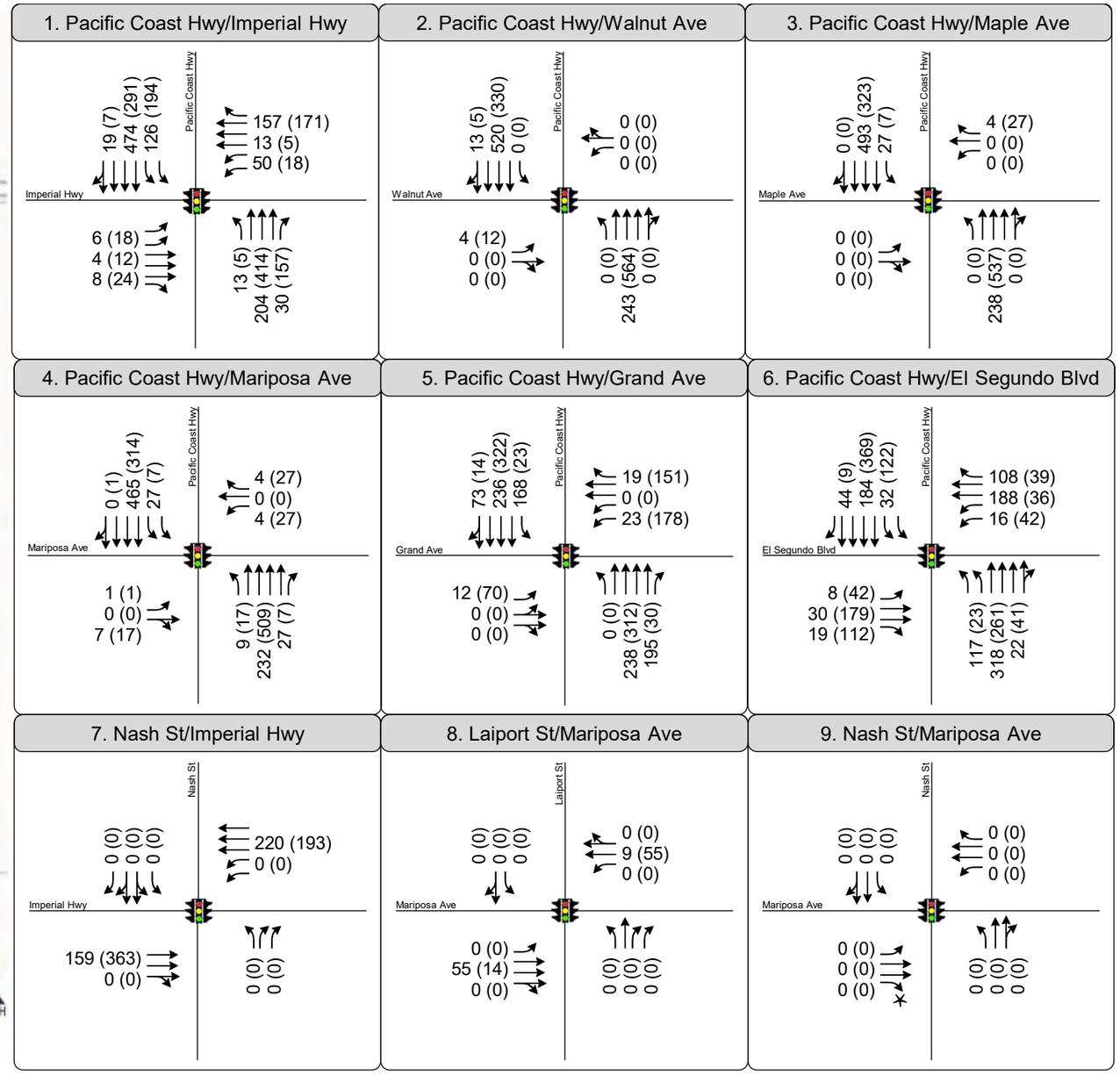
TABLE 5
PACIFIC COAST COMMONS PROJECT
REVISED DRIVEWAY LEVEL OF SERVICE ANALYSIS

DRIVEWAY	PEAK HOUR	FUTURE + PROJECT	
		Delay	LOS
Pacific Coast Hwy &	AM	28.5	D
Pacific Coast Commons South Dwy	PM	35.4	E

TABLE 6
PACIFIC COAST COMMONS PROJECT
REVISED DRIVEWAY QUEUE ANALYSIS

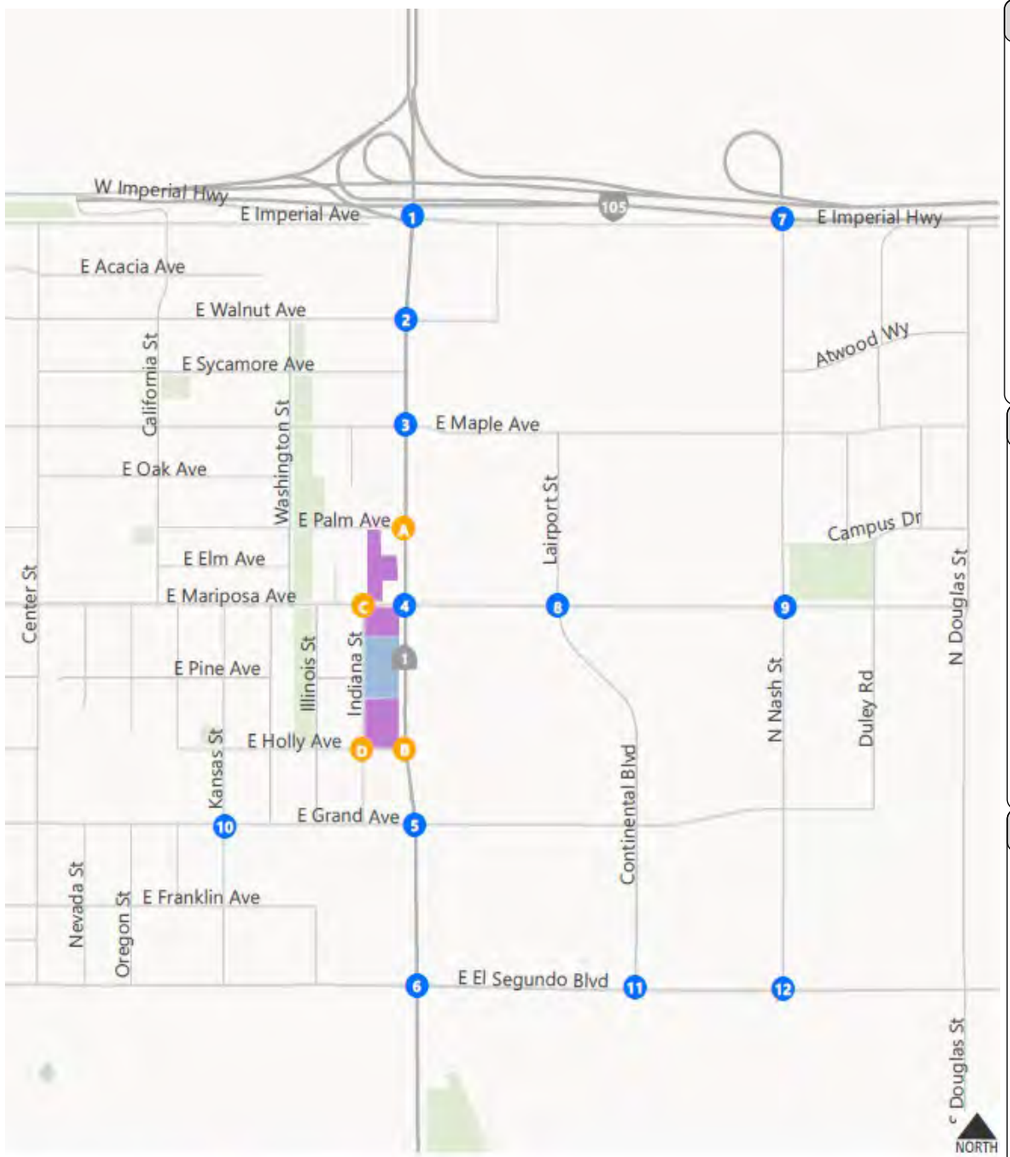
DRIVEWAY	PEAK HOUR	FUTURE + PROJECT
		95th% Queue (ft)
Pacific Coast Hwy &	AM	25
Pacific Coast Commons South Dwy	PM	25





*De facto right turn

Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Revised Related Projects



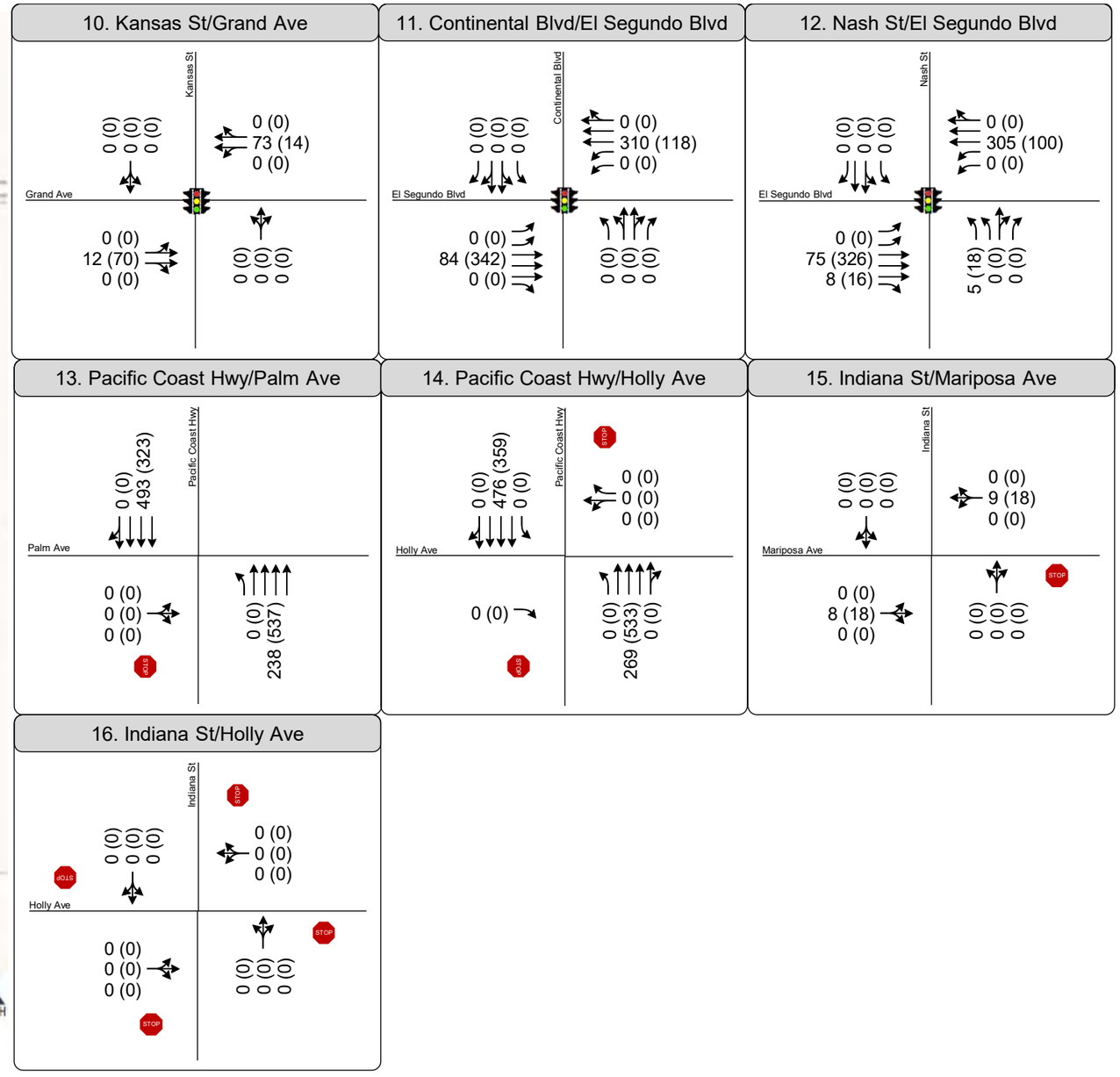
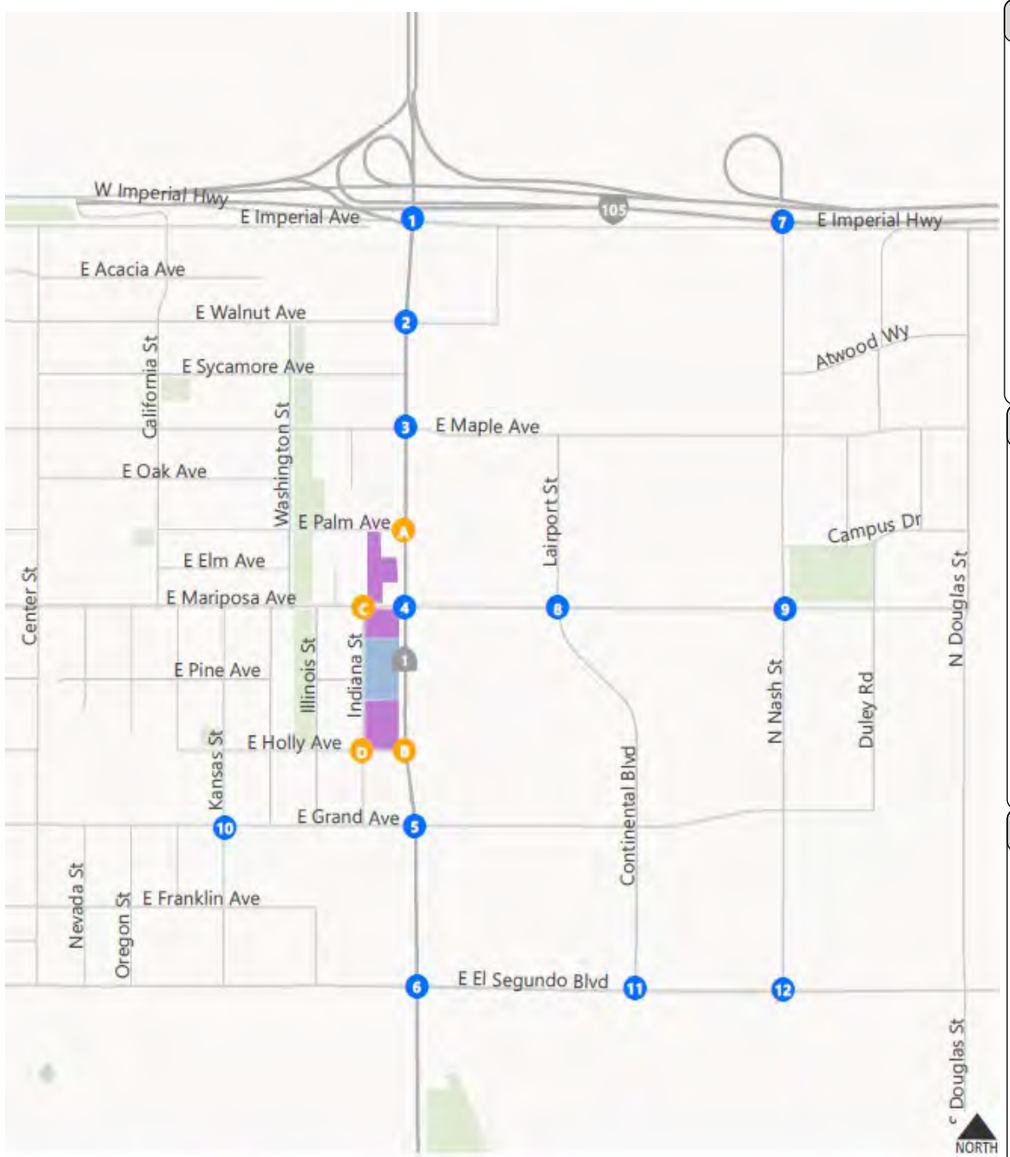
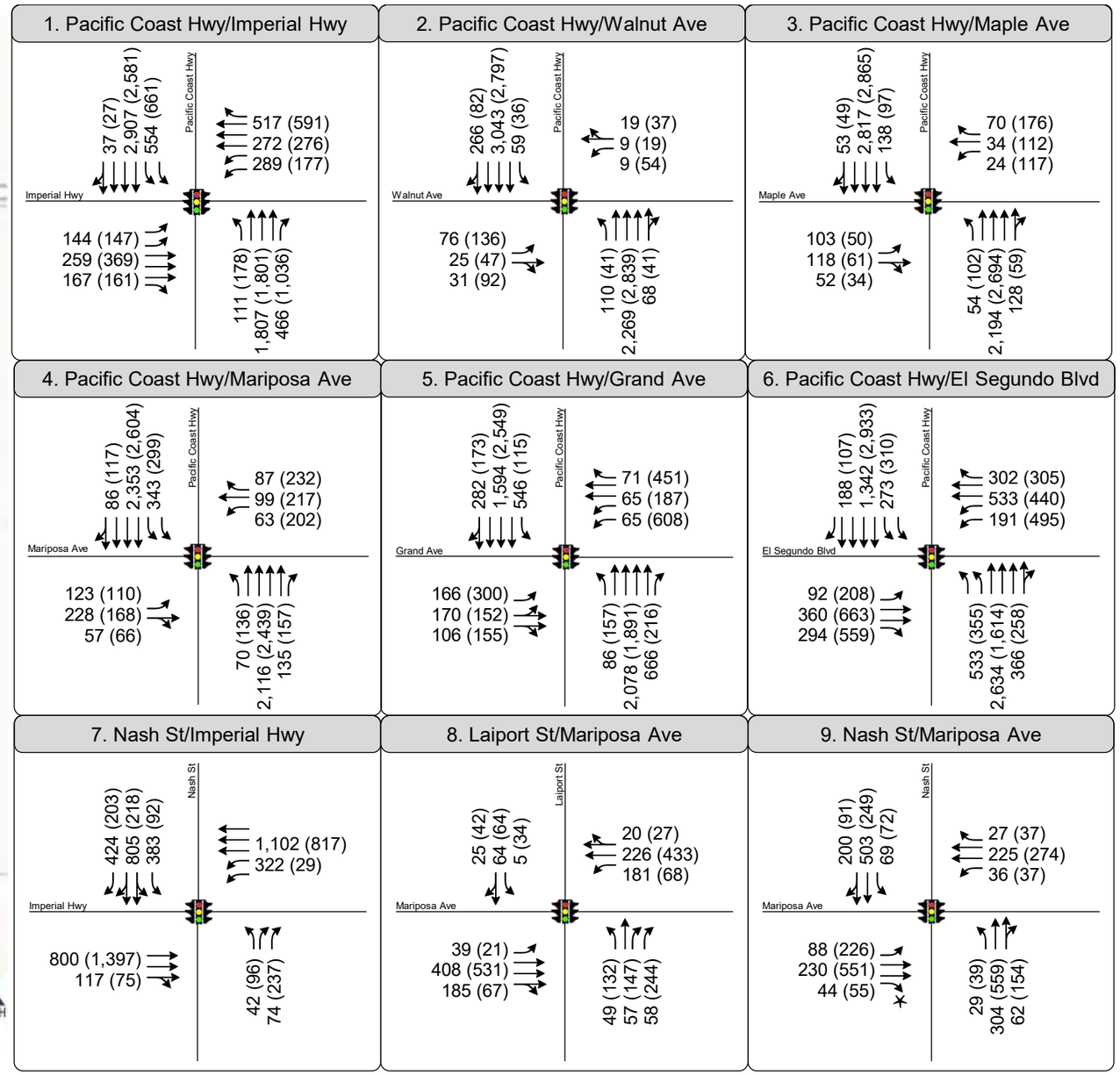


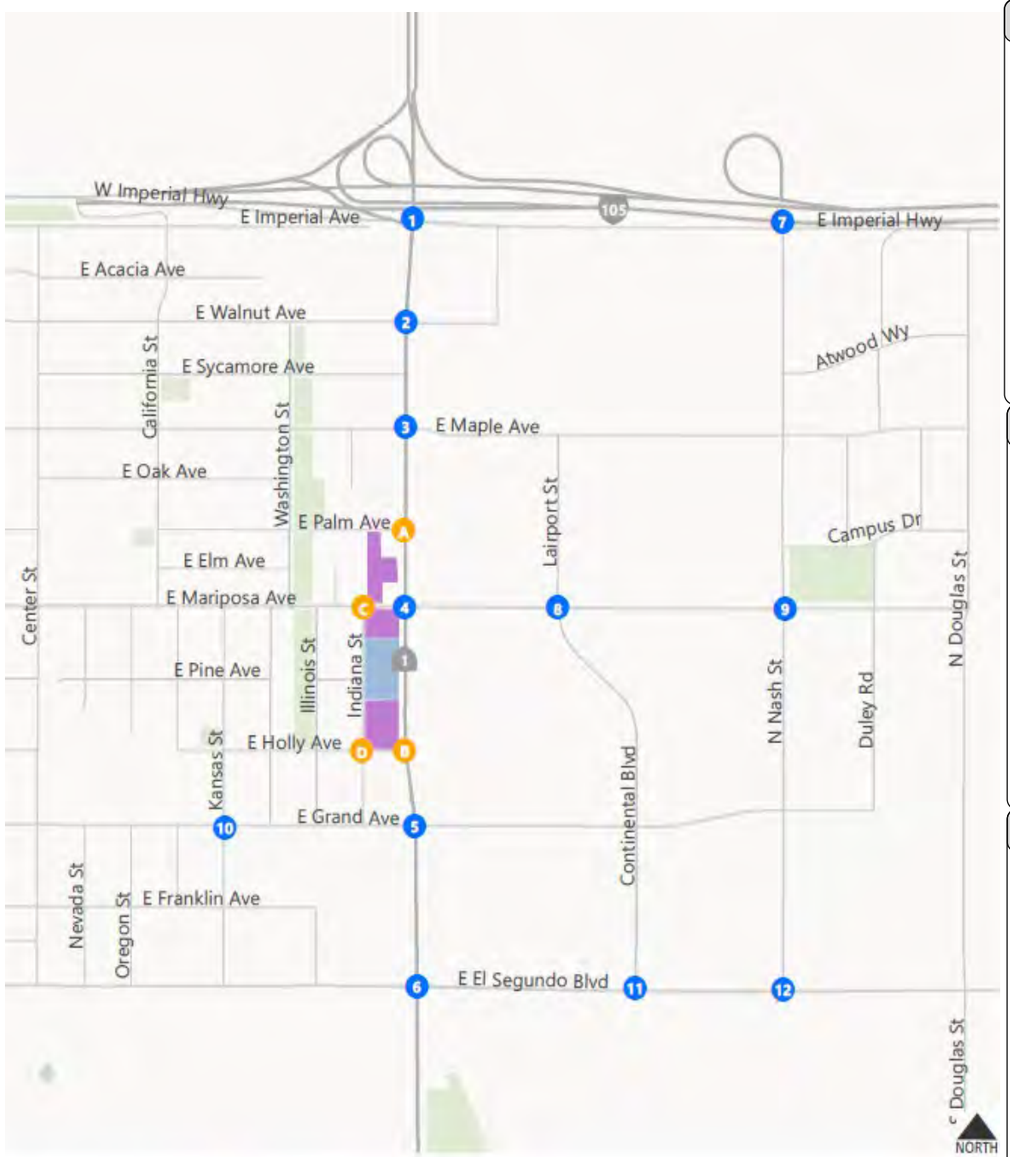
Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Revised Related Projects

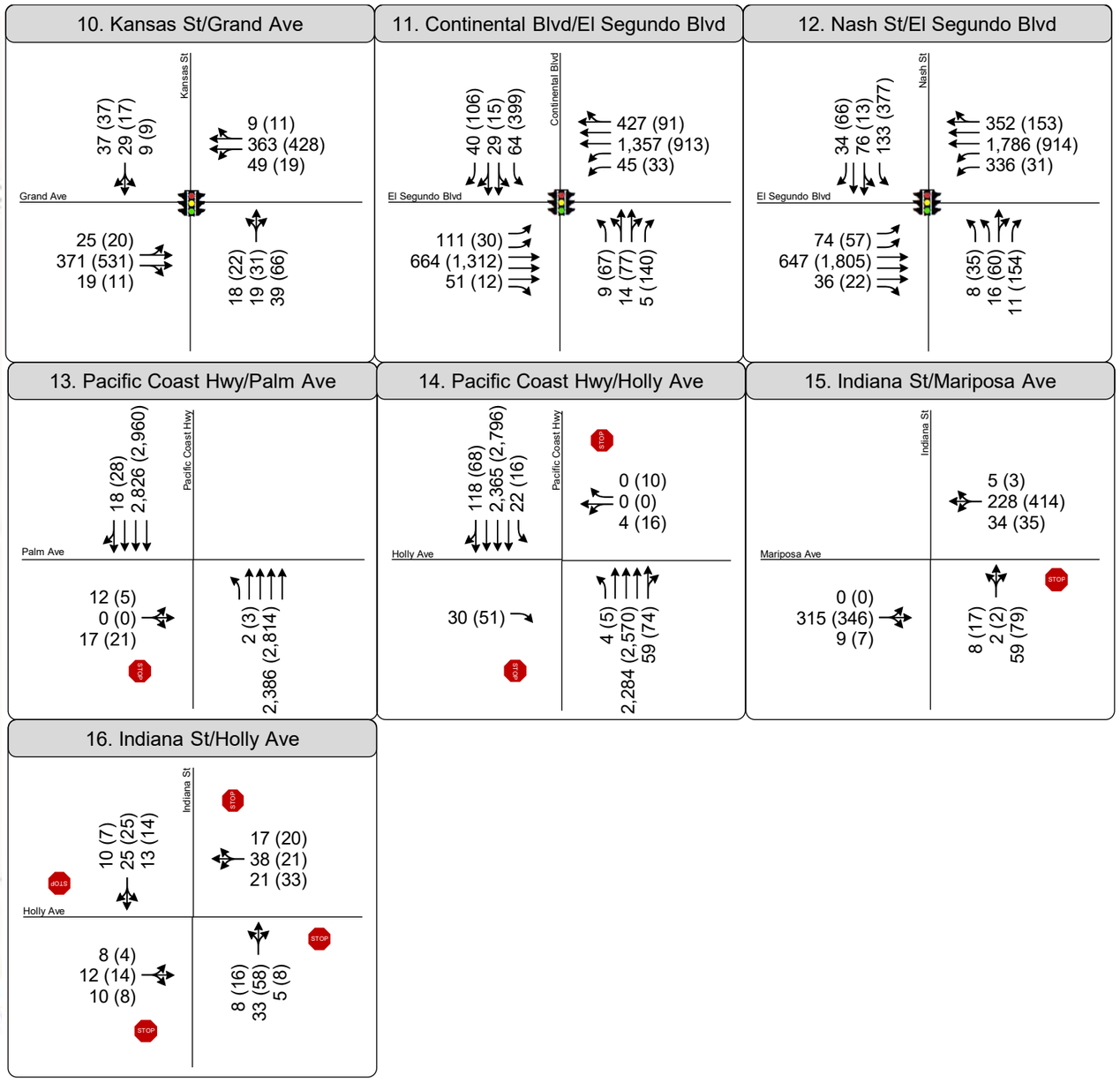




*De facto right turn

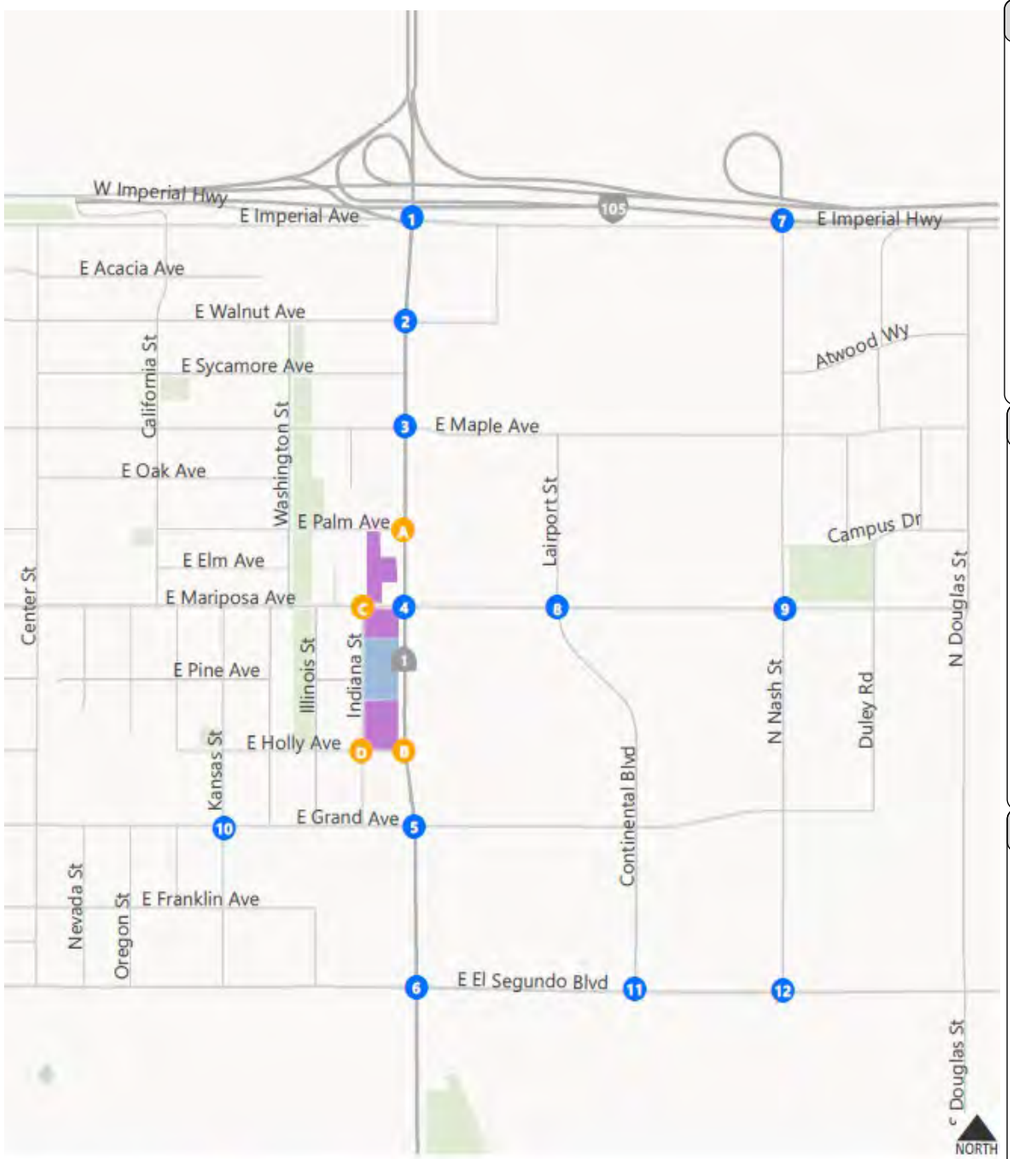
Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Revised Future (2027) Conditions

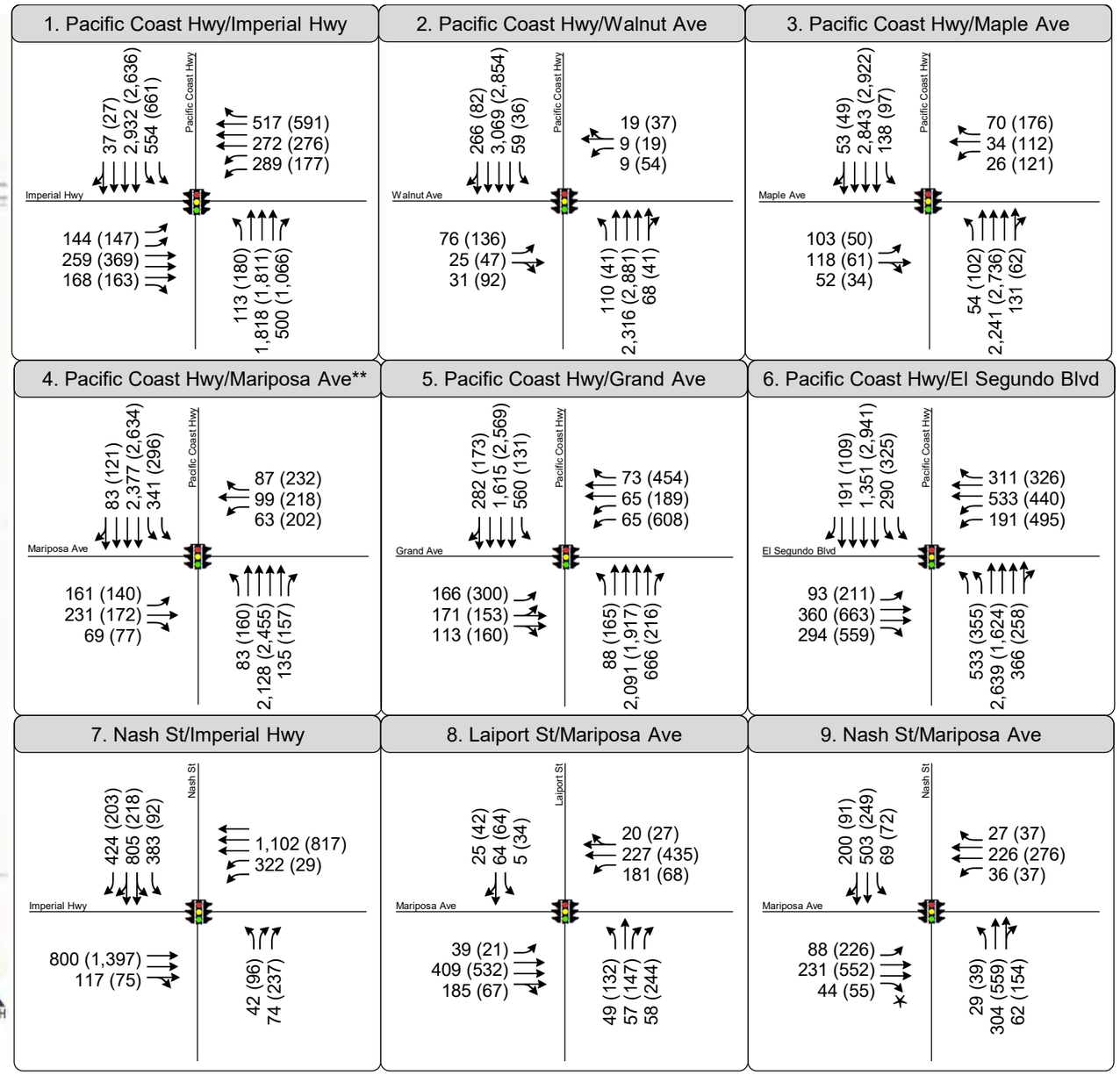




*De facto right turn

Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Revised Future (2027) Conditions

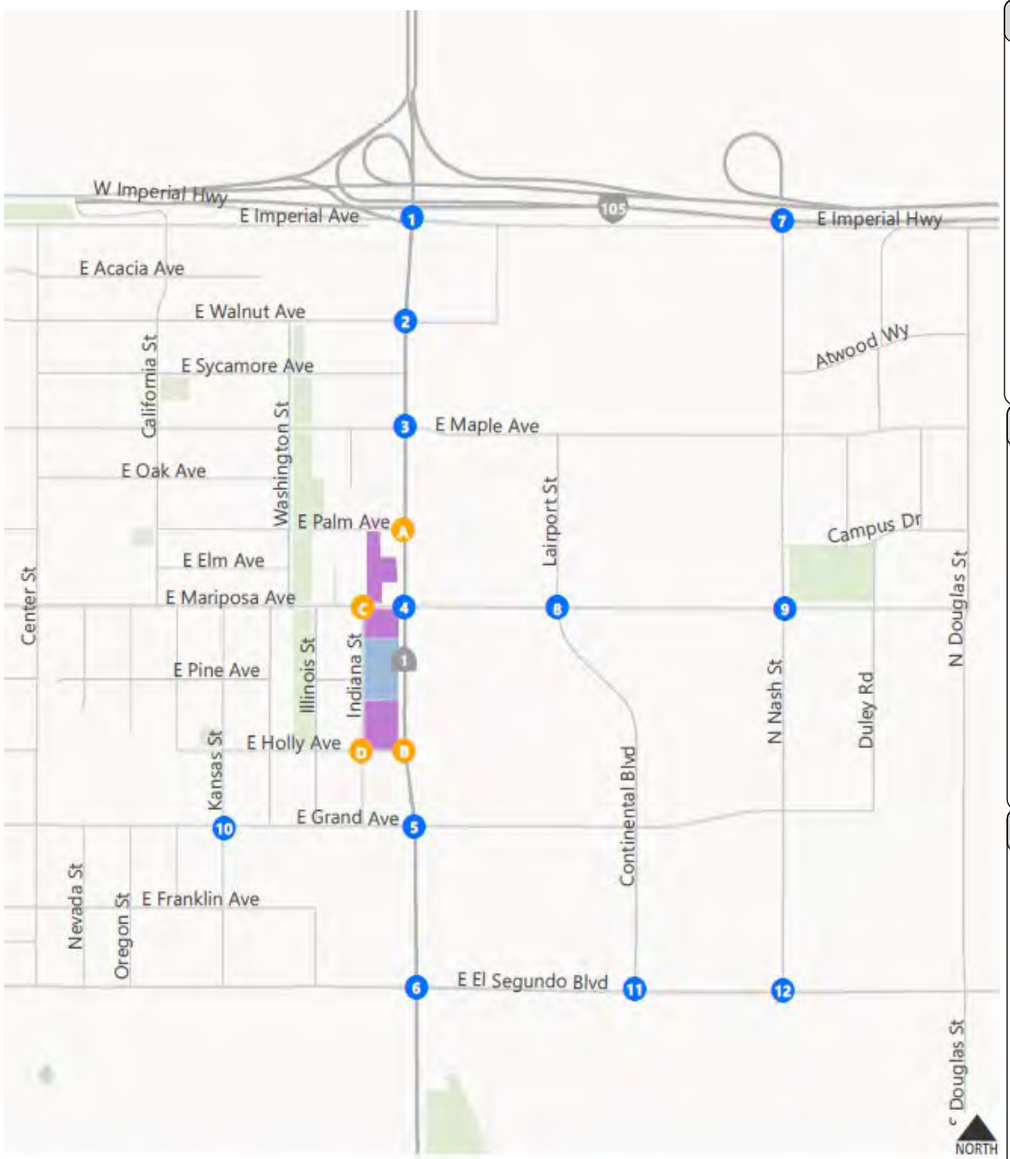


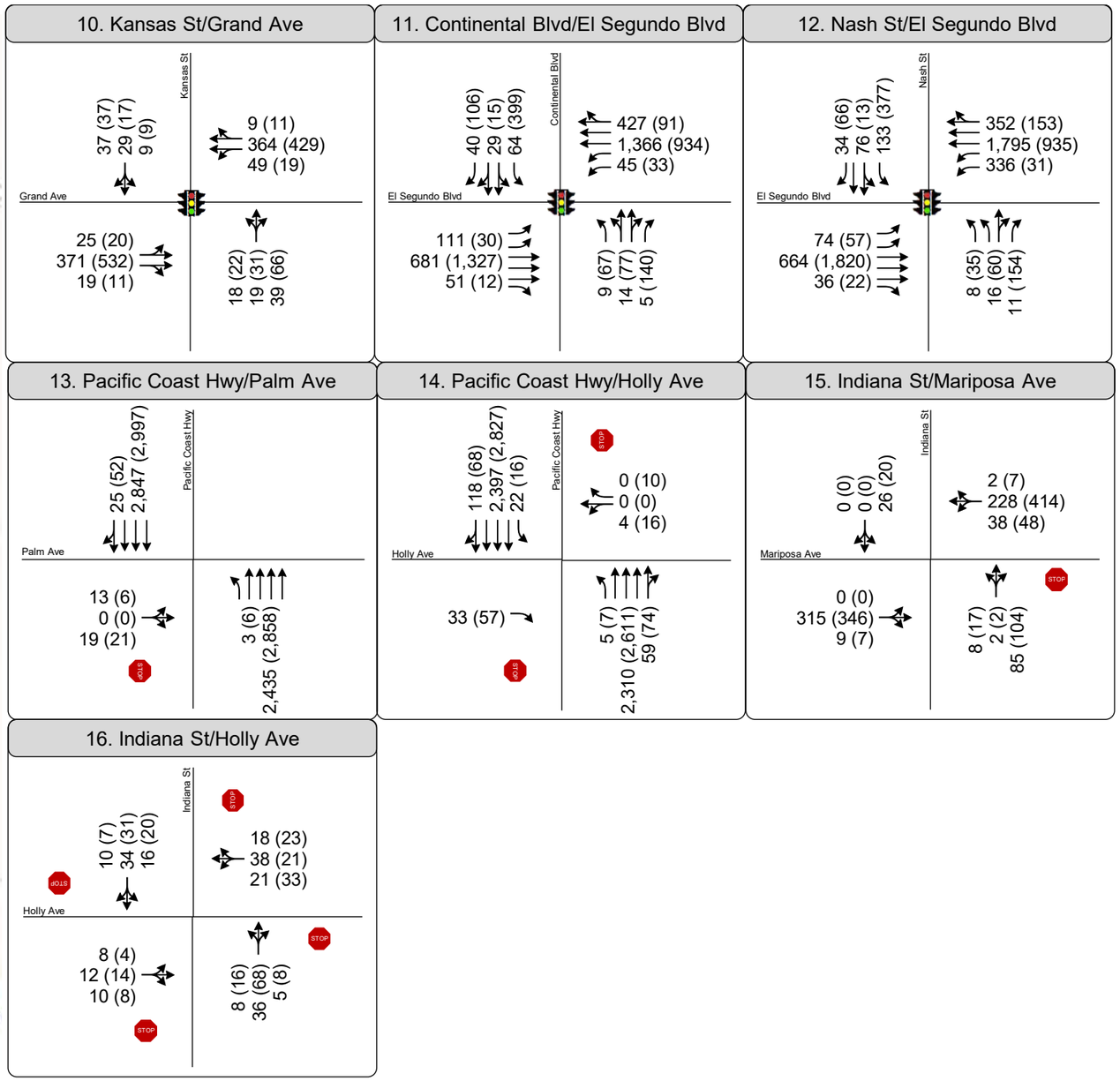


*De facto right turn

**As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (Intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.

Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Revised Future + Project (2027) Conditions





*De facto right turn

Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Revised Future + Project (2027) Conditions

ATTACHMENT A

Level of Service Analysis Worksheets

Project Title: **Pacific Coast Commons Project**
Intersection: **1 - Pacific Coast Hwy & Imperial Hwy**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	WBR		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.592 *
	TH	4.00	2,907	6,400	0.460	N-S(2):	0.529
	LT	2.00	554	2,560	0.216 *	E-W(1):	0.183 *
Westbound	RT	1.00	517	1,600	0.107	E-W(2):	0.163
	TH	3.00	272	4,800	0.057		
	LT	2.00	289	2,560	0.113 *	V/C:	0.775
Northbound	RT	1.00	466	1,600	0.235	Lost Time:	0.100
	TH	3.00	1,807	4,800	0.376 *	ITS:	0.000
	LT	1.00	111	1,600	0.069		
Eastbound	RT	1.00	167	1,600	0.070 *	ICU:	0.875
	TH	3.00	259	4,800	0.054		
	LT	2.00	144	2,560	0.056	LOS:	D

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000	N-S(1):	0.871 *
	TH	4.00	2,581	6,400	0.408	N-S(2):	0.519
	LT	2.00	661	2,560	0.258 *	E-W(1):	0.146
Westbound	RT	1.00	591	1,600	0.111 *	E-W(2):	0.168 *
	TH	3.00	276	4,800	0.058		
	LT	2.00	177	2,560	0.069	V/C:	1.039
Northbound	RT	1.00	1,036	1,600	0.613 *	Lost Time:	0.100
	TH	3.00	1,801	4,800	0.375	ITS:	0.000
	LT	1.00	178	1,600	0.111		
Eastbound	RT	1.00	161	1,600	0.045	ICU:	1.139
	TH	3.00	369	4,800	0.077		
	LT	2.00	147	2,560	0.057 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **2 - Pacific Coast Hwy & Walnut Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	266	0	0.000	N-S(1):	0.402
	TH	4.00	3,043	6,400	0.517 *	N-S(2):	0.586 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.041
Westbound	RT	0.68	19	1,086	0.000	E-W(2):	0.066 *
	TH	0.32	9	514	0.018 *		
	LT	1.00	9	1,600	0.006	V/C:	0.652
Northbound	RT	0.00	68	0	0.000	Lost Time:	0.100
	TH	4.00	2,269	6,400	0.365	ITS:	0.000
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.55	31	886	0.001	ICU:	0.752
	TH	0.45	25	714	0.035		
	LT	1.00	76	1,600	0.048 *	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.473
	TH	4.00	2,797	6,400	0.450 *	N-S(2):	0.476 *
	LT	1.00	36	1,600	0.023	E-W(1):	0.121 *
Westbound	RT	0.66	37	1,057	0.024	E-W(2):	0.120
	TH	0.34	19	543	0.035		
	LT	1.00	54	1,600	0.034 *	V/C:	0.597
Northbound	RT	0.00	41	0	0.000	Lost Time:	0.100
	TH	4.00	2,839	6,400	0.450	ITS:	0.000
	LT	1.00	41	1,600	0.026 *		
Eastbound	RT	0.66	92	1,059	0.074	ICU:	0.697
	TH	0.34	47	541	0.087 *		
	LT	1.00	136	1,600	0.085	LOS:	B

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **3 - Pacific Coast Hwy & Maple Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	53	0	0.000	N-S(1):	0.449
	TH	4.00	2,817	6,400	0.448 *	N-S(2):	0.482 *
	LT	1.00	138	1,600	0.086	E-W(1):	0.121 *
Westbound	RT	1.00	70	1,600	0.001	E-W(2):	0.085
	TH	1.00	34	1,600	0.021		
	LT	1.00	24	1,600	0.015 *	V/C:	0.603
Northbound	RT	0.00	128	0	0.000	Lost Time:	0.100
	TH	4.00	2,194	6,400	0.363	ITS:	0.000
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.31	52	489	0.089	ICU:	0.703
	TH	0.69	118	1,111	0.106 *		
	LT	1.00	103	1,600	0.064	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.491
	TH	4.00	2,865	6,400	0.455 *	N-S(2):	0.519 *
	LT	1.00	97	1,600	0.061	E-W(1):	0.132 *
Westbound	RT	1.00	176	1,600	0.080	E-W(2):	0.111
	TH	1.00	112	1,600	0.070		
	LT	1.00	117	1,600	0.073 *	V/C:	0.651
Northbound	RT	0.00	59	0	0.000	Lost Time:	0.100
	TH	4.00	2,694	6,400	0.430	ITS:	0.000
	LT	1.00	102	1,600	0.064 *		
Eastbound	RT	0.36	34	573	0.028	ICU:	0.751
	TH	0.64	61	1,027	0.059 *		
	LT	1.00	50	1,600	0.031	LOS:	C

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **4 - Pacific Coast Hwy & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	86	0	0.000	N-S(1):	0.465 *
	TH	4.00	2,353	6,400	0.381	N-S(2):	0.425
	LT	2.00	343	2,560	0.134 *	E-W(1):	0.217 *
Westbound	RT	1.00	87	1,600	0.000	E-W(2):	0.139
	TH	1.00	99	1,600	0.062		
	LT	1.00	63	1,600	0.039 *	V/C:	0.682
Northbound	RT	1.00	135	1,600	0.065	Lost Time:	0.100
	TH	4.00	2,116	6,400	0.331 *	ITS:	0.000
	LT	1.00	70	1,600	0.044		
Eastbound	RT	0.20	57	320	0.156	ICU:	0.782
	TH	0.80	228	1,280	0.178 *		
	LT	1.00	123	1,600	0.077	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.498
	TH	4.00	2,604	6,400	0.425 *	N-S(2):	0.510 *
	LT	2.00	299	2,560	0.117	E-W(1):	0.272 *
Westbound	RT	1.00	232	1,600	0.087	E-W(2):	0.205
	TH	1.00	217	1,600	0.136		
	LT	1.00	202	1,600	0.126 *	V/C:	0.782
Northbound	RT	1.00	157	1,600	0.035	Lost Time:	0.100
	TH	4.00	2,439	6,400	0.381	ITS:	0.000
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.28	66	451	0.104	ICU:	0.882
	TH	0.72	168	1,149	0.146 *		
	LT	1.00	110	1,600	0.069	LOS:	D

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **5 - Pacific Coast Hwy & Grand Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	NBR,		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	282	0	0.000	N-S(1):	0.732 *
	TH	4.00	1,594	6,400	0.293	N-S(2):	0.347
	LT	1.00	546	1,600	0.341 *	E-W(1):	0.140 *
Westbound	RT	1.00	71	1,600	0.000	E-W(2):	0.000
	TH	2.00	65	3,200	0.020		
	LT	2.00	65	2,560	0.025 *	V/C:	0.872
Northbound	RT	1.00	666	1,600	0.391 *	Lost Time:	0.100
	TH	4.00	2,078	6,400	0.325	ITS:	0.000
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	106	0	0.000	ICU:	0.972
	TH	1.87	170	2,997	0.092		
	LT	1.13	166	1,442	0.115 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	173	0	0.000	N-S(1):	0.367
	TH	4.00	2,549	6,400	0.425 *	N-S(2):	0.523 *
	LT	1.00	115	1,600	0.072	E-W(1):	0.404 *
Westbound	RT	1.00	451	1,600	0.246 *	E-W(2):	0.000
	TH	2.00	187	3,200	0.058		
	LT	2.00	608	2,560	0.238	V/C:	0.927
Northbound	RT	1.00	216	1,600	0.000	Lost Time:	0.100
	TH	4.00	1,891	6,400	0.295	ITS:	0.000
	LT	1.00	157	1,600	0.098 *		
Eastbound	RT	0.00	155	0	0.000	ICU:	1.027
	TH	1.52	152	2,428	0.126		
	LT	1.48	300	1,898	0.158 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **6 - Pacific Coast Hwy & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	188	1,600	0.089	N-S(1):	0.576 *
	TH	4.00	1,342	6,400	0.210	N-S(2):	0.418
	LT	2.00	273	2,560	0.107 *	E-W(1):	0.188
Westbound	RT	1.00	302	1,600	0.135	E-W(2):	0.225 *
	TH	2.00	533	3,200	0.167 *		
	LT	2.00	191	2,560	0.075	V/C:	0.801
Northbound	RT	0.00	366	0	0.000	Lost Time:	0.100
	TH	4.00	2,634	6,400	0.469 *	ITS:	0.000
	LT	2.00	533	2,560	0.208		
Eastbound	RT	1.00	294	1,600	0.080	ICU:	0.901
	TH	2.00	360	3,200	0.113		
	LT	1.00	92	1,600	0.058 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	107	1,600	0.002	N-S(1):	0.414
	TH	4.00	2,933	6,400	0.458 *	N-S(2):	0.597 *
	LT	2.00	310	2,560	0.121	E-W(1):	0.473 *
Westbound	RT	1.00	305	1,600	0.130	E-W(2):	0.268
	TH	2.00	440	3,200	0.138		
	LT	2.00	495	2,560	0.193 *	V/C:	1.070
Northbound	RT	0.00	258	0	0.000	Lost Time:	0.100
	TH	4.00	1,614	6,400	0.293	ITS:	0.000
	LT	2.00	355	2,560	0.139 *		
Eastbound	RT	1.00	559	1,600	0.280 *	ICU:	1.170
	TH	2.00	663	3,200	0.207		
	LT	1.00	208	1,600	0.130	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **7 - Nash St & Imperial Hwy**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.03	424	1,656	0.256	N-S(1):	0.282 *
	TH	1.97	805	3,144	0.256 *	N-S(2):	0.000
	LT	1.00	383	1,600	0.239	E-W(1):	0.317 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.230
	TH	3.00	1,102	4,800	0.230		
	LT	2.00	322	2,560	0.126 *	V/C:	0.599
Northbound	RT	2.00	74	3,200	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	42	1,600	0.026 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.699
	TH	3.00	800	4,800	0.191 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.45	203	2,314	0.088	N-S(1):	0.156 *
	TH	1.55	218	2,486	0.088 *	N-S(2):	0.000
	LT	1.00	92	1,600	0.058	E-W(1):	0.318 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.170
	TH	3.00	817	4,800	0.170		
	LT	2.00	29	2,560	0.011 *	V/C:	0.474
Northbound	RT	2.00	237	3,200	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	96	1,600	0.060		
Eastbound	RT	0.00	75	0	0.000	ICU:	0.574
	TH	3.00	1,397	4,800	0.307 *		
	LT	0.00	0	0	0.000	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **8 - Laiport St & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.28	25	449	0.043	N-S(1):	0.039
	TH	0.72	64	1,151	0.056 *	N-S(2):	0.087 *
	LT	1.00	5	1,600	0.003	E-W(1):	0.237 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.101
	TH	2.00	226	3,200	0.077		
	LT	1.00	181	1,600	0.113 *	V/C:	0.324
Northbound	RT	2.00	58	3,200	0.000	Lost Time:	0.100
	TH	1.00	57	1,600	0.036	ITS:	0.000
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	0.424
	TH	3.00	408	4,800	0.124 *		
	LT	1.00	39	1,600	0.024	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.40	42	634	0.060	N-S(1):	0.113
	TH	0.60	64	966	0.066 *	N-S(2):	0.149 *
	LT	1.00	34	1,600	0.021	E-W(1):	0.168 *
Westbound	RT	0.00	27	0	0.000	E-W(2):	0.157
	TH	2.00	433	3,200	0.144		
	LT	1.00	68	1,600	0.043 *	V/C:	0.317
Northbound	RT	2.00	244	3,200	0.055	Lost Time:	0.100
	TH	1.00	147	1,600	0.092	ITS:	0.000
	LT	1.00	132	1,600	0.083 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.417
	TH	3.00	531	4,800	0.125 *		
	LT	1.00	21	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **9 - Nash St & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	200	0	0.000	N-S(1):	0.157
	TH	2.00	503	3,200	0.220 *	N-S(2):	0.238 *
	LT	1.00	69	1,600	0.043	E-W(1):	0.095
Westbound	RT	1.00	27	1,600	0.000	E-W(2):	0.125 *
	TH	2.00	225	3,200	0.070 *		
	LT	1.00	36	1,600	0.023	V/C:	0.363
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	2.00	304	3,200	0.114	ITS:	0.000
	LT	1.00	29	1,600	0.018 *		
Eastbound	RT	1.00	44	1,600	0.018	ICU:	0.463
	TH	2.00	230	3,200	0.072		
	LT	1.00	88	1,600	0.055 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.268 *
	TH	2.00	249	3,200	0.106	N-S(2):	0.130
	LT	1.00	72	1,600	0.045 *	E-W(1):	0.195
Westbound	RT	1.00	37	1,600	0.001	E-W(2):	0.227 *
	TH	2.00	274	3,200	0.086 *		
	LT	1.00	37	1,600	0.023	V/C:	0.495
Northbound	RT	0.00	154	0	0.000	Lost Time:	0.100
	TH	2.00	559	3,200	0.223 *	ITS:	0.000
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	55	1,600	0.022	ICU:	0.595
	TH	2.00	551	3,200	0.172		
	LT	1.00	226	1,600	0.141 *	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **10 - Kansas St & Grand Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.054
	TH	1.00	29	1,600	0.047 *	N-S(2):	0.058 *
	LT	0.00	9	1,600	0.006	E-W(1):	0.161 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.148
	TH	2.00	363	1,600	0.132		
	LT	0.00	49	1,600	0.031 *	V/C:	0.219
Northbound	RT	0.00	39	0	0.000	Lost Time:	0.100
	TH	1.00	19	1,600	0.048	ITS:	0.000
	LT	0.00	18	1,600	0.011 *		
Eastbound	RT	0.00	19	0	0.000	ICU:	0.319
	TH	2.00	371	1,600	0.130 *		
	LT	0.00	25	1,600	0.016	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.080 *
	TH	1.00	17	1,600	0.039	N-S(2):	0.053
	LT	0.00	9	1,600	0.006 *	E-W(1):	0.188 *
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.156
	TH	2.00	428	1,600	0.143		
	LT	0.00	19	1,600	0.012 *	V/C:	0.268
Northbound	RT	0.00	66	0	0.000	Lost Time:	0.100
	TH	1.00	31	1,600	0.074 *	ITS:	0.000
	LT	0.00	22	1,600	0.014		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.368
	TH	2.00	531	1,600	0.176 *		
	LT	0.00	20	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **11 - Continental Blvd & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.20	40	1,925	0.000	N-S(1):	0.032 *
	TH	0.87	29	1,395	0.021	N-S(2):	0.000
	LT	1.92	64	2,464	0.026 *	E-W(1):	0.156
Westbound	RT	0.00	427	0	0.000	E-W(2):	0.415 *
	TH	3.00	1,357	4,800	0.372 *		
	LT	2.00	45	2,560	0.018	V/C:	0.447
Northbound	RT	1.00	5	1,600	0.000	Lost Time:	0.100
	TH	1.83	14	2,922	0.005	ITS:	0.000
	LT	1.17	9	1,503	0.006 *		
Eastbound	RT	1.00	51	1,600	0.029	ICU:	0.547
	TH	3.00	664	4,800	0.138		
	LT	2.00	111	2,560	0.043 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.75	106	2,803	0.032	N-S(1):	0.201 *
	TH	0.25	15	397	0.038	N-S(2):	0.000
	LT	2.00	399	2,560	0.156 *	E-W(1):	0.286 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.221
	TH	3.00	913	4,800	0.209		
	LT	2.00	33	2,560	0.013 *	V/C:	0.487
Northbound	RT	1.94	140	3,097	0.039	Lost Time:	0.100
	TH	1.06	77	1,703	0.045 *	ITS:	0.000
	LT	1.00	67	1,600	0.042		
Eastbound	RT	1.00	12	1,600	0.000	ICU:	0.587
	TH	3.00	1,312	4,800	0.273 *		
	LT	2.00	30	2,560	0.012	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **12 - Nash St & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	34	1,600	0.007	N-S(1):	0.064 *
	TH	1.09	76	1,745	0.044	N-S(2):	0.000
	LT	1.91	133	2,444	0.054 *	E-W(1):	0.266
Westbound	RT	0.00	352	0	0.000	E-W(2):	0.474 *
	TH	3.00	1,786	4,800	0.445 *		
	LT	2.00	336	2,560	0.131	V/C:	0.538
Northbound	RT	1.00	11	1,600	0.000	Lost Time:	0.100
	TH	1.00	16	1,600	0.010 *	ITS:	0.000
	LT	2.00	8	2,560	0.003		
Eastbound	RT	1.00	36	1,600	0.021	ICU:	0.638
	TH	3.00	647	4,800	0.135		
	LT	2.00	74	2,560	0.029 *	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.030	N-S(1):	0.214 *
	TH	1.00	13	1,600	0.008	N-S(2):	0.000
	LT	2.00	377	2,560	0.147 *	E-W(1):	0.388 *
Westbound	RT	0.00	153	0	0.000	E-W(2):	0.244
	TH	3.00	914	4,800	0.222		
	LT	2.00	31	2,560	0.012 *	V/C:	0.602
Northbound	RT	1.44	154	2,303	0.061	Lost Time:	0.100
	TH	0.56	60	897	0.067 *	ITS:	0.000
	LT	2.00	35	2,560	0.014		
Eastbound	RT	1.00	22	1,600	0.007	ICU:	0.702
	TH	3.00	1,805	4,800	0.376 *		
	LT	2.00	57	2,560	0.022	LOS:	C

* - Denotes critical movement

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	17	2	1850	2243	18
Future Vol, veh/h	12	17	2	1850	2243	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	18	2	2011	2438	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3256	1229	2458	0	-	0
Stage 1	2448	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	19	146	73	-	-	-
Stage 1	29	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	18	146	73	-	-	-
Mov Cap-2 Maneuver	18	-	-	-	-	-
Stage 1	28	-	-	-	-	-
Stage 2	362	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	265	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	73	-	37	-	-
HCM Lane V/C Ratio	0.03	-	0.852	-	-
HCM Control Delay (s)	55.8	-	265	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	3.1	-	-

2021

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	30	4	0	0	4	1780	59	22	1892	118
Future Vol, veh/h	0	0	30	4	0	0	4	1780	59	22	1892	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	33	4	0	0	4	1935	64	24	2057	128

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1093	2846	4208	1000	2185	0	0	1999	0	0
Stage 1	-	-	-	1975	1975	-	-	-	-	-	-	-
Stage 2	-	-	-	871	2233	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	180	18	2	207	101	-	-	125	-	-
Stage 1	0	0	-	40	106	-	-	-	-	-	-	-
Stage 2	0	0	-	283	78	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	180	12	2	207	101	-	-	125	-	-
Mov Cap-2 Maneuver	-	-	-	12	2	-	-	-	-	-	-	-
Stage 1	-	-	-	38	102	-	-	-	-	-	-	-
Stage 2	-	-	-	187	63	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.4	$ 425.1	0.1	0.4
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	101	-	-	180	12	-	125	-	-
HCM Lane V/C Ratio	0.043	-	-	0.181	0.362	-	0.191	-	-
HCM Control Delay (s)	42.2	-	-	29.4	$ 425.1	0	40.5	-	-
HCM Lane LOS	E	-	-	D	F	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.9	-	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	21	3	2245	2300	28
Future Vol, veh/h	5	21	3	2245	2300	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	23	3	2440	2500	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3497	1265	2530	0	-	0
Stage 1	2515	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	14	138	67	-	-	-
Stage 1	26	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	13	138	67	-	-	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	25	-	-	-	-	-
Stage 2	292	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	156.1	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	67	-	48	-	-
HCM Lane V/C Ratio	0.049	-	0.589	-	-
HCM Control Delay (s)	61.5	-	156.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	2.2	-	-

2023

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	51	16	0	10	5	2061	74	16	2187	68
Future Vol, veh/h	0	0	51	16	0	10	5	2061	74	16	2187	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	55	17	0	11	5	2240	80	17	2377	74

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1226	3275	4775	1160	2451	0	0	2320	0	0
Stage 1	-	-	-	2290	2290	-	-	-	-	-	-	-
Stage 2	-	-	-	985	2485	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	146	~ 10	1	162	73	-	-	86	-	-
Stage 1	0	0	-	24	73	-	-	-	-	-	-	-
Stage 2	0	0	-	240	58	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	146	~ 5	1	162	73	-	-	86	-	-
Mov Cap-2 Maneuver	-	-	-	~ 5	1	-	-	-	-	-	-	-
Stage 1	-	-	-	22	68	-	-	-	-	-	-	-
Stage 2	-	-	-	119	47	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	44	$ 1538.3	0.1	0.4
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	73	-	-	146	5	162	86	-	-
HCM Lane V/C Ratio	0.074	-	-	0.38	3.478	0.067	0.202	-	-
HCM Control Delay (s)	58.2	-	-	44	2481.7	28.8	57.2	-	-
HCM Lane LOS	F	-	-	E	F	D	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.6	3.4	0.2	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2024

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	315	9	34	228	5	8	2	59	0	0	0
Future Vol, veh/h	0	315	9	34	228	5	8	2	59	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	342	10	37	248	5	9	2	64	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	253	0	0	352	0	0	672	674	347
Stage 1	-	-	-	-	-	-	347	347	-
Stage 2	-	-	-	-	-	-	325	327	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1312	-	-	1207	-	-	421	376	696
Stage 1	-	-	-	-	-	-	716	635	-
Stage 2	-	-	-	-	-	-	732	648	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1312	-	-	1207	-	-	406	0	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	406	0	-
Stage 1	-	-	-	-	-	-	690	0	-
Stage 2	-	-	-	-	-	-	732	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	641	1312	-	-	1207	-	-
HCM Lane V/C Ratio	0.117	-	-	-	0.031	-	-
HCM Control Delay (s)	11.4	0	-	-	8.1	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	12	10	21	38	17	8	33	5	13	25	10
Future Vol, veh/h	8	12	10	21	38	17	8	33	5	13	25	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	13	11	23	41	18	9	36	5	14	27	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.2	7.5	7.5	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	27%	28%	27%
Vol Thru, %	72%	40%	50%	52%
Vol Right, %	11%	33%	22%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	30	76	48
LT Vol	8	8	21	13
Through Vol	33	12	38	25
RT Vol	5	10	17	10
Lane Flow Rate	50	33	83	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.036	0.093	0.059
Departure Headway (Hd)	4.142	4.026	4.055	4.1
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	879	876	865
Service Time	2.207	2.096	2.114	2.165
HCM Lane V/C Ratio	0.058	0.038	0.095	0.06
HCM Control Delay	7.5	7.2	7.5	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	346	7	35	414	3	17	2	79	0	0	0
Future Vol, veh/h	0	346	7	35	414	3	17	2	79	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	376	8	38	450	3	18	2	86	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	453	0	0	384	0	0	908	909	380
Stage 1	-	-	-	-	-	-	380	380	-
Stage 2	-	-	-	-	-	-	528	529	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1108	-	-	1174	-	-	306	275	667
Stage 1	-	-	-	-	-	-	691	614	-
Stage 2	-	-	-	-	-	-	592	527	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1108	-	-	1174	-	-	293	0	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	0	-
Stage 1	-	-	-	-	-	-	661	0	-
Stage 2	-	-	-	-	-	-	592	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	544	1108	-	-	1174	-	-
HCM Lane V/C Ratio	0.196	-	-	-	0.032	-	-
HCM Control Delay (s)	13.2	0	-	-	8.2	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	14	8	33	21	20	16	58	8	14	25	7
Future Vol, veh/h	4	14	8	33	21	20	16	58	8	14	25	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	15	9	36	23	22	17	63	9	15	27	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.6	7.7	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	15%	45%	30%
Vol Thru, %	71%	54%	28%	54%
Vol Right, %	10%	31%	27%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	26	74	46
LT Vol	16	4	33	14
Through Vol	58	14	21	25
RT Vol	8	8	20	7
Lane Flow Rate	89	28	80	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.103	0.032	0.092	0.058
Departure Headway (Hd)	4.14	4.082	4.122	4.16
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	863	858	851
Service Time	2.207	2.175	2.201	2.236
HCM Lane V/C Ratio	0.104	0.032	0.093	0.059
HCM Control Delay	7.7	7.3	7.6	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.3	0.2

Project Title: **Pacific Coast Commons Project**
Intersection: **1 - Pacific Coast Hwy & Imperial Hwy**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	WBR		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000		N-S(1):	0.595 *
	TH	4.00	2,932	6,400	0.464		N-S(2):	0.535
	LT	2.00	554	2,560	0.216	*	E-W(1):	0.183 *
Westbound	RT	1.00	517	1,600	0.107		E-W(2):	0.163
	TH	3.00	272	4,800	0.057			
	LT	2.00	289	2,560	0.113	*	V/C:	0.778
Northbound	RT	1.00	500	1,600	0.256		Lost Time:	0.100
	TH	3.00	1,818	4,800	0.379	*	ITS:	0.000
	LT	1.00	113	1,600	0.071			
Eastbound	RT	1.00	168	1,600	0.070	*	ICU:	0.878
	TH	3.00	259	4,800	0.054			
	LT	2.00	144	2,560	0.056		LOS:	D

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000		N-S(1):	0.890 *
	TH	4.00	2,636	6,400	0.416		N-S(2):	0.529
	LT	2.00	661	2,560	0.258	*	E-W(1):	0.146
Westbound	RT	1.00	591	1,600	0.111	*	E-W(2):	0.168 *
	TH	3.00	276	4,800	0.058			
	LT	2.00	177	2,560	0.069		V/C:	1.058
Northbound	RT	1.00	1,066	1,600	0.632	*	Lost Time:	0.100
	TH	3.00	1,811	4,800	0.377		ITS:	0.000
	LT	1.00	180	1,600	0.113			
Eastbound	RT	1.00	163	1,600	0.046		ICU:	1.158
	TH	3.00	369	4,800	0.077			
	LT	2.00	147	2,560	0.057	*	LOS:	F

* - Denotes critical movement

2029

Project Title: **Pacific Coast Commons Project**
Intersection: **2 - Pacific Coast Hwy & Walnut Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	266	0	0.000	N-S(1):	0.410
	TH	4.00	3,069	6,400	0.521 *	N-S(2):	0.590 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.041
Westbound	RT	0.68	19	1,086	0.000	E-W(2):	0.066 *
	TH	0.32	9	514	0.018 *		
	LT	1.00	9	1,600	0.006	V/C:	0.656
Northbound	RT	0.00	68	0	0.000	Lost Time:	0.100
	TH	4.00	2,316	6,400	0.373	ITS:	0.000
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.55	31	886	0.001	ICU:	0.756
	TH	0.45	25	714	0.035		
	LT	1.00	76	1,600	0.048 *	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.480
	TH	4.00	2,854	6,400	0.459 *	N-S(2):	0.485 *
	LT	1.00	36	1,600	0.023	E-W(1):	0.121 *
Westbound	RT	0.66	37	1,057	0.024	E-W(2):	0.120
	TH	0.34	19	543	0.035		
	LT	1.00	54	1,600	0.034 *	V/C:	0.606
Northbound	RT	0.00	41	0	0.000	Lost Time:	0.100
	TH	4.00	2,881	6,400	0.457	ITS:	0.000
	LT	1.00	41	1,600	0.026 *		
Eastbound	RT	0.66	92	1,059	0.074	ICU:	0.706
	TH	0.34	47	541	0.087 *		
	LT	1.00	136	1,600	0.085	LOS:	C

* - Denotes critical movement

2030

Project Title: **Pacific Coast Commons Project**
Intersection: **3 - Pacific Coast Hwy & Maple Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	53	0	0.000	N-S(1):	0.457
	TH	4.00	2,843	6,400	0.453 *	N-S(2):	0.487 *
	LT	1.00	138	1,600	0.086	E-W(1):	0.122 *
Westbound	RT	1.00	70	1,600	0.001	E-W(2):	0.085
	TH	1.00	34	1,600	0.021		
	LT	1.00	26	1,600	0.016 *	V/C:	0.609
Northbound	RT	0.00	131	0	0.000	Lost Time:	0.100
	TH	4.00	2,241	6,400	0.371	ITS:	0.000
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.31	52	489	0.089	ICU:	0.709
	TH	0.69	118	1,111	0.106 *		
	LT	1.00	103	1,600	0.064	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.498
	TH	4.00	2,922	6,400	0.464 *	N-S(2):	0.528 *
	LT	1.00	97	1,600	0.061	E-W(1):	0.135 *
Westbound	RT	1.00	176	1,600	0.080	E-W(2):	0.111
	TH	1.00	112	1,600	0.070		
	LT	1.00	121	1,600	0.076 *	V/C:	0.663
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	4.00	2,736	6,400	0.437	ITS:	0.000
	LT	1.00	102	1,600	0.064 *		
Eastbound	RT	0.36	34	573	0.028	ICU:	0.763
	TH	0.64	61	1,027	0.059 *		
	LT	1.00	50	1,600	0.031	LOS:	C

* - Denotes critical movement

2031

Project Title: **Pacific Coast Commons Project**
Intersection: **4 - Pacific Coast Hwy & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000		N-S(1):	0.466 *
	TH	4.00	2,377	6,400	0.384		N-S(2):	0.436
	LT	2.00	341	2,560	0.133	*	E-W(1):	0.183 *
Westbound	RT	1.00	87	1,600	0.000		E-W(2):	0.163
	TH	1.00	99	1,600	0.062			
	LT	1.00	63	1,600	0.039	*	V/C:	0.649
Northbound	RT	1.00	135	1,600	0.065		Lost Time:	0.100
	TH	4.00	2,128	6,400	0.333	*	ITS:	0.000
	LT	1.00	83	1,600	0.052			
Eastbound	RT	1.00	69	1,600	0.017		ICU:	0.749
	TH	1.00	231	1,600	0.144	*		
	LT	1.00	161	1,600	0.101		LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	0.00	121	0	0.000		N-S(1):	0.500
	TH	4.00	2,634	6,400	0.430	*	N-S(2):	0.530 *
	LT	2.00	296	2,560	0.116		E-W(1):	0.234 *
Westbound	RT	1.00	232	1,600	0.087		E-W(2):	0.224
	TH	1.00	218	1,600	0.136			
	LT	1.00	202	1,600	0.126	*	V/C:	0.764
Northbound	RT	1.00	157	1,600	0.035		Lost Time:	0.100
	TH	4.00	2,455	6,400	0.384		ITS:	0.000
	LT	1.00	160	1,600	0.100	*		
Eastbound	RT	1.00	77	1,600	0.000		ICU:	0.864
	TH	1.00	172	1,600	0.108	*		
	LT	1.00	140	1,600	0.088		LOS:	D

* - Denotes critical movement

2032

Project Title: **Pacific Coast Commons Project**
Intersection: **5 - Pacific Coast Hwy & Grand Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	NBR,		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	282	0	0.000	N-S(1):	0.741 *
	TH	4.00	1,615	6,400	0.296	N-S(2):	0.351
	LT	1.00	560	1,600	0.350 *	E-W(1):	0.142 *
Westbound	RT	1.00	73	1,600	0.000	E-W(2):	0.000
	TH	2.00	65	3,200	0.020		
	LT	2.00	65	2,560	0.025 *	V/C:	0.883
Northbound	RT	1.00	666	1,600	0.391 *	Lost Time:	0.100
	TH	4.00	2,091	6,400	0.327	ITS:	0.000
	LT	1.00	88	1,600	0.055		
Eastbound	RT	0.00	113	0	0.000	ICU:	0.983
	TH	1.89	171	3,029	0.094		
	LT	1.11	166	1,417	0.117 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	173	0	0.000	N-S(1):	0.382
	TH	4.00	2,569	6,400	0.428 *	N-S(2):	0.531 *
	LT	1.00	131	1,600	0.082	E-W(1):	0.403 *
Westbound	RT	1.00	454	1,600	0.243 *	E-W(2):	0.000
	TH	2.00	189	3,200	0.059		
	LT	2.00	608	2,560	0.238	V/C:	0.934
Northbound	RT	1.00	216	1,600	0.000	Lost Time:	0.100
	TH	4.00	1,917	6,400	0.300	ITS:	0.000
	LT	1.00	165	1,600	0.103 *		
Eastbound	RT	0.00	160	0	0.000	ICU:	1.034
	TH	1.53	153	2,451	0.128		
	LT	1.47	300	1,879	0.160 *	LOS:	F

* - Denotes critical movement

2033

Project Title: **Pacific Coast Commons Project**
Intersection: **6 - Pacific Coast Hwy & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	191	1,600	0.091	N-S(1):	0.583 *
	TH	4.00	1,351	6,400	0.211	N-S(2):	0.419
	LT	2.00	290	2,560	0.113 *	E-W(1):	0.188
Westbound	RT	1.00	311	1,600	0.138	E-W(2):	0.224 *
	TH	2.00	532	3,200	0.166 *		
	LT	2.00	191	2,560	0.075	V/C:	0.807
Northbound	RT	0.00	366	0	0.000	Lost Time:	0.100
	TH	4.00	2,639	6,400	0.470 *	ITS:	0.000
	LT	2.00	533	2,560	0.208		
Eastbound	RT	1.00	294	1,600	0.080	ICU:	0.907
	TH	2.00	360	3,200	0.113		
	LT	1.00	92	1,600	0.058 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	109	1,600	0.002	N-S(1):	0.421
	TH	4.00	2,941	6,400	0.460 *	N-S(2):	0.599 *
	LT	2.00	325	2,560	0.127	E-W(1):	0.473 *
Westbound	RT	1.00	326	1,600	0.140	E-W(2):	0.272
	TH	2.00	440	3,200	0.138		
	LT	2.00	495	2,560	0.193 *	V/C:	1.072
Northbound	RT	0.00	258	0	0.000	Lost Time:	0.100
	TH	4.00	1,624	6,400	0.294	ITS:	0.000
	LT	2.00	355	2,560	0.139 *		
Eastbound	RT	1.00	559	1,600	0.280 *	ICU:	1.172
	TH	2.00	663	3,200	0.207		
	LT	1.00	211	1,600	0.132	LOS:	F

* - Denotes critical movement

2034

Project Title: **Pacific Coast Commons Project**
Intersection: **7 - Nash St & Imperial Hwy**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.03	424	1,656	0.256	N-S(1):	0.282 *
	TH	1.97	805	3,144	0.256 *	N-S(2):	0.000
	LT	1.00	383	1,600	0.239	E-W(1):	0.317 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.230
	TH	3.00	1,102	4,800	0.230		
	LT	2.00	322	2,560	0.126 *	V/C:	0.599
Northbound	RT	2.00	74	3,200	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	42	1,600	0.026 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.699
	TH	3.00	800	4,800	0.191 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.45	203	2,314	0.088	N-S(1):	0.156 *
	TH	1.55	218	2,486	0.088 *	N-S(2):	0.000
	LT	1.00	92	1,600	0.058	E-W(1):	0.318 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.170
	TH	3.00	817	4,800	0.170		
	LT	2.00	29	2,560	0.011 *	V/C:	0.474
Northbound	RT	2.00	237	3,200	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	96	1,600	0.060		
Eastbound	RT	0.00	75	0	0.000	ICU:	0.574
	TH	3.00	1,397	4,800	0.307 *		
	LT	0.00	0	0	0.000	LOS:	A

* - Denotes critical movement

2035

Project Title: **Pacific Coast Commons Project**
Intersection: **8 - Laiport St & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.28	25	449	0.043	N-S(1):	0.039
	TH	0.72	64	1,151	0.056 *	N-S(2):	0.087 *
	LT	1.00	5	1,600	0.003	E-W(1):	0.237 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.101
	TH	2.00	227	3,200	0.077		
	LT	1.00	181	1,600	0.113 *	V/C:	0.324
Northbound	RT	2.00	58	3,200	0.000	Lost Time:	0.100
	TH	1.00	57	1,600	0.036	ITS:	0.000
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	0.424
	TH	3.00	409	4,800	0.124 *		
	LT	1.00	39	1,600	0.024	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.40	42	634	0.060	N-S(1):	0.113
	TH	0.60	64	966	0.066 *	N-S(2):	0.149 *
	LT	1.00	34	1,600	0.021	E-W(1):	0.168 *
Westbound	RT	0.00	27	0	0.000	E-W(2):	0.157
	TH	2.00	435	3,200	0.144		
	LT	1.00	68	1,600	0.043 *	V/C:	0.317
Northbound	RT	2.00	244	3,200	0.055	Lost Time:	0.100
	TH	1.00	147	1,600	0.092	ITS:	0.000
	LT	1.00	132	1,600	0.083 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.417
	TH	3.00	532	4,800	0.125 *		
	LT	1.00	21	1,600	0.013	LOS:	A

* - Denotes critical movement

2036

Project Title: **Pacific Coast Commons Project**
Intersection: **9 - Nash St & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	200	0	0.000	N-S(1):	0.157
	TH	2.00	503	3,200	0.220 *	N-S(2):	0.238 *
	LT	1.00	69	1,600	0.043	E-W(1):	0.095
Westbound	RT	1.00	27	1,600	0.000	E-W(2):	0.126 *
	TH	2.00	226	3,200	0.071 *		
	LT	1.00	36	1,600	0.023	V/C:	0.364
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	2.00	304	3,200	0.114	ITS:	0.000
	LT	1.00	29	1,600	0.018 *		
Eastbound	RT	1.00	44	1,600	0.018	ICU:	0.464
	TH	2.00	231	3,200	0.072		
	LT	1.00	88	1,600	0.055 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.268 *
	TH	2.00	249	3,200	0.106	N-S(2):	0.130
	LT	1.00	72	1,600	0.045 *	E-W(1):	0.196
Westbound	RT	1.00	37	1,600	0.001	E-W(2):	0.227 *
	TH	2.00	276	3,200	0.086 *		
	LT	1.00	37	1,600	0.023	V/C:	0.495
Northbound	RT	0.00	154	0	0.000	Lost Time:	0.100
	TH	2.00	559	3,200	0.223 *	ITS:	0.000
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	55	1,600	0.022	ICU:	0.595
	TH	2.00	552	3,200	0.173		
	LT	1.00	226	1,600	0.141 *	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **10 - Kansas St & Grand Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.054
	TH	1.00	29	1,600	0.047 *	N-S(2):	0.058 *
	LT	0.00	9	1,600	0.006	E-W(1):	0.161 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.148
	TH	2.00	364	1,600	0.132		
	LT	0.00	49	1,600	0.031 *	V/C:	0.219
Northbound	RT	0.00	39	0	0.000	Lost Time:	0.100
	TH	1.00	19	1,600	0.048	ITS:	0.000
	LT	0.00	18	1,600	0.011 *		
Eastbound	RT	0.00	19	0	0.000	ICU:	0.319
	TH	2.00	371	1,600	0.130 *		
	LT	0.00	25	1,600	0.016	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.080 *
	TH	1.00	17	1,600	0.039	N-S(2):	0.053
	LT	0.00	9	1,600	0.006 *	E-W(1):	0.188 *
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.156
	TH	2.00	429	1,600	0.143		
	LT	0.00	19	1,600	0.012 *	V/C:	0.268
Northbound	RT	0.00	66	0	0.000	Lost Time:	0.100
	TH	1.00	31	1,600	0.074 *	ITS:	0.000
	LT	0.00	22	1,600	0.014		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.368
	TH	2.00	532	1,600	0.176 *		
	LT	0.00	20	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **11 - Continental Blvd & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.20	40	1,925	0.000	N-S(1):	0.032 *
	TH	0.87	29	1,395	0.021	N-S(2):	0.000
	LT	1.92	64	2,464	0.026 *	E-W(1):	0.160
Westbound	RT	0.00	427	0	0.000	E-W(2):	0.417 *
	TH	3.00	1,366	4,800	0.374 *		
	LT	2.00	45	2,560	0.018	V/C:	0.449
Northbound	RT	1.00	5	1,600	0.000	Lost Time:	0.100
	TH	1.83	14	2,922	0.005	ITS:	0.000
	LT	1.17	9	1,503	0.006 *		
Eastbound	RT	1.00	51	1,600	0.029	ICU:	0.549
	TH	3.00	681	4,800	0.142		
	LT	2.00	111	2,560	0.043 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.75	106	2,803	0.032	N-S(1):	0.201 *
	TH	0.25	15	397	0.038	N-S(2):	0.000
	LT	2.00	399	2,560	0.156 *	E-W(1):	0.289 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.226
	TH	3.00	934	4,800	0.214		
	LT	2.00	33	2,560	0.013 *	V/C:	0.490
Northbound	RT	1.94	140	3,097	0.039	Lost Time:	0.100
	TH	1.06	77	1,703	0.045 *	ITS:	0.000
	LT	1.00	67	1,600	0.042		
Eastbound	RT	1.00	12	1,600	0.000	ICU:	0.590
	TH	3.00	1,327	4,800	0.276 *		
	LT	2.00	30	2,560	0.012	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **12 - Nash St & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	1.00	34	1,600	0.007		N-S(1):	0.064 *
	TH	1.09	76	1,745	0.044		N-S(2):	0.000
	LT	1.91	133	2,444	0.054	*	E-W(1):	0.269
Westbound	RT	0.00	352	0	0.000		E-W(2):	0.476 *
	TH	3.00	1,795	4,800	0.447	*		
	LT	2.00	336	2,560	0.131		V/C:	0.540
Northbound	RT	1.00	11	1,600	0.000		Lost Time:	0.100
	TH	1.00	16	1,600	0.010	*	ITS:	0.000
	LT	2.00	8	2,560	0.003			
Eastbound	RT	1.00	36	1,600	0.021		ICU:	0.640
	TH	3.00	664	4,800	0.138			
	LT	2.00	74	2,560	0.029	*	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C		ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.030		N-S(1):	0.214 *
	TH	1.00	13	1,600	0.008		N-S(2):	0.000
	LT	2.00	377	2,560	0.147	*	E-W(1):	0.391 *
Westbound	RT	0.00	153	0	0.000		E-W(2):	0.249
	TH	3.00	935	4,800	0.227			
	LT	2.00	31	2,560	0.012	*	V/C:	0.605
Northbound	RT	1.44	154	2,303	0.061		Lost Time:	0.100
	TH	0.56	60	897	0.067	*	ITS:	0.000
	LT	2.00	35	2,560	0.014			
Eastbound	RT	1.00	22	1,600	0.007		ICU:	0.705
	TH	3.00	1,820	4,800	0.379	*		
	LT	2.00	57	2,560	0.022		LOS:	C

* - Denotes critical movement

2040

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	19	3	1899	2264	25
Future Vol, veh/h	13	19	3	1899	2264	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	21	3	2064	2461	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3307	1244	2488	0	-	0
Stage 1	2475	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	17	142	70	-	-	-
Stage 1	28	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	16	142	70	-	-	-
Mov Cap-2 Maneuver	16	-	-	-	-	-
Stage 1	27	-	-	-	-	-
Stage 2	351	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 336.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	70	-	34	-	-
HCM Lane V/C Ratio	0.047	-	1.023	-	-
HCM Control Delay (s)	58.9	-	$ 336.9	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	3.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2041

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	33	4	0	0	5	1806	59	22	1924	118
Future Vol, veh/h	0	0	33	4	0	0	5	1806	59	22	1924	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	36	4	0	0	5	1963	64	24	2091	128

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1110	2889	4272	1014	2219	0	0	2027	0	0
Stage 1	-	-	-	2005	2005	-	-	-	-	-	-	-
Stage 2	-	-	-	884	2267	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	175	17	2	203	97	-	-	121	-	-
Stage 1	0	0	-	38	103	-	-	-	-	-	-	-
Stage 2	0	0	-	278	75	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	175	11	2	203	97	-	-	121	-	-
Mov Cap-2 Maneuver	-	-	-	11	2	-	-	-	-	-	-	-
Stage 1	-	-	-	36	98	-	-	-	-	-	-	-
Stage 2	-	-	-	177	60	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.8	$ 473.2	0.1	0.4
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	97	-	-	175	11	-	121	-	-
HCM Lane V/C Ratio	0.056	-	-	0.205	0.395	-	0.198	-	-
HCM Control Delay (s)	44.3	-	-	30.8	$ 473.2	0	41.9	-	-
HCM Lane LOS	E	-	-	D	F	A	E	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.9	-	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2042

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	21	6	2289	2337	52
Future Vol, veh/h	6	21	6	2289	2337	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	23	7	2488	2540	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3578	1299	2597	0	-	0
Stage 1	2569	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	12	131	62	-	-	-
Stage 1	24	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	11	131	62	-	-	-
Mov Cap-2 Maneuver	11	-	-	-	-	-
Stage 1	21	-	-	-	-	-
Stage 2	282	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	237.1	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	62	-	38	-	-
HCM Lane V/C Ratio	0.105	-	0.772	-	-
HCM Control Delay (s)	69.8	-	237.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	2.8	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	57	16	0	10	7	2102	74	16	2218	68
Future Vol, veh/h	0	0	57	16	0	10	7	2102	74	16	2218	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	62	17	0	11	8	2285	80	17	2411	74

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1243	3339	4860	1183	2485	0	0	2365	0	0
Stage 1	-	-	-	2341	2341	-	-	-	-	-	-	-
Stage 2	-	-	-	998	2519	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	142	~ 9	1	156	70	-	-	81	-	-
Stage 1	0	0	-	22	69	-	-	-	-	-	-	-
Stage 2	0	0	-	236	56	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	142	~ 4	1	156	70	-	-	81	-	-
Mov Cap-2 Maneuver	-	-	-	~ 4	1	-	-	-	-	-	-	-
Stage 1	-	-	-	19	61	-	-	-	-	-	-	-
Stage 2	-	-	-	105	44	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.7	$ 1970.9	0.2	0.4
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	70	-	-	142	4	156	81	-	-
HCM Lane V/C Ratio	0.109	-	-	0.436	4.348	0.07	0.215	-	-
HCM Control Delay (s)	62.6	-	-	48.3	$ 3184.1	29.8	61.2	-	-
HCM Lane LOS	F	-	-	E	F	D	F	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.9	3.5	0.2	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2044

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	315	9	38	228	2	8	2	85	26	0	0
Future Vol, veh/h	0	315	9	38	228	2	8	2	85	26	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	342	10	41	248	2	9	2	92	28	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	250	0	0	352	0	0	678	679	347
Stage 1	-	-	-	-	-	-	347	347	-
Stage 2	-	-	-	-	-	-	331	332	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1316	-	-	1207	-	-	418	374	696
Stage 1	-	-	-	-	-	-	716	635	-
Stage 2	-	-	-	-	-	-	728	644	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1316	-	-	1207	-	-	402	0	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	402	0	-
Stage 1	-	-	-	-	-	-	688	0	-
Stage 2	-	-	-	-	-	-	728	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	655	1316	-	-	1207	-	-
HCM Lane V/C Ratio	0.158	-	-	-	0.034	-	-
HCM Control Delay (s)	11.5	0	-	-	8.1	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	12	10	21	38	18	8	36	5	16	34	10
Future Vol, veh/h	8	12	10	21	38	18	8	36	5	16	34	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	13	11	23	41	20	9	39	5	17	37	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.6	7.5	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	27%	27%	27%
Vol Thru, %	73%	40%	49%	57%
Vol Right, %	10%	33%	23%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	30	77	60
LT Vol	8	8	21	16
Through Vol	36	12	38	34
RT Vol	5	10	18	10
Lane Flow Rate	53	33	84	65
Geometry Grp	1	1	1	1
Degree of Util (X)	0.062	0.037	0.095	0.075
Departure Headway (Hd)	4.157	4.056	4.078	4.129
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	871	870	858
Service Time	2.229	2.137	2.147	2.199
HCM Lane V/C Ratio	0.062	0.038	0.097	0.076
HCM Control Delay	7.5	7.3	7.6	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	346	7	48	414	7	17	2	104	20	0	0
Future Vol, veh/h	0	346	7	48	414	7	17	2	104	20	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	376	8	52	450	8	18	2	113	22	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	458	0	0	384	0	0	938	942	380
Stage 1	-	-	-	-	-	-	380	380	-
Stage 2	-	-	-	-	-	-	558	562	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1103	-	-	1174	-	-	293	263	667
Stage 1	-	-	-	-	-	-	691	614	-
Stage 2	-	-	-	-	-	-	573	510	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1103	-	-	1174	-	-	276	0	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	0	-
Stage 1	-	-	-	-	-	-	650	0	-
Stage 2	-	-	-	-	-	-	573	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	556	1103	-	-	1174	-	-
HCM Lane V/C Ratio	0.24	-	-	-	0.044	-	-
HCM Control Delay (s)	13.5	0	-	-	8.2	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.9	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	14	8	33	21	23	16	68	8	20	31	7
Future Vol, veh/h	4	14	8	33	21	23	16	68	8	20	31	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	15	9	36	23	25	17	74	9	22	34	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.7	7.8	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	15%	43%	34%
Vol Thru, %	74%	54%	27%	53%
Vol Right, %	9%	31%	30%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	26	77	58
LT Vol	16	4	33	20
Through Vol	68	14	21	31
RT Vol	8	8	23	7
Lane Flow Rate	100	28	84	63
Geometry Grp	1	1	1	1
Degree of Util (X)	0.116	0.033	0.096	0.074
Departure Headway (Hd)	4.159	4.235	4.144	4.201
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	850	851	841
Service Time	2.233	2.235	2.237	2.285
HCM Lane V/C Ratio	0.117	0.033	0.099	0.075
HCM Control Delay	7.8	7.4	7.7	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	0	0	2013	26
Future Vol, veh/h	0	21	0	0	2013	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	0	0	2188	28

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	1108		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.14		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.92		-	-
Pot Cap-1 Maneuver	0	176		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	176		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	28.5	0
HCM LOS	D	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	176	-	-
HCM Lane V/C Ratio	0.13	-	-
HCM Control Delay (s)	28.5	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	0.4	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	0	0	2253	32
Future Vol, veh/h	0	23	0	0	2253	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	25	0	0	2449	35

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	1242		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.14		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.92		-	-
Pot Cap-1 Maneuver	0	143		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	143		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	35.4	0
HCM LOS	E	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	143	-	-
HCM Lane V/C Ratio	0.175	-	-
HCM Control Delay (s)	35.4	-	-
HCM Lane LOS	E	-	-
HCM 95th %tile Q(veh)	0.6	-	-

2050

ATTACHMENT B

Signal Warrant Analysis Worksheets

FEHR PEERS

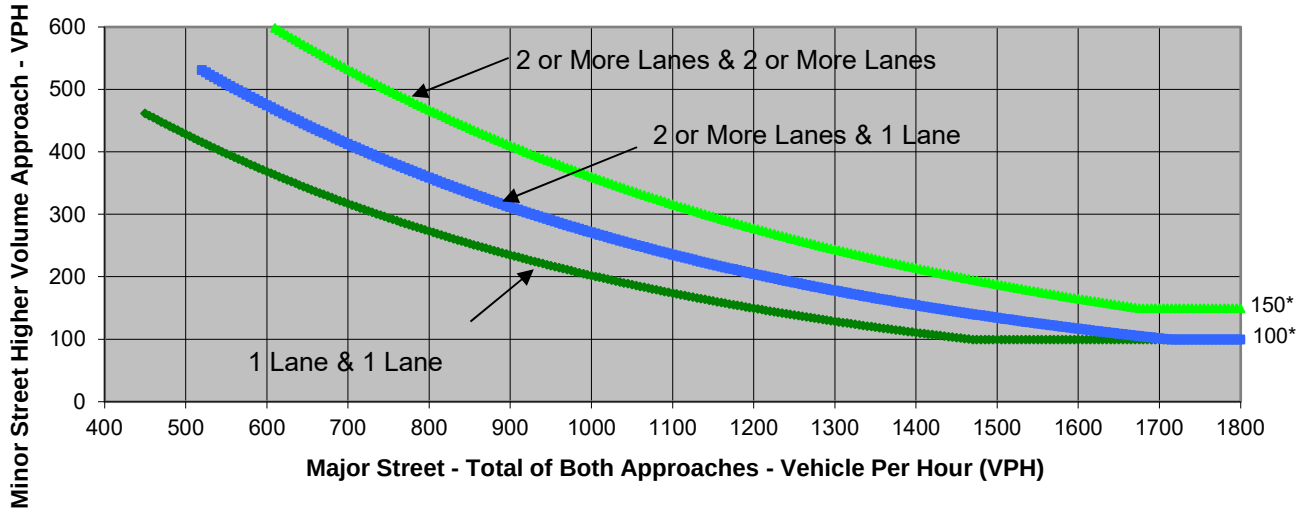
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	2	0	12	0
Through	2,386	2,826	0	0
Right	0	18	17	0
Total	2,388	2,844	29	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,232**	**29**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

2052

FEHR PEERS

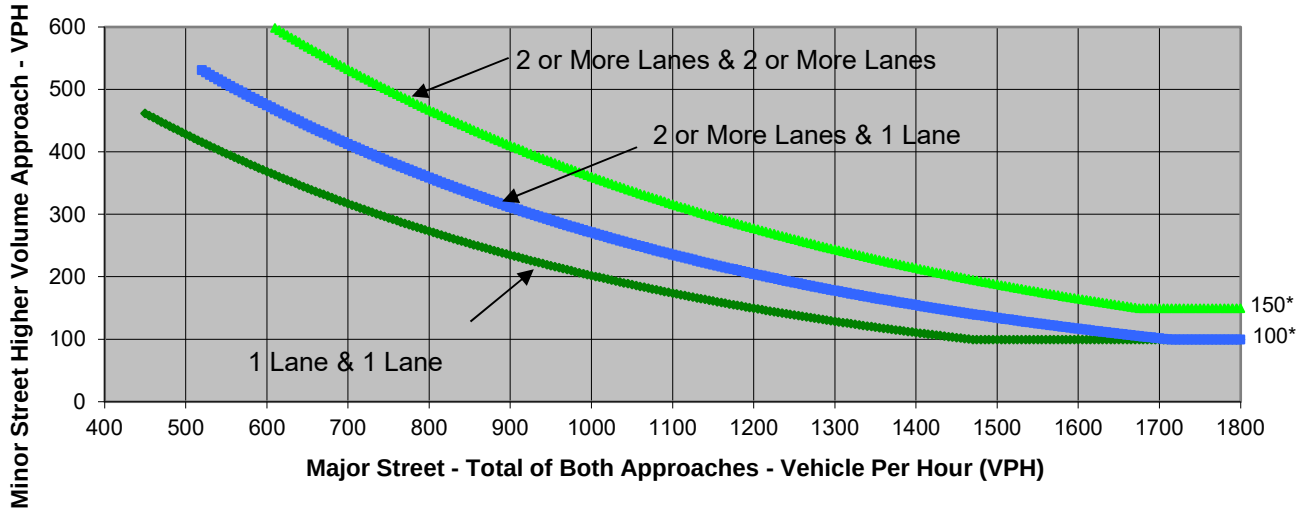
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	3	0	5	0
Through	2,814	2,960	0	0
Right	0	28	21	0
Total	2,817	2,988	26	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,805**	**26**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

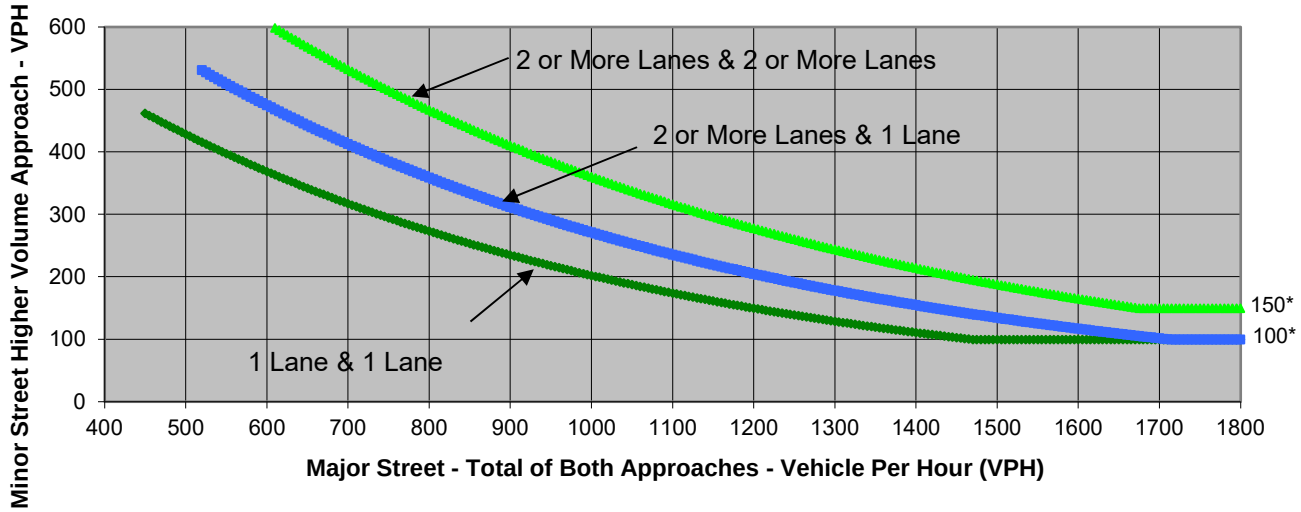
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future + Project Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	3	0	13	0
Through	2,435	2,847	0	0
Right	0	25	19	0
Total	2,438	2,872	32	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,310**	**32**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

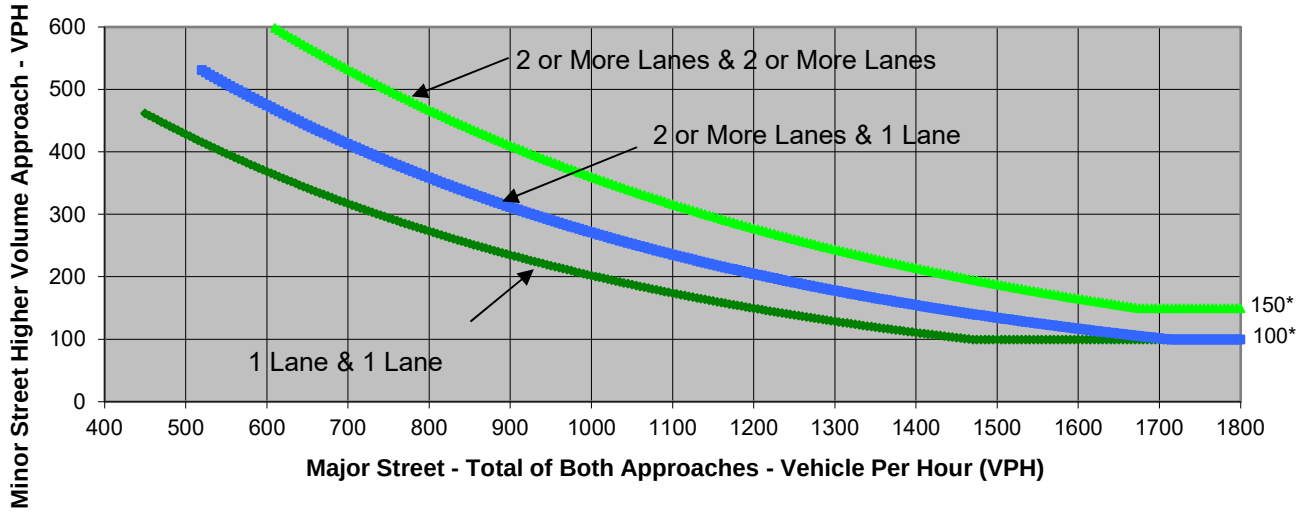
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future + Project Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	6	0	6	0
Through	2,858	2,997	0	0
Right	0	52	21	0
Total	2,864	3,049	27	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,913**	**27**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

2055

FEHR & PEERS

Major Street	Pacific Coast Highway
Minor Street	Holly Ave

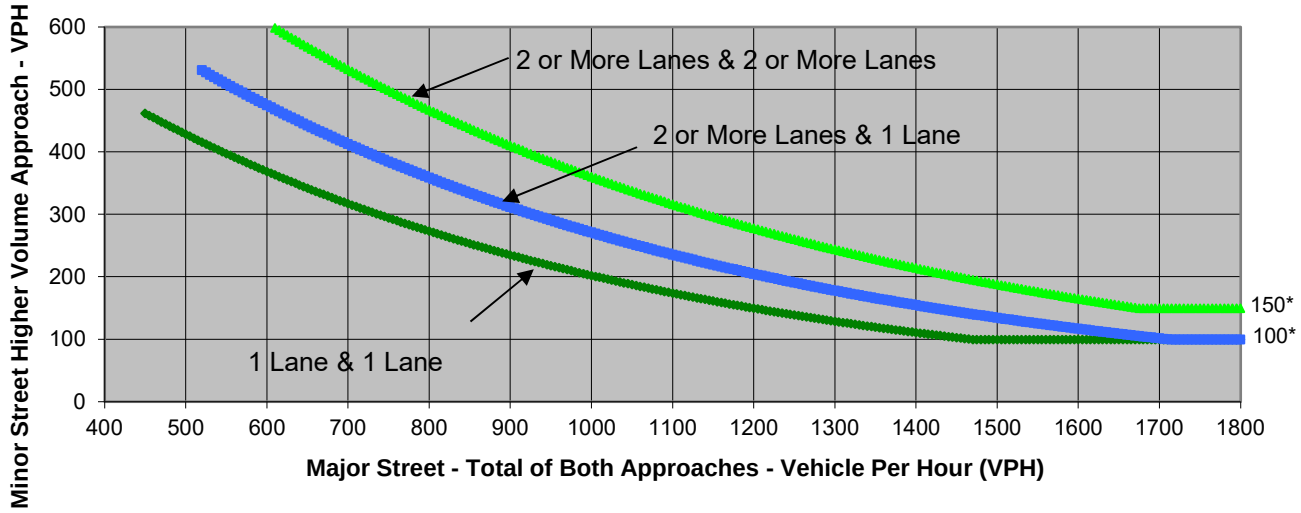
Project	Pacific Coast Commons
Scenario	Future Conditions
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	4	22	0	4
Through	2,284	2,365	0	0
Right	59	118	30	0
Total	2,347	2,505	30	4

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**4,852**	**30**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

Major Street	Pacific Coast Highway
Minor Street	Holly Ave

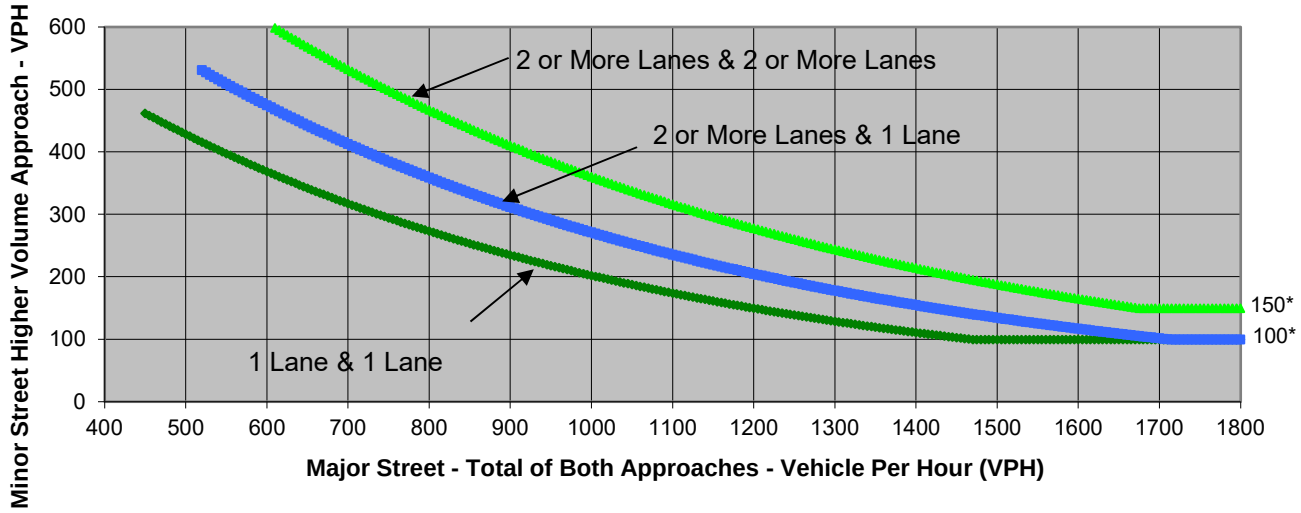
Project	Pacific Coast Commons
Scenario	Future Conditions
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	5	16	0	16
Through	2,570	2,796	0	0
Right	74	68	51	10
Total	2,649	2,880	51	26

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,529**	**51**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

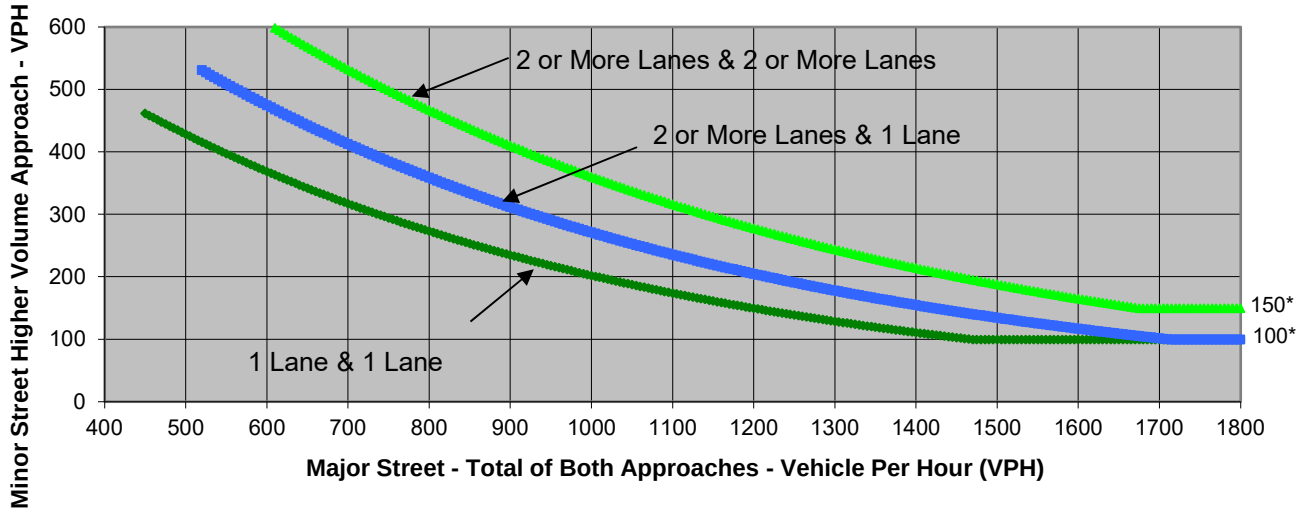
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Holly Ave	Scenario	Future + Project Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	5	22	0	4
Through	2,310	2,397	0	0
Right	59	118	33	0
Total	2,374	2,537	33	4

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**4,911**	**33**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Major Street	Pacific Coast Highway
Minor Street	Holly Ave

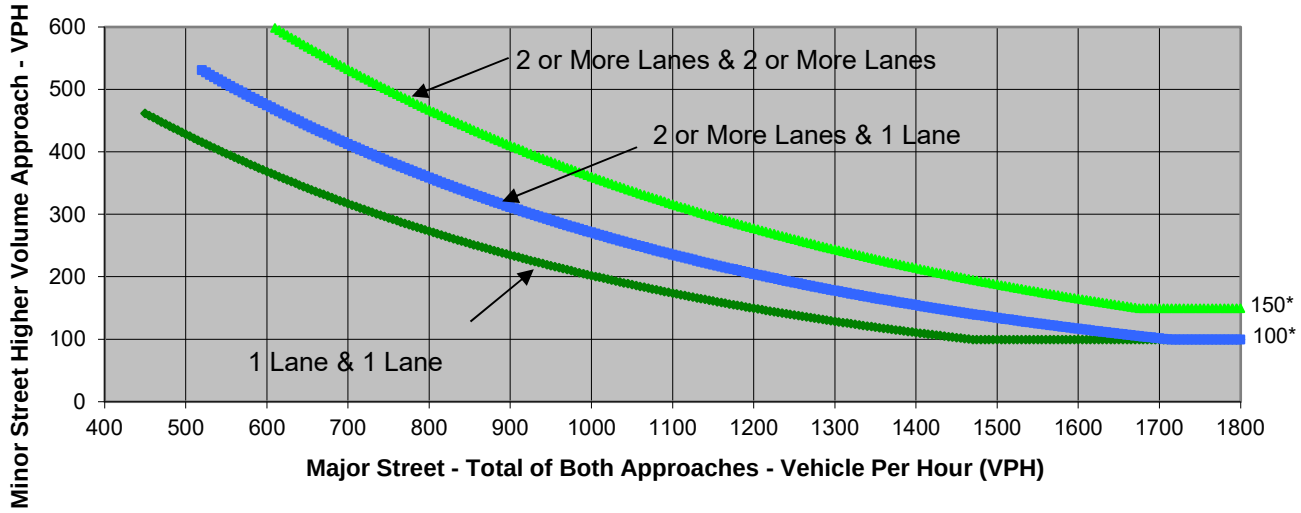
Project	Pacific Coast Commons
Scenario	Future + Project Conditions
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	7	16	0	16
Through	2,611	2,827	0	0
Right	74	68	57	10
Total	2,692	2,911	57	26

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,603**	**57**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

4 Mitigation Monitoring and Reporting Program

California Public Resources Code Section 21081.6 requires that, upon certification of an EIR, "the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

This chapter contains the mitigation monitoring and reporting program (MMRP) that has been developed for the Pacific Coast Commons Specific Plan Project (Specific Plan or Project). This MMRP has been developed in compliance with Public Resources Code Section 21081.6 and Section 15097 of the CEQA Guidelines. The mitigation measures in the table are coded by alphanumeric identification consistent with the EIR. The following items are identified for each mitigation measure:

- **Mitigation Monitoring.** This section of the MMRP lists the stage of the proposed project during which the mitigation measure would be implemented and the stage during which proper implementation would be monitored and verified. It also lists the agency that is responsible for ensuring that the mitigation measure is implemented and that it is implemented properly.
- **Verification of Compliance.** This section of the MMRP provides a location for the implementing party and/or enforcing agency to make notes and to record their initials and the compliance date for each mitigation measure.

The City of El Segundo (City) must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Air Quality						
MM-AQ-1. To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the Project, the Construction Contractor's contract specifications shall require compliance with the following: Prior to the start of construction activities, the Construction Contractor shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines. An exemption from this requirement may be granted if equipment with Tier 4 Interim engines are not reasonably available and the required corresponding reductions in criteria air pollutant emissions can be achieved from other combinations of construction equipment, such as using equipment with Tier 4 Final engines. Before an exemption may be granted, the City's Construction Contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Interim equipment could not be located within Los Angeles County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using CalEEMod and documentation provided to the City to confirm that Project-generated emissions do not exceed applicable localized significance thresholds (LST) for nitrogen dioxide (NO2), carbon monoxide (CO), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM2.5), and the	Prior to commencement of construction activities	Construction Contractor shall ensure that CARB-certified Tier 4 Interim engines are being utilized	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
SCAQMD carcinogenic (cancer) risk threshold. If these requirements cannot be met, construction activities at the Project site shall be postponed until CARB-certified Tier 4 Interim engines are available for use.						
Cultural Resources						
MM-CUL-1. Prior to commencement of construction activities for all phases of Project implementation, the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of El Segundo for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the	Prior to commencement of construction activities for all phases of Project implementation; Upon discovery of any archaeologic resources	Project applicant; Project archaeologist for meeting attendance and preparation of a mitigation plan	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
immediate contact of the site supervisor and archaeological monitor.						
MM-CUL-2. If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of El Segundo for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South-Central Coastal Information Center (SCCIC).	During construction activities; Upon discovery of any archaeologic resources	City of El Segundo Development Services Department; Project archaeologist	City of El Segundo Development Services Department			
Geology and Soils						
MM-GEO-1. Prior to commencement of any grading activity on-site, the Project applicant/Developer shall retain a qualified paleontologist per the Society of Vertebrate	Prior to grading activities	Project applicant; Project	City of El Segundo Development Services			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project for review and approval by the City. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site below a depth of 5 feet below the existing ground surface or depth of documented artificial fill (based on construction plans and/or geotechnical reports), procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. At a minimum, the PRIMP shall require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, Pleistocene Sand Dune deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the PRIMP shall require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources.		paleontologist	Department			
Hazards and Hazardous Materials						
MM-HAZ-1. The Project applicant/Developer shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous material, hazardous wastes, and	During demolition activities	Project applicant; Demolition contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
universal waste items. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance of a building permit for PCC-Fairfield Parking. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.						
MM-HAZ-2. Prior to commencement of any earthwork or construction activities at PCC-North, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and soil vapor associated with the 76 Station adjacent to PCC-North. The HMCP shall include training procedures for identification of contamination, and shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations. Contaminated soils shall be managed and disposed of in accordance with local and state regulations. The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The applicant or its designee shall implement the HMCP during construction activities for the proposed Project.	Prior to commencement of any earthwork or construction activities at PCC-North	Project applicant or its designee	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Noise						
MM-NOI-1. Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures: a) To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating activities during Phase 2, temporary noise barriers of sufficient height and extent along the Project's western site boundary shall be installed and shall be confirmed to achieve (depending on construction phase activity and involved equipment) at least 5 dBA and as much as 20 dBA of barrier noise insertion loss. The temporary barrier elements should resemble an outdoor-use vinyl-covered acoustical blanket comprising one or more materials that demonstrate a sound	Prior to issuance of a demolition or grading permit; During site preparation, grading, building construction, architectural coating, and/or paving activities associated with Phases 1, 2, and 3; Two (2) weeks prior to any construction phase commencement	Project applicant or approved Construction Contractor; Project acoustical consultant or noise control engineer; Project concrete saw operator and/or Construction Contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
transmission class (STC) of 30 or better. The Project Applicant/Developer shall retain the services of a qualified acoustical consultant or noise control engineer to advise on or review the design, installation, and expected performance of such temporary barriers when used during Project construction. Anticipated locations, horizontal extents, heights, and durations of installation of the temporary sound barriers over the course of Project phased buildout shall be part of the CNMP submitted to the City for review. b) Operation of a concrete saw during the demolition phase shall include some form of proximate and portable solid-walled partial enclosure, acoustical-blanket tent, or comparably-performing shroud that can reliably deliver 10 dBA of noise reduction—separate from the temporary barrier insertion loss need described in MM-NOI-1(a) above. Alternately, slotted low-noise saw blades may be used to yield some or all of this noise reduction, so that operation of the concrete saw at a distance of 50 feet does not exceed 80 dBA. If this limit cannot be wholly achieved due to saw operation noise control or localized sound abatement (i.e., partial enclosure), then the balance of needed attenuation shall be provided by either the temporary noise barrier per MM-NOI-1(a) or by limiting duration of saw operation within an hour: each halving of duration should yield a 3 dB						

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
reduction to the hourly noise level produced by the saw. c) Residents within 200 feet of the Project shall be informed at least two (2) weeks in advance when construction phase activities will occur. An information telephone hotline and/or website shall be established and managed to receive resident complaints, and the Applicant and its contractors shall respond to received complaints and document their investigations and any complaint resolutions in regular reports to the City Building Safety division.						
Transportation						
MM-TRA-1. Prior to the issuance of demolition or grading permits, the Project Applicant/Developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City and Manual on Uniform Traffic Control Devices guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or	Prior to the issuance of demolition or grading permits	Project Applicant	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
rerouting of construction trucks away from congested streets or sensitive receptors						
Tribal Cultural Resources						
MM-TCR-1. Should a potential tribal cultural resource (TCR) (as defined by PRC Section 21074) be inadvertently encountered during construction activities, consistent with the process required by MM-CUL-2, all construction work occurring within 100 feet of the find shall immediately stop and the City shall be notified of the discovery. The City shall notify Native American tribes that have been identified by the Native American Heritage Commission to be traditionally and culturally affiliated with the geographic area of the Project. Any affected tribe shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible.	In the event that a tribal cultural resource is encountered during any and all construction activities associated with any and all Project Phases	Construction Contractor; Native American Heritage Commission (NAHC) identified Native American tribes; Project archeologist	City of El Segundo Development Services Department; NAHC			

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4 MITIGATION MONITORING AND REPORTING PROGRAM 1

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FINDINGS OF FACT

AND

STATEMENT OF OVERRIDING CONSIDERATIONS

Pacific Coast Commons Specific Plan EIR (SCH No. 2020050508)

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245
Contact: Paul Samaras, AICP, Principal Planner

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101
Contact: Kristin Starbird, Senior Project Manager

FEBRUARY 2022

Printed on 30% post-consumer recycled material.

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1 Introduction

This statement of Findings of Fact (Findings) addresses the environmental effects associated with the proposed Pacific Coast Commons Specific Plan (Specific Plan or proposed Project), as described in the Draft Environmental Impact Report (EIR). These Findings are made pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), specifically California Public Resources Code, Sections 21081, 21081.5, and 21081.6, and the CEQA Guidelines (14 CCR 15000 et seq.), specifically Sections 15091 and 15093. The Draft EIR examines the full range of potential effects of construction and operation of the Project and identifies standard mitigation practices that could be employed to reduce, minimize, or avoid those potential effects.

1.1 Purpose

California Public Resources Code, Section 21081, and CEQA Guidelines Section 15091 require that the lead agency, in this case the City of El Segundo (City), prepare written findings for identified significant effects, accompanied by a brief explanation of the rationale for each finding. Specifically, CEQA Guidelines Section 15091 states, in part, that:

a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
   1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
   2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
   3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

In accordance with California Public Resource Code, Section 21081, and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the decision-making agency is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable.” In that case, the decision-making agency may prepare and adopt a Statement of Overriding Considerations (SOC), pursuant to the CEQA Guidelines.

Section 15093 of the CEQA Guidelines state that:

a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The EIR identified potentially significant effects that could result from the Project. The City finds that the inclusion of certain mitigation measures as part of the approval of the Project will reduce most, but not all, of those effects to less-than-significant levels. Those impacts that are not reduced to less-than-significant levels are identified and overridden due to specific Project benefits (see Section 5, Statement of Overriding Considerations).

As required by CEQA, the City, in adopting these Findings, also adopts a Mitigation Monitoring and Reporting Program (MMRP) for the Project. The City finds that the MMRP, which is incorporated by reference and made a part of these Findings, meets the requirements of California Public Resources Code, Section 21081.6, by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the Project.

In accordance with the CEQA Statutes and Guidelines, the City adopts these Findings for the Project. Pursuant to California Public Resources Code, Section 21082.1(c)(3), the City also finds that these Findings reflect the City's independent judgment as the lead agency for the Project.

1.1.1 Record of Proceedings

For the purposes of CEQA and the Findings herein set forth, the record of proceedings for the Project consists of those items listed in CEQA Section 21167.6(e). The record of proceedings for the City's decision on the Project consists of the following documents, at a minimum and without limitation, which are incorporated by reference and made part of the record supporting these Findings:

(a) The Notice of Preparation, Notice of Availability, and all other public notices issued by the City in conjunction with the Project

(b) The Draft EIR for the Project and all technical appendices and documents relied upon or incorporated by reference

(c) All written comments submitted by agencies, organizations, or members of the public during the public review comment period on the Draft EIR and the City's responses to those comments as well as letters from the Southwest Carpenters and SAFER received by the City after the close of the public review period and responses to those comments

(d) The Final EIR for the Project

(e) The Responses to Additional Comments received dated February 2022

(f) The MMRP for the Project

(g) All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the City or consultants to the City with respect to the City's compliance with the requirements of CEQA and with respect to the City's action on the Project

(h) All documents submitted to the City by other public agencies or members of the public in connection with the Draft EIR

(i) Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the City in connection with the Project

(j) Any documentary or other evidence submitted to the City at such information sessions, public meetings, and public hearings

(k) All resolutions adopted by the City regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions

(l) Matters of common knowledge to the City, including, but not limited to federal, state, and local laws and regulations

(m) Any documents expressly cited in these Findings, in addition to those cited above; and any other materials required for the record of proceedings by CEQA Section 21167.6(e)

1.1.2 Custodian and Location of Records

The documents and other materials that constitute the Record of Proceedings for the City's actions related to the Project are located at the City of El Segundo, 350 Main Street, California 90245. The City Clerk is the custodian of the Record of Proceedings for the Project.

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2 CEQA Findings of Independent Judgement

2.1 Independent Review and Analysis

Under CEQA, the lead agency must (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the report or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (California Public Resources Code, Section 21082.1[c]).

These Findings reflect the City's independent judgment. The City has exercised independent judgment in accordance with CEQA Section 21082.1(c)(3) in retaining its own environmental consultant in the preparation of the EIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Having received, reviewed, and considered the information in the Final EIR, as well as any and all other information in the record, the City hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

2.2 Impacts Determined to Be Significant and Unavoidable

This section identifies the significant unavoidable impacts that require a statement of overriding considerations to be issued by the City, pursuant to Section 15093 of the CEQA Guidelines, if the Project is approved. Based on the analysis contained in the EIR, the following impacts have been determined to fall within the "significant unavoidable impacts" category:

Air Quality

- Conflict with an Applicable Air Quality Plan

2.2.1 Air Quality

2.2.1.1 Potentially Significant Impacts to Air Quality

Conflict with an Applicable Air Quality Plan

The Project site is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD administers the AQMP for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all CAAQS and NAAQS. The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which the SCAQMD Governing Board adopted in March 2017 (SCAQMD 2017).

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency Criterion No. 1

The proposed Project would not result in construction or operational criteria air pollutant emissions that would exceed the SCAQMD mass daily thresholds. Because it would not exceed the SCAQMD criteria air pollutant mass thresholds, the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, and thus, the proposed Project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993).

Consistency Criterion No. 2

The second criterion regarding the proposed Project's potential to exceed the assumptions in the AQMP is primarily assessed by determining consistency between the proposed Project's land use designations and potential to generate population growth. In general, a project would be consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for its RTP/SCS (SCAG 2016). SCAG bases its growth forecasts on general plans for cities and counties in the SCAB. The SCAQMD uses these growth forecasts for the development of the AQMP emissions inventory (SCAQMD 2017). The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans. Note that although the Connect SoCal (2020–2045 RTP/SCS) is the most recent RTP/SCS, the SCAQMD is still in the early stages of updating its AQMP (anticipated to be released in 2022). Therefore, the SCAG 2016 RTP/SCS and associated Regional Growth Forecast would be applicable in this analysis of the potential to conflict with the SCAQMD 2016 AQMP.

The Project site has a designation of General Commercial (C-3) and Parking (P). To facilitate the proposed Project, the Project applicant is requesting a General Plan Amendment to change the current land designation to Pacific Coast Commons Specific Plan (PCCSP). Although the Project site is currently inconsistent with the General Plan land use designation for the Project site, the proposed Project would be consistent with the adjacent residential and commercial land uses and would be in compliance with the Land Use Element goals and policies of the City's General Plan. Nonetheless, because the Project's proposed land use designation is not consistent with the current City's General Plan land use designation, the Project may result in population (residents) not anticipated in the SCAG 2016 RTP/SCS and therefore, the 2016 SCAQMD AQMP.

The Final SCAG 2016 RTP/SCS provides population estimates for the years 2012 and 2040. In the 2016 RTP/SCS, SCAG estimates that the County would have 10,159,000 residents in 2015 and 11,514,800 residents by 2040. Furthermore, SCAG estimated 16,700 residents in the City in 2012 and 17,300 residents by 2040. Using population and housing estimates from the California Department of Finance, the City has a household size of 2.35 persons per household (DOF 2020). Assuming a household size of 2.35 persons per household, the proposed Project's residential units would accommodate 618 individuals upon its anticipated full occupancy in 2025. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP.

While the proposed Project would exceed the growth assumptions in the SCAG 2016 RTP/SCS and thus, the SCAQMD 2016 AQMP population assumptions, the proposed Project would implement the guiding principles, goals and policies of SCAG's 2020-2045 RTP/SCS as they relate to livability, economic prosperity, and sustainability through the development of walkable, mixed use communities along major transportation corridors. Because the proposed Project would support SCAG's goals and strategies for growth in the region and because the proposed Project would assist the development of new housing and improves the City's job/housing balance, the proposed Project is not anticipated to result in impacts related to population growth. Although the proposed Project would provide a resident population that exceeds SCAG's projections, this growth is not considered substantial and it would further attainment of local and regional goals. In addition, the proposed Project would not result in impacts related to vehicle miles traveled (VMT).

Although the Project would exceed the population growth assumptions in the SCAG 2016 RTP/SCS, it's important to note that the Project is consistent with the City's housing strategy to direct growth in regional centers and areas near transit stations, major bus centers, and bus stops along a major bus routes. The Project is also a mixed-use development that would generate fewer vehicle trips than traditional single-use and subdivision development and would take advantage of existing infrastructure systems serving the area. Additionally, the Project would implement the majority of the proposed measures by the California Air Pollution Control Officers Association (CAPCOA) to reduce GHG emissions, which also reduce criteria pollutants, related transportation-related design features as outlined in its 2010 Quantifying Greenhouse Gas Mitigation Measures guidance document.

The Project would provide housing in a jobs-rich area and would consist of a mixed-use, transit-oriented development that would reduce the need for vehicle use for residents due to the Project site's proximity to local destinations and regional transportation opportunities. Therefore, while the Project would provide needed housing within the City and would result in development that would result in low VMT and associated mobile source emissions, because the proposed Project would not be consistent with the City's current General Plan land use designation and would result in population growth that would exceed the population growth anticipated for the City in SCAG's regional growth forecast, the proposed Project would conflict with Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook.

However, it should be noted that the impact is temporary until the Project is appropriately included in the City's population estimates and eventually, the SCAQMD AQMP. Since SCAG's forecasts are based on input from individual jurisdictions in accordance with their General Plans and local development trends and these are updated regularly as part of SCAG's regional planning programs, adjustments to these projections will continue to be made by the different cities and counties and SCAG as part of the regional planning process. This established regular update process will capture changes in development trends and capacities that occur over time. If approved, the Project would be included in future City projections that would be provided to and used by SCAG and SCAQMD to update the RTP/SCS and AQMP, and the potential impact is reduced to less than significant in the future.

Nevertheless, the proposed Project would result in population growth that would exceed the population growth anticipated for the City in SCAG's regional growth forecast, and therefore conflict with Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook. There is no feasible mitigation measure for population growth; therefore, this impact would be significant and unavoidable.

Cumulative Effect

Operation-Related Cumulative Impacts

The Project would result in less-than-significant long-term operational air quality impacts for all criteria pollutants. Impacts related to the proposed Project's potential to conflict with or obstruct implementation of the SCAQMD 2016 AQMP would be significant and unavoidable due to the exceedance of population projections assumed within SCAG's RTP/SCS. No feasible mitigation can be implemented for population growth.

2.2.1.2 Mitigation Measures

There is no feasible mitigation measure for population growth.

2.2.1.3 Findings per CEQA Guidelines

The City finds that there is no feasible mitigation measure to reduce the Project's air quality impact exceeding the assumptions in the AQMP. The proposed Project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or conflict with Consistency Criterion No. 1. However, implementation of the proposed Project would exceed the demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, the proposed Project would potentially conflict with the SCAQMD 2016 AQMP. Based on these considerations, impacts related to the proposed Project's potential to conflict with or obstruct implementation of the applicable air quality plan would be significant and unavoidable, as no feasible mitigation can be implemented for population growth.

Pursuant to Section 21081(a)(3) of the California Public Resources Code, as described in the Statement of Overriding Considerations, the City has determined that specific economic, legal, social, technological, or other considerations make infeasible the alternatives identified in the EIR, and the identified air quality impacts are thereby acceptable because of specific overriding considerations (see Section 5).

2.2.1.4 Facts in Support of the Findings Related to Air Quality

Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth that exceeds the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. The proposed Project would therefore conflict with the applicable AQMP, which would result in a significant and unavoidable impact, as there is no feasible mitigation for population growth.

2.3 Impacts Determined to Be Less Than Significant with Mitigation

This section identifies significant adverse impacts of the Project that require findings to be made under CEQA Section 21081(a) and CEQA Guidelines Section 15091(a)(1). Based on substantial evidence, the City finds that adoption of the mitigation measures set forth in this section will reduce the identified significant impacts to less than significant levels:

Air Quality

- Expose Sensitive Receptors to Substantial Pollutant Concentrations
- Cumulative Effect

Cultural Resources

- Archaeological Resources
- Cumulative Effect

Geology and Soils

- Paleontological Resources
- Cumulative Effect

Hazards and Hazardous Materials

- Routine Transport, Use, or Disposal of Hazardous Materials/Release of Hazardous Materials and the Potential for Upset Conditions
- Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials
- Cortese List
- Emergency Response Plan

Noise

- Generation of Substantial Temporary or Permanent Increase in Ambient Noise Levels
- Cumulative Effect

Transportation

- Inadequate Emergency Access

Tribal Cultural Resources

- Historical Resources Register
- California Public Resource Code, Section 5024.1
- Cumulative Effect

Other impacts addressed under Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation are addressed under Section 2.4, Impacts Determined to Be Less Than Significant.

2.3.1 Air Quality

2.3.1.1 Potentially Significant Impacts to Air Quality

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Toxic Air Contaminants

Health Impacts of Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology (OEHHA 2015). TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB Airborne Toxic Control Measures to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with a project (OEHHA 2015). The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in an on-site cancer risk above the 10 in 1 million threshold for the proposed Project. The Chronic Hazard Index for the proposed Project would be less than 1. Therefore, TAC emissions from construction activities associated with the proposed Project may expose sensitive receptors to substantial pollutant concentrations of TACs and would result in a potentially significant impact; therefore, mitigation measure MM-AQ-1 is required. The HRA results from the mitigated scenario show cancer risks less than the 10 in 1 million threshold and chronic hazard index less than the 1.0 threshold. Impacts would be less than significant with mitigation incorporated.

Cumulative Effect

Construction-Related Cumulative Impacts

Construction of the Project is not expected to exceed the SCAQMD mass daily emission-based construction thresholds. In addition, construction of the Project would not exceed the SCAQMD's LST and would not result in impacts to potential nearby sensitive receptors. The Project's short-term construction-related TAC emissions would not result in a significant health risk and would not substantially contribute to health risk in the Project area with implementation of MM-AQ-1, which would reduce Project-related health risk on nearby sensitive receptors by substantially reducing exhaust diesel particulate matter (DPM). MM-AQ-1 would also reduce potentially significant construction-related cumulative impacts. Because of the minimal amount of Project-related emissions relative to significance thresholds, and because of compliance with SCAQMD rules, Project-generated construction emissions would not be cumulatively considerable.

2.3.1.2 Mitigation Measures

MM-AQ-1 To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the Project, the Construction Contractor's contract specifications shall require compliance with the following:

Prior to the start of construction activities, the Construction Contractor shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines. An exemption from this requirement may be granted if equipment with Tier 4 Interim engines are not reasonably available and the required corresponding reductions in criteria air pollutant emissions can be achieved from other combinations of construction equipment, such as using equipment with Tier 4 Final engines. Before an exemption may be granted, the City's Construction Contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Interim equipment could not be located within Los Angeles County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using CalEEMod and documentation provided to the City to confirm that Project-generated emissions do not exceed applicable localized significance thresholds (LST) for nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and the SCAQMD carcinogenic (cancer) risk threshold. If these requirements cannot be met, construction activities at the Project site shall be postponed until CARB-certified Tier 4 Interim engines are available for use.

2.3.1.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.1.1. This feasible measure, MM-AQ-1, is listed in Section 2.3.1.2.

The City finds that this mitigation measure is feasible, is adopted, and will reduce the potential air quality impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid potentially significant air quality impacts of the Project identified in the EIR.

2.3.1.4 Facts in Support of the Findings Related to Air Quality

The construction of the proposed Project would result in a potentially significant pollutant concentration of TACs prior to mitigation. With the implementation of MM-AQ-1, the emissions of DPM would be significantly reduced compared to the unmitigated scenario, impacts would be less than significant after mitigation. There would be no significant, unavoidable impacts related to air quality after implementation of this mitigation measure.

2.3.2 Cultural Resources

2.3.2.1 Potentially Significant Impacts to Cultural Resources

Archaeological Resources

The CHRIS records search identified 33 previously conducted cultural resources technical investigations within the 1-mile radius records search area. Of these, one study overlaps the Project site; however, individual sites were not identified within the current Project site as a result of this study. Additionally, the SCCIC records indicate that 12 previously recorded cultural resources exist within the surrounding 1-mile search radius. All of the resource

identified are built environment resources. No previously recorded prehistoric or historic-era archaeological resources were identified within the Project site or 1-mile records search radius. Additionally, the NAHC was contacted to request a search of its SLF, which were negative. The NAHC also suggested contacting five Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the Project site.

Based on the results provided above, the potential of encountering and impacting unknown archaeological resources during Project implementation is low given the level of disturbance from the mid-twentieth century; however, it is always possible that unanticipated discoveries could be encountered during ground-disturbing activities associated with the proposed Project. If such unanticipated discoveries were encountered, impacts to encountered resources could be potentially significant. However, with implementation of Mitigation Measure (MM-) CUL-1, which includes preparation and implementation of a Worker Environmental Awareness Program (WEAP), all construction personnel will be appropriately informed of required responses to unanticipated cultural resources, should these be encountered. Additionally, MM-CUL-2, requires that all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find. Thus, potentially significant impacts to archaeological resources would be reduced to less-than-significant levels with mitigation incorporated.

Cumulative Effect

For archaeological resources, cumulative projects may require extensive excavation in culturally sensitive areas, and thus, may result in adverse effects to known or previously unknown, inadvertently discovered archaeological resources. There is the potential for accidental discovery of other archaeological resources by the proposed Project as well as by cumulative projects. Because all significant cultural resources are unique and non-renewable, all adverse effects or negative impacts contribute to a dwindling resource base. Through implementation of MM-CUL-2, which would require investigation and handling by a qualified archaeologist in the event that an unknown resource is encountered, the project-level impact to archeological resources would be reduced to less than significant.

Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to archaeological resources would be mitigated, as applicable. These determinations would be made on a case-by-case basis, and the effects of cumulative development on historical and archaeological resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, impacts on archaeological resources would not be cumulatively considerable with mitigation incorporated (MM-CUL-2).

2.3.2.2 Mitigation Measures

MM-CUL-1 Prior to commencement of construction activities for all phases of Project implementation, the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of El Segundo for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be

taken in the event of a discovery of cultural resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-2 If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of El Segundo for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South Central Coastal Information Center (SCCIC).

2.3.2.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.2.1. These feasible measures, MM-CUL-1 and MM-CUL-2, are listed in Section 2.3.2.2.

The City finds that these mitigation measures are feasible, are adopted, and will reduce the potential cultural resources impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the Project that will mitigate or avoid potentially significant impacts on cultural resources.

2.3.2.4 Facts in Support of the Findings Related to Cultural Resources

Implementation of MM-CUL-1 and MM-CUL-2 would reduce potentially significant impacts to archaeological resources by addressing the inadvertent discovery of archeological resources. There would be no significant, unavoidable impacts related to cultural resources after implementation of this mitigation measure.

2.3.3 Geology and Soils

2.3.3.1 Potentially Significant Impacts to Geology and Soils

Paleontological Resource

The Project site is underlain late Pleistocene Sand Dune deposits as indicated by surficial geological mapping at a 1:24,000 scale and is not anticipated to be underlain by unique geological features. The LACM did not report any paleontological localities from within the Project site, but they did report localities nearby from Pleistocene Sand Dune deposits. In addition to the LACM localities, desktop research for the Project area indicated there are additional paleontological localities from Pleistocene Sand Dune deposits close to the Project site. Given the proximity of past fossil discoveries in the surrounding area and the potential for significant vertebrate fossils below any artificial fill present within the Project site, the proposed Project is highly sensitive for supporting paleontological resources and is considered to have high paleontological sensitivity. In the event that intact paleontological resources are located on the Project site, ground-disturbing activities associated with construction of the Project, such as grading during site preparation, excavations for the subterranean parking structure, and trenching for pipelines or utilities, have the potential to destroy a unique paleontological resource or site. Without mitigation, the potential damage to paleontological resources during construction would be a potentially significant impact. However, upon implementation of Mitigation Measure (MM)-GEO-1, impacts would be reduced to below a level of significance. MM-GEO-1 requires a preparation of a Paleontological Resources Impact Mitigation Program that requires preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site below a depth of 5 feet below the existing ground surface or depth of documented artificial fill (based on construction plans and/or geotechnical reports), procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. With incorporation of MM-GEO-1, impacts would be less than significant.

Cumulative Effect

Potential cumulative impacts on geology and soils would result from projects that combine to create geologic hazards, including unstable geologic conditions, or contribute substantially to erosion. The majority of impacts from geologic hazards, such as rupture of a fault line, liquefaction, landslides, expansive soils, and unstable soils, are site-specific and are therefore generally mitigated on a project-by-project basis. Each cumulative project would be required to adhere to required building engineering design per the most recent version of the CBC in order to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative project site. Similarly, MM-GEO-1 would ensure that potential impacts to paleontological resources would be less than significant and other cumulative projects that would have a potential to impact soils that are sensitive for significant fossils would also require mitigation. Therefore, a potential cumulative impact related to site-specific geologic hazards, such as seismically induced ground failure, subsidence, soil collapse, and expansive soils, as well as paleontological resources, would not occur. Therefore, the proposed Project, in combination with other cumulative projects, would not contribute to a significant cumulative impact associated with geology and soils.

2.3.3.2 Mitigation Measures

MM-GEO-1 Prior to commencement of any grading activity on-site, the Project applicant/developer shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project for review and approval by the City. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site below a depth of 5 feet below the existing ground surface or depth of documented artificial fill (based on construction plans and/or geotechnical reports), procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. At a minimum, the PRIMP shall require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, Pleistocene Sand Dune deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the PRIMP shall require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources.

2.3.3.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.3.1. This feasible measure, MM-GEO-1, is listed in Section 2.3.3.2.

The City finds that this mitigation measure is feasible, is adopted, and will reduce the potential paleontological resources impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid potentially significant paleontological -related impacts of the Project identified in the EIR.

2.3.3.4 Facts in Support of the Findings Related to Geology and Soils

Potential impacts to geology and soils would be less than significant. Incorporation of MM-GEO-1 would reduce construction-related impacts to paleontological resources to a less-than-significant level. There would be no significant, unavoidable impacts related to geology and soils after implementation of these mitigation measures.

2.3.4 Hazards and Hazardous Materials

2.3.4.1 Potentially Significant Impacts to Hazards and Hazardous Materials

Routine Transport, Use, or Disposal of Hazardous Materials/Release of Hazardous Materials and the Potential for Upset Conditions

Short-Term Construction Impacts

Construction would require the use of heavy equipment and machinery. Hazardous materials would be stored in designated construction staging areas within the boundaries of the Project site and the construction contractor must ensure that they would be transported, handled, used, stored, and disposed of in accordance with all applicable federal, state, and local laws and regulations.

The Food and Beverage Building is scheduled for demolition as part of the proposed Project. Based on information provided in the Phase I ESA, ACM is present, and LBP and universal wastes are likely present in the Food and Beverage Building. Universal wastes that may be present would require collection and off-site disposal prior to demolition. Hazardous wastes, such as spent chemicals or petroleum, may also require collection and off-site disposal prior to demolition and rehabilitation. Additionally, materials that contain PCBs would require proper management prior to demolition. Should remaining hazardous materials and hazardous wastes associated with site maintenance be present, including petroleum products and cleaning supplies, these would be disturbed during the demolition process if not removed. These materials, if not properly removed, could be transported offsite with demolition debris, and therefore the proposed Project has the potential to create a significant hazard to the public or the environment through the routine transport or disposal of hazardous materials associated with demolition activities. In accordance with mitigation measure (MM-)HAZ-1, demolition must include abatement of the Food and Beverage Building of any asbestos- and lead-containing materials, PCB-containing items, universal wastes, and/or other hazardous materials. Abatement must be conducted by licensed contractors, and materials must be transported offsite for recycling and/or disposal by licensed transporters in accordance with federal, state, and local laws. Hazardous materials are also present in the hotels, including a diesel AST and various janitorial items. As these hotels are not scheduled for demolition or renovation for the proposed Project, it is not anticipated that the presence of these materials would impact construction of the proposed Project. With implementation of MM-HAZ-1, impacts associated with the routine transport of ACM, LBP, universal wastes, and hazardous materials for offsite disposal during construction would be less than significant with mitigation incorporated.

Reasonably Foreseeable Upset and Accident Conditions

Short-Term Construction Impacts

The proposed Project has the potential to expose the public and the environment to hazards associated with on-site releases of hazardous materials including ACM, LBP, PCB-containing items, universal wastes, and other hazardous materials and wastes present in the building scheduled for demolition. Management of hazardous materials and waste during pre-demolition surveys and abatement activities would be addressed by MM-HAZ-1.

Five hazardous material pipelines are located within close proximity to the Project site, three of which are located within the PCH right-of-way. Construction of the proposed Project would require excavation into existing rights-of-way to connect to existing utilities. In accordance with California Government Code 4216, notification to the Regional Notification Center is required prior to excavation work so that subsurface utilities can be located.

Excavation, grading, and offsite export of soils is anticipated for construction of the proposed Project. The adjacent 76 gasoline service station suggest that there is a potential for soil contamination associated with gas station operations in this area. Excavation of petroleum-impacted soils could cause an upset or accident condition if contaminated soils are released to the environment. Therefore, MM-HAZ-2 requires preparation of a Hazardous Materials Contingency Plan, which would include procedures to identify, handle, and dispose of potential petroleum-impacted soils related to the gas station.

With adherence to federal, state, and local laws and regulations, and implementation of MM-HAZ-1 and MM-HAZ-2, short-term construction impacts associated with potential upset and accident conditions involving the release of hazardous materials to the environment would be less than significant with mitigation incorporated.

Cortese List

Short-Term Construction Impacts

A search of the Cortese List databases was conducted, as well as other online environmental regulatory databases that provide information on hazardous material release sites in the State of California. Multiple LUST sites were identified within 0.5-mile of the Project site. These LUST sites have all received regulatory closure. However, as discussed above in Off-Site Hazardous Materials, one of these sites still has potential remaining contamination which could impact the Project site. No additional sites were identified on the Cortese List databases within 1 mile of the Project site. Additionally, 3 hazardous material release sites were identified that were not previously identified in the Phase I ESA; upon review these sites are at such a distance or gradient and/or have limited environmental contamination such that they do not likely impact the environmental condition of the Project site.

There are three sites within 0.5-mile of the Project site that have documented contamination: (1) 76 Station at 603 N Pacific Coast Highway (Sepulveda Boulevard), (2) the West Basin groundwater, and (3) a regional PCE and TCE groundwater contamination plume. Excavation and grading of PCC-North would occur adjacent to the gas station. Therefore, there is a potential for petroleum-impacted soils to be present in excavations adjacent to the gas station. A Hazardous Materials Contingency Plan would be prepared in accordance with MM-HAZ-2, which would include procedures to identify, handle, and dispose of potential petroleum-impacted soils related to the gas station. The other two listings are associated with groundwater contamination. Groundwater is not expected to be encountered during construction activities. Therefore, construction of the proposed Project in areas of potentially impacted groundwater is not anticipated to create a significant hazard to the public or the environment. With implementation of MM-HAZ-2, short-term construction related impacts associated with nearby hazardous materials sites would be less than significant with mitigation incorporated.

Impair or Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan

Short-Term Construction Impacts

PCH is a designated emergency evacuation route and runs north/south adjacent to the Project site. Construction of the proposed Project is not anticipated to impact traffic routes on PCH or other adjacent streets. However, should construction of the proposed Project require partial right-of-way closures, such as when tying into existing utilities, a traffic control plan would be submitted in accordance with MM-TRA-1. The traffic control plan would provide alternative routes for emergency evacuation and would be submitted to and approved by the City of El Segundo and/or California Department of Transportation. With implementation of MM-TRA-1, impacts would be less than significant with mitigation incorporated.

2.3.4.2 Mitigation Measures

MM-HAZ-1 The Project applicant/developer shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous material, hazardous wastes, and universal waste items. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance

of a building permit for PCC-Fairfield Parking. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.

MM-HAZ-2 Prior to commencement of any earthwork or construction activities at PCC-North, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and soil vapor associated with the 76 Station adjacent to PCC-North. The HMCP shall include training procedures for identification of contamination, and shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations. Contaminated soils shall be managed and disposed of in accordance with local and state regulations. The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The applicant or its designee shall implement the HMCP during construction activities for the proposed Project.

2.3.4.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.4.1. These feasible measures, MM-HAZ-1 and MM-HAZ-2, are listed in Section 2.3.4.2.

The City finds that these mitigation measures are feasible, are adopted, and will reduce the Project's potential impacts related to hazards and hazardous materials to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the Project that will mitigate or avoid potentially significant impacts related to hazards and hazardous materials.

2.3.4.4 Facts in Support of the Findings Related to Hazards and Hazardous Materials

The abatement of hazardous materials identified on the Project site would remove the potential for exposure of the public and the environment to accidental release of hazardous materials, as required by MM-HAZ-1. Construction and demolition activities on PCC-North adjacent to the adjacent 76 Station would be completed in accordance with the Hazardous Materials Contingency Plan, as required by MM-HAZ-2, Therefore, impacts related to foreseeable upset and accident conditions involving a release of hazardous materials to the environment would be mitigated to a less-than-significant level. All other impacts would be less than significant. There would be no significant, unavoidable impacts related to hazards and hazardous materials after implementation of these mitigation measures.

2.3.5 Noise

2.3.5.1 Potentially Significant Impacts to Noise

Generation of a Substantial Temporary or Permanent Increase in Ambient Noise Levels

Construction Noise (Short-Term Impacts)

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. The estimated construction noise levels are predicted to be as high as 85 dBA hourly L_{eq} at the nearest existing residences when Project Buildout Phase 2 (PCC-North) grading activities take place. Aside from operation of an air compressor at the acoustical center of buildout Phases 1 and 3, noise from construction for all phases is anticipated to exceed the City's hourly threshold of 65 dBA L_{eq} at the existing nearest residential properties to the west. Thus, under these conditions construction noise would result in a temporary but significant noise impact at these receptors and require mitigation measures that—if designed and implemented properly by the Project applicant and its construction contractors—would need to demonstrate at least 5 dBA and as high as 20 dBA of sound abatement in order to yield Project-attributed construction noise levels that are compliant with this City standard. Typical construction "sound blankets", such as those offered by local suppliers, are capable of providing this 5 to 20 dBA range of acoustical insertion loss (i.e., the difference in measured sound level at a receiver after a sound-occluding element is placed in the direct path between the receiver and the noise source of interest). Thus, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level.

Cumulative Effect

Noise in Excess of Standards

Implementation of the Project and its component site-specific development, as well as unrelated development projects within its vicinity would all be subject to applicable noise standards. The Project would not contribute to cumulative exceedances of noise standards, and its incremental effect would be a less-than-significant impact with mitigation incorporated.

2.3.5.2 Mitigation Measures

MM-NOI-1 Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures:

a. To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating activities during

Phase 2, temporary noise barriers of sufficient height and extent along the Project's western site boundary shall be installed and shall be confirmed to achieve (depending on construction phase activity and involved equipment) at least 5 dBA and as much as 20 dBA of barrier noise insertion loss. The temporary barrier elements should resemble an outdoor-use vinyl-covered acoustical blanket comprising one or more materials that demonstrate a sound transmission class (STC) of 30 or better. The Project Applicant/Developer shall retain the services of a qualified acoustical consultant or noise control engineer to advise on or review the design, installation, and expected performance of such temporary barriers when used during Project construction. Anticipated locations, horizontal extents, heights, and durations of installation of the temporary sound barriers over the course of Project phased buildout shall be part of the CNMP submitted to the City for review.

b. Operation of a concrete saw during the demolition phase shall include some form of proximate and portable solid-walled partial enclosure, acoustical-blanket tent, or comparably-performing shroud that can reliably deliver 10 dBA of noise reduction—separate from the temporary barrier insertion loss need described in MM-NOI-1(a) above. Alternately, slotted low-noise saw blades may be used to yield some or all of this noise reduction, so that operation of the concrete saw at a distance of 50 feet does not exceed 80 dBA. If this limit cannot be wholly achieved due to saw operation noise control or localized sound abatement (i.e., partial enclosure), then the balance of needed attenuation shall be provided by either the temporary noise barrier per MM-NOI-1(a) or by limiting duration of saw operation within an hour: each halving of duration should yield a 3 dB reduction to the hourly noise level produced by the saw.

c. Residents within 200 feet of the Project shall be informed at least two (2) weeks in advance when construction phase activities will occur. An information telephone hotline and/or website shall be established and managed to receive resident complaints, and the Applicant and its contractors shall respond to received complaints and document their investigations and any complaint resolutions in regular reports to the City Building Safety division.

2.3.5.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.5.1. This feasible measure, MM-NOI-1, is listed in Section 2.3.5.2.

The City finds that this mitigation measure is feasible, is adopted, and will reduce potential noise impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the Project that will mitigate or avoid potentially significant noise impacts.

2.3.5.4 Facts in Support of the Findings Related to Noise

With implementation of MM-NOI-1 prior to and during construction of the Project, potential construction noise impacts as received at the nearest residential properties would be reduced to less-than-significant levels. There would be no significant, unavoidable impacts related to noise after implementation of this mitigation measure.

2.3.6 Transportation

2.3.6.1 Potentially Significant Impacts to Transportation

Inadequate Emergency Access.

Construction

Short-Term Site Access

Short-term adverse traffic and parking impacts could occur in the Project vicinity during construction of the Project. Additional trips generated by the truck deliveries and construction employees could affect traffic flow in the study area; construction activity could impact traffic near the Project site; and pedestrian traffic flow near the Project site could also be altered as a result of construction.

Based on the construction period trip generation analysis conducted for the proposed Project, the peak construction activity is estimated to generate fewer total daily trips and peak-hour trips than are projected for the Project once it is completed and occupied. Although the influx of equipment and materials to the Project site could create temporary adverse effects to the adjacent roadway, potential impacts associated with construction of the Project would be limited to those locations immediately adjacent to the Project site. Segments of PCH and Mariposa Avenue would have short-term impacts at locations where new curbs are installed. Temporary lane closures around the Project site may be expected. The existing hotels on the Project site would remain open during the duration of construction. Pedestrian access to the existing hotel uses on the Project site would be open, although temporary sidewalk closures around the portions of the Project site may be expected, specifically during Mariposa Avenue street improvements for approximately 1 to 2 months.

These construction activities have the potential to temporarily impact emergency vehicle access to the Project site. To ensure adequate safeguards for pedestrian, bicycle and vehicular circulation and emergency vehicle access during short-term construction activities, MM-TRA-1 is required. MM-TRA-1 requires preparation of a Construction Traffic Control Plan. With implementation of MM-TRA-1 to address pedestrian, bicycle, and vehicular circulation during construction activities, would reduce potential impacts related to emergency access to less than significant.

2.3.6.2 Mitigation Measures

MM-TRA-1 Prior to the issuance of demolition or grading permits, the Project applicant/developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City and Manual on Uniform Traffic Control Devices guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors.

2.3.6.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.6.1. This feasible measure, MM-TRA-1, is listed in Section 2.3.6.2.

The City finds that this mitigation measure is feasible, is adopted, and will reduce the potential transportation-related impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the Project that will mitigate or avoid potentially significant impacts related to transportation.

2.3.6.4 Facts in Support of the Findings Related to Transportation

With incorporation of MM-TRA-1, potential significant impacts related to short-term access to the Project site would be reduced to less than significant. All other potential environmental impacts to Transportation would be less than significant. There would be no significant, unavoidable impacts related to transportation after implementation of this mitigation measure.

2.3.7 Tribal Cultural Resources

2.3.7.1 Potentially Significant Impacts to Tribal Cultural Resources

Register of Historical Resources and Public Resource Code Section 5024.1

Observation of the present conditions within the proposed Project site indicate that all areas have been disturbed from urban development. Neither a California Historical Resources Information System records search nor survey were able to identify any archaeological resources within the Project site. An NAHC Sacred Lands File search did not identify Native American resources within the search area, which included the proposed Project site and a surrounding 1-mile buffer. The NAHC recommended contacting five Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the Project site.

- Andrew Salas, Chairperson, Gabrieleno Band of Mission Indians, Kizh Nation
- Anthony Morales, Chairperson, Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Sandonne Goad, Chairperson, Gabrielino/Tongva Nation
- Robert Dorame, Chairperson, Gabrielino Tongva Indians of California Tribal Council
- Charles Alvarez, Gabrielino-Tongva Tribe

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City of El Segundo contacted the five NAHC Native American individuals and/or tribal organizations provided on May 18, 2020. The Gabrieleno Band of Mission Indians, Kizh Nation, responded on May 29, 2020, affirming the Project lies within their Ancestral Tribal Territory and requested formal consultation with the City of El Segundo. During a subsequent consultation meeting on August 13, 2020 between the Kizh Nation and City, the Kizh Nation provided information including historical maps showing the limits early Spanish-Mexican era ranchos, the distribution of early travel routes, and approximate locations of mapped Native American village locations in the region. The City received email correspondence from the Kizh Nation on August 13th and August 27th in 2020 that further provided information relating to traditional use of the

area and documented villages located in what is now known as Playa Del Rey and Redondo Beach. Recommended mitigation was additionally provided by the Kizh Nation for City review. No Tribal Cultural Resources were identified within the proposed Project site by the Kizh Nation as a result of their formal consultation with the City. The City sent a follow-up email on September 10, 2020 acknowledging receipt of information provided by the Kizh Nation and noting the provided information along with the proposed mitigation measures would be considered during preparation of the Draft EIR. No further communication was received by the Kizh Nation. The City sent an email to Kizh Nation on October 1, 2020 to state consultation is considered complete.

No known tribal cultural resources or cultural resources were identified by the tribe that have potential to be impacted by project activities. Government to government tribal consultation pursuant to SB 18 and AB 52 has not resulted in the identification of a TCR within the Project site. Given that no TCR has been identified, no resource-specific mitigation measures pertaining to known TCRs have been developed. Based on this information, the City has determined that the Project would not cause a substantial adverse change in the significance of a tribal cultural resource with cultural value to a California Native American tribe pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

MM-CUL-1 requires preparation and implementation of a Worker Environmental Awareness Program (WEAP), wherein all construction personnel must be trained to respond appropriately to inadvertent discovery of cultural resources. Additionally, MM-CUL-2, requires that all construction work occurring within 100 feet of any potential archaeological discovery shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, evaluates the significance of the find, and any potentially significant impacts to resources. In consideration of the information provided by the Gabrieleno Band of Mission Indians, Kizh Nation, measures for appropriate management requirements in the event that unknown tribal cultural resources are inadvertently encountered during Project construction-related earthwork activities are outlined in the following MM-TCR-1. MM-TCR-1 requires that if potential tribal cultural resources are discovered through earthwork activities, the City shall be notified and coordination with Native American tribes that have been identified by the NAHC to be traditionally and culturally affiliated with the geographic area of the Project must be conducted. Any affected tribe would be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered tribal cultural resources. With incorporation of MM-TCR-1, as well as MM-CUL-1, and MM-CUL-2, impacts to tribal cultural resources would be less than significant.

Cumulative Tribal Cultural Resources Impacts

Cumulative impacts on tribal cultural resources consider whether impacts of the proposed Project together with other related projects identified within the vicinity of the Project site, when taken as a whole, substantially diminish the number of such resources within the same or similar context or property type. There are no known tribal cultural resources on the Project site and the area is considered to be of low potential to contain unanticipated cultural or tribal cultural resources. No archaeological resources have been documented by the SCCIC within the Project site or a surrounding one-mile records search area.

Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to tribal cultural resources would be mitigated, as applicable. These determinations would be made on a case-by-case basis, and the effects of cumulative development on historical and archaeological resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, impacts on archaeological resources would not be cumulatively considerable with mitigation incorporated as MM-TCR-1, MM-CUL-1, and MM-CUL-2.

2.3.7.2 Mitigation Measures

MM-TCR-1 Should a potential tribal cultural resource (TCR) (as defined by PRC Section 21074) be inadvertently encountered during construction activities, consistent with the process required by MM-CUL-2, all construction work occurring within 100 feet of the find shall immediately stop and the City shall be notified of the discovery. The City shall notify Native American tribes that have been identified by the Native American Heritage Commission to be traditionally and culturally affiliated with the geographic area of the Project. Any affected tribe shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible.

MM-CUL-1 Prior to commencement of construction activities for all phases of Project implementation, the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of El Segundo for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-2 If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of El Segundo for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South Central Coastal Information Center (SCCIC).

2.3.7.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.7.1. These feasible measures, MM-TCR-1, as well as MM-CUL-1 and MM-CUL-2, are listed in Section 2.3.7.2.

The City finds that these mitigation measures are feasible, are adopted, and will reduce the potential tribal cultural resource impacts of the Project to less than significant levels. Accordingly, the City finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the Project that will mitigate or avoid potentially significant impacts on tribal cultural resources.

2.3.7.4 Facts in Support of the Findings Related to Tribal Cultural Resources

With the implementation of MM-TCR-1, as well as MM-CUL-1 and MM-CUL-2, would reduce potential impacts to tribal resources to less than significant levels. There would be no significant, unavoidable impacts related to tribal cultural resources after implementation of these mitigation measures.

2.4 Impacts Determined to Be Less Than Significant

Based on the analysis contained in the EIR, the following issue areas have been determined to fall within the "less than significant impact" category for all thresholds: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire.

Other impacts under air quality, cultural resources, geology and soils, hazards and hazardous materials, noise, transportation, and tribal cultural resources not addressed below are addressed in Section 2.2 and Section 2.3.

2.4.1 Aesthetics

Scenic Vistas

The Project site is currently developed and located within a highly urbanized, relatively flat portion of the City. As such, views from the Project site and in the vicinity of the Project site are not particularly scenic. The City's General Plan does not identify any officially designated scenic vistas within City boundaries (City of El Segundo 1992). Further, the County of Los Angeles's General Plan does not identify any officially designated scenic vistas for conservation purposes (County of Los Angeles 2014). The western boundary of the City includes 0.8 miles of Pacific Ocean shoreline; however, this area is not visible from the Project site. The views from the Project site are limited to existing urban development. Scenic resources visible from the regional Project area include the elevated terrain of the Santa Monica Mountains to the north, San Gabriel Mountains to the north/northeast, the Lakes at El Segundo Golf Course to the southeast, and the coastline and beaches to the west. However, these scenic resources are not visible from the Project site due to the distance and intervening development. Although open space at Washington Park and Freedom Park provide some valued viewshed within the proximity of the Project, the intervening residential uses prevent extensive views of the Project site from these parks. As such, although the Project would result in visual changes on the Project site due to increased intensity of use, these changes would not adversely affect a

scenic vista. In summary, due to the urban, developed character of the existing viewshed, the presence and proximity of existing nine- to 20-story developments along PCH, as well as existing topography in the area, the proposed Project would not have a substantial adverse effect to existing scenic views of the Santa Monica Mountains, San Gabriel Mountains, the coastline, or beaches, and no mitigation is required.

Scenic Resource Damage within a State Scenic Highway

There are currently no designated state scenic highways or eligible state scenic highways in the City of El Segundo. The nearest eligible scenic highway, Route 1, runs from Route 187 near the City of Santa Monica (approximately 6 miles northwest of the Project site), to Route 101 near El Rio in Ventura County. The nearest officially designated state scenic highway, Route 27 near the Topanga State Park, is located approximately 13.3 miles northwest of the Project site (Caltrans 2019). Due to distance, intervening terrain, and intervening development, the proposed Project would not be visible from the eligible state scenic segment of Route 1 nor the officially designated state scenic highway segment of Route 27. As such, the proposed Project would not damage scenic resources within a state scenic highway. No impact would occur and no mitigation is required.

Regulations Governing Scenic Quality

California Public Resources Code Section 21071 defines an "urbanized area" as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." The combined population of the City of El Segundo and any combination of not more than two of these adjacent cities is well over 100,000 persons.

With regards to local plans and policies, under existing conditions, the Project site is subject to the El Segundo General Plan and the ESMC. The Project would involve adoption of the proposed Specific Plan, which would establish a new regulatory framework within the Specific Plan area. Implementation of the Project would require approval of a General Plan Amendment (No. GPA 19-01) to change the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying General Plan Amendment Land Use map change (No. GPA 19-01), a Zone Text Amendment (No. ZTA 19-08) to add a new ESMC §15-3-2(A)(12) "Pacific Coast Commons Specific Plan (PCCSP)", and Zone Change (No. ZC-19-01).

The proposed Specific Plan would allow for the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties to be in compliance with the Specific Plan as the hotels would be consistent with the newly established development standards in the Commercial-1 (COM-1) and Commercial-2 (COM-2), respectively. The COM-1 and COM-2 designations would allow hotels and several other commercial uses that are either accessory to hotel uses or complementary uses. Additionally, there would be no additional floor area added to the hotel properties.

Upon Project approval, the Specific Plan would constitute the zoning for the Project site, and the land use and development standards identified in the Specific Plan document would supersede all zoning regulations to the extent that they would be in conflict with the sections of this Specific Plan.

It is anticipated that Project implementation would eliminate all landscaped areas, including all trees, within the development areas that contain landscaping (PCC-South and PCC-Fairfield Parking), and no changes to landscaping are anticipated at the two hotel properties. As required by ESMC Section 9-3-6 all tree removals located on public property must obtain a tree permit from the City. Permits may be granted if the proposed tree removal would occur under the direction of a certified arborist and completed by a licensed contractor, and tree removal or maintenance

must adhere to standards issued by the International Society of Arboriculture. The City may require that the permittee plant another tree in the place of the one removed or destroyed and that a particular species of tree, as determined by the city's approved street tree list, be used as a replacement (and the director will select the species of tree that may be planted).

Additionally, the Specific Plan requires preparation of a Landscape Master Plan for each sub-district of the Specific Plan area to ensure a unified appearance implementing the intent of the Design Guidelines and objectives of this Specific Plan. The Landscape Master Plan must be prepared by a licensed landscape architect and it must be submitted to the City prior to approval of the first site plan review within the Specific Plan area. Development on the Project site must include landscaping at all property perimeter areas except where buildings, driveways, pedestrian walkways, driveway visibility and corner clearance areas are located. One shade tree must be provided for every 25 feet of street frontage where landscaping is provided. One shade tree must be provided for every 25 feet along interior property lines where landscaping is provided in the PCC Mixed-Use 2 (PCC MU-2) land use district. Therefore, the removal of any trees on the Project site would be addressed through compliance with the ESMC and the Specific Plan development standards.

Although the Project would require a General Plan Amendment to allow for greater density on the Project site, as well as changes to the allowable land use mix and land use recommendations for the site, the Project would comply with all other applicable goals and policies related to aesthetics and scenic resources of the City's General Plan.

The Project site would be brought into consistency with the ESMC upon approval of the Specific Plan and would comply with other applicable provisions of the ESMC. Additionally, the proposed Project is subject to the City's Site Plan Review, which would evaluate the proposal for architectural design. Therefore, the proposed Project would be consistent with applicable regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

Shade/Shadow Effects

The Conceptual Site Plan proposes development that does not exceed the maximum allowable development capacity for each land use district as required by the Specific Plan. As such, the maximum allowable height as defined by the Specific Plan is more conservative for its potential shade/shadow impacts. The maximum allowable height for each of the Specific Plan land use districts are listed in Section 4.1.2, Relevant Plans, Policies, and Ordinances. No development changes are proposed to PCC-COM-1 and PCC-COM-2. The development standards in the Specific Plan identify the maximum height for PCC-MU-1 (PCC-South) as 90 feet, PCC-COM-3 (PCC-Fairfield Parking) as 68 feet, and PCC-MU-2 (PCC-North) as 85 feet.

The existing residential across Indiana Street to the west, are considered shadow-sensitive uses. A shade/shadow analysis was prepared for the proposed Project to consider the potential for shadow-sensitive uses to be placed in shadow by the Project. To approximate shade and shadow conditions in the surrounding area created by implementation of the proposed Project, shadows cast by the proposed Project were simulated for the winter solstice (December 21), spring equinox (March 20), summer solstice (June 21), and fall equinox (September 23) Shadow projections from the proposed Project during spring, summer, winter, and fall.

The City does not have existing zoning or other regulations governing the effects of shade/shadow. Nonetheless, the City has utilized the City of Los Angeles thresholds of significance to determine whether the proposed Project would result in a significant to shade/shadow impacts onto adjacent residential uses. Based on the City of Los Angeles' thresholds, the proposed Project would have a shade/shadow impact if shadow-sensitive uses would be

shaded by Project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. (Winter Solstice and Spring Equinox), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. (Summer Solstice and Fall Equinox).

Winter Solstice

Due to the low angle of the sun, shadows cast on December 21 would be the longest in length, and therefore, represent the worst-case scenario. Shadows generated by the proposed Project at 9:00 a.m. and 10:00 a.m. would be cast to the northwest onto residential uses. As the morning progresses, shadows cast to the northwest would reduce in length and would be reoriented toward the north. For example, by 12:00 p.m. the shadows cast by the proposed Project would no longer be cast on residential uses across Indiana Street. At this time, the proposed Project would not shade any other structure outside of the Project site. At 2:00 p.m. and 3:00 p.m., shadows cast by the proposed Project would extend north onto one single-family property and would continue to move and elongate to the east onto PCH. Project-generated shadows would extend across PCH to the sidewalk near the restaurant and retail uses across PCH. After 3:00 p.m., Project-generated shadows may continue to elongate as the sun sets but would not produce shadows on nearby residential uses. Further, Project shadows would function in this manner for a limited duration (i.e., during the winter season). As such, the proposed Project would not produce shadows for more than three hours between 9:00 a.m. and 3:00 p.m. affecting adjacent uses or property during the winter and impacts would be less than significant.

Spring Equinox

The analysis prepared for Project-generated shadows represent the median shade/shadow that would result from implementation of the proposed Project. At 9:00 a.m. and 10:00 a.m. would be cast to the northwest onto residential uses. As the morning progresses, shadows cast to the northwest would reduce in length and would be reoriented toward the north. For example, by 11:00 a.m. the shadows cast by the proposed Project would no longer be cast on residential uses across Indiana Street. At 2:00 p.m. shadows would be cast onto one of the single-family driveways to the north. At 3:00 p.m. and 4:00 p.m., the shadow would no longer be cast on the same single-family property and would cast a shadow onto the driveway of another single-family resident. The Project would produce shadows that extend onto PCH beginning at 3:00 p.m. and extend west at 4:00 p.m. and slightly farther west at 5:00 p.m., no longer casting shadows on residential uses to the north and west Due to the limited duration of these shadows, the Project would not produce shadows for more than three hours between 9:00 a.m. and 3:00 p.m. affecting adjacent uses or property during the spring and impacts would be less than significant.

Summer Solstice

Shadows cast by the proposed Project during the summer would be shorter than those in the winter and would generally only cast slightly onto the residential uses to the west at 9:00 a.m. and 10:00 a.m. In the afternoon, shadows would be cast onto the sidewalk immediately adjacent to the Project site at 2:00 p.m. and onto PCH toward the existing median at 4:00 p.m. However, the adjacent residential uses to the west would only be shaded at 9:00 a.m. and 10:00 a.m. Due to the limited duration of these shadows, the Project would not produce shadows for more than four hours between 9:00 a.m. and 5:00 p.m. affecting adjacent uses or property during the summer and impacts would be less than significant.

Fall Equinox

During the fall equinox, shadows would be projected to the west at the greatest extent at 9:00 a.m. and to the east at the greatest extent at 5:00 p.m. The Project would produce a shadow at the existing residential uses across Indiana at 9:00 a.m. and 10:00 a.m. The Project would not produce shadows onto residential uses during the rest of the day. The Project would produce shadows that extend onto PCH beginning at 2:00 p.m. However, the adjacent residential uses to the west would only be shaded at 9:00 a.m. and 10:00 a.m. Due to the limited duration of these shadows, the Project would not produce shadows for more than four hours between 9:00 a.m. and 5:00 p.m. affecting adjacent uses or property during the fall and impacts would be less than significant.

Lighting and Glare

Nighttime Lighting

The Project would result in additional lighting sources and potential sources of glare on the Project site and light trespass on adjacent residential neighborhoods. Regarding lighting, lighting sources on the Project site may include surface-mounted floodlights for landscaping, linear landscape luminaries, in-ground up-lights, and pathway lights for safety and wayfinding. Outdoor lighting would be used on the exterior of the building's street level, signage, pedestrian ways, plaza courtyards, the roof-deck swimming pool at PCC-South and PCC-North, and the parking structures. Interior lights would shine through the Project's glass windows at night, causing additional illumination.

The Specific Plan sets forth specific requirements for neon signage. Neon signage is not permitted on any building façades facing west in the PCC Mixed-Use 1 land use district. Neon Signage is not permitted on any building façade facing west in the PCC Commercial-3 land use district. Neon signage is not permitted on the Palm Avenue street frontage or on any building facades facing west in the PCC Mixed-Use 2 land use district between Mariposa and Palm Avenues or along the Palm Avenue. Electronic signage for the proposed Project must be in conformance with the signage regulations of ESMC Chapter 15-18 except as established and approved in a Master Sign Program for each land use district in the Specific Plan.

While the new structures on the Project site would result in greater general illumination on the Project site over the existing uses. The Project would be required to comply with existing California Building Code regulations pertaining to lighting, as adopted by reference pursuant to Chapter 13-1-1 of the ESMC. The development standards in the California Building Code provide requirements to limit light and glare to the extent feasible while providing sufficient light for safety and practicality.

Further, the Specific Plan would implement design guidelines to promote and enforce the City's lighting regulations. The Specific Plan requires the submittal of photometric studies as part of any site plan review submittal, which includes parking lots, and parking structures in the Specific Plan area. The Project represents an intensification of use over existing development on the Project site and would create a new source of substantial light on the Project site. Nonetheless, the Project and Project lighting elements would comply with ESMC and Specific Plan requirements, as well as the Site Plan Review. In addition, due to the presence of comparable multi-story office development along PCH, and the general urban character of the corridor and surrounding area, the proposed Project would not adversely affect existing nighttime views in the area due to new sources of nighttime lighting or glare. No mitigation is required.

Daytime Glare

Consistent with the California Vehicle Code, "no person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway" and "limits to

the location of light sources that may cause glare and impair the vision of drivers." Additionally, the Specific Plan would require that "the type and location of parking structure, parking area and building lighting must prevent direct glare on to adjacent residential properties". Furthermore, the Project is subject to Site Plan Review to ensure materials that could create adverse light or glare effects are not included in the design. Per the Specific Plan, lighting must be adequate throughout the Specific Plan area and shielded to minimize off-site illumination, and the submittal of photometric studies is required as part of any Site Plan Review submittal, which includes parking lots and parking structures in the Specific Plan area. Therefore, the proposed Project would not create a new source of substantial daytime glare and less than significant impacts would occur. No mitigation is required.

Cumulative Aesthetics Impacts

Scenic Vistas/Scenic Quality

Due to the urban, developed character of the City and surrounding area, cumulative projects would not have a substantial adverse effect to existing scenic views of the Santa Monica Mountains, San Gabriel Mountains, the coastline, or beaches. The Project site, along with cumulative projects, are located in a highly developed urban environment. In general, visual resource impacts of the cumulative projects would be site-specific and would not be expected to combine with other projects in separate viewsheds to create a cumulative impact. However, other projects in close proximity to the Project site could cumulatively change the scenic character of the area in combination with the proposed Project. There are no identified cumulative projects within close proximity to the Project site or within the PCH view corridor. Cumulative projects would be required to comply with the development standards of the ESMC that include setbacks and height limits, and may similarly be subject to Site Plan Review.

Similar to the Project, future projects in the cumulative study area would be required to demonstrate compliance with applicable scenic quality regulations. If non-compliance with a particular regulation would result in a significant impact, mitigation would be required to reduce impacts to the extent feasible. Therefore, impacts would be less than significant and the Project would not result in a cumulatively considerable impact related to scenic vistas or conflicts with scenic quality regulations. No mitigation is required.

Shade/Shadow Effects

The extent to which a project could produce significant shade/shadow impacts is site-specific. Thus, the geographic area of potential shade/shadow impacts would be within the immediate vicinity of the Project site. There are no cumulative projects in the immediate vicinity of the Project, the closet cumulative project is the office proposed at 455 Continental Boulevard & 1995 E Grand Avenue, over 0.3-mile southwest of the Project site. Due to the distance and intervening development, this cumulative project would not combine with the proposed Project to produce shadows on nearby sensitive uses. Therefore, impacts would be less than significant and the Project would not result in a cumulatively considerable impact related to shade/shadow.

Light or Glare

The urbanized Project setting supports numerous nighttime lighting sources and contains buildings and facilities constructed of potentially reflective materials, including metal paneling and glass. The Project would have the potential to result in an incremental increase in light and glare associated with the new development. However, the California Vehicle Code requires new development to avoid glare impacts. In addition, all lighting installed on the Project site would comply with applicable guidelines included in the Specific Plan that would be comparable to ESMC regulations concerning lighting and glare. Lastly, the surrounding area is largely developed in nature and

located in an urban environment. Thus, the area currently includes sources of interior and exterior lighting. Therefore, impacts would be less than significant and the Project would not result in a cumulatively considerable impact related to light and glare. No mitigation is required.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on aesthetics as it relates to scenic vistas, scenic resource damage within a state scenic highway, regulations governing scenic quality, lighting and glare, and cumulative aesthetic impacts; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.2 Agriculture and Forestry Resources

The Project site is located in an urban area on a site that is fully developed with buildings and asphalt paving and is included in the General Commercial (C-3) and Parking (P) zones. There are no existing agriculture or forestry activities on the site. No readily available opportunities for agricultural or forestry operations exist on site or in the surrounding area. According to the California Department of Conservation's California Important Farmland Finder, most of Los Angeles County, including the City of El Segundo, is not mapped as part of the state's Farmland Mapping and Monitoring Program; thus, the Project site does not contain Prime Farmland, Unique Farmland, or Farmland of State Importance (collectively "Important Farmland") (DOC 2020), nor does it contain any parcels under a Williamson Act contract (DOC 2018). Additionally, the Project site nor the surrounding area contain forestland or timberland. Therefore, impacts associated with agricultural and forestry resources would not occur.

Finding

Appendix B of the Notice of Preparation for the Project found no potential for significant impacts to agriculture and forestry resources; therefore, agriculture and forestry resources was not addressed in the Draft EIR. No mitigation would be required and no significant, unavoidable adverse impacts would occur.

2.4.3 Air Quality

Cumulatively Considerable Net Increase of Criteria Pollutants

Construction Emissions

Construction of the proposed Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (e.g., on-road haul trucks, vendor trucks, and worker vehicle trips).

Implementation of the proposed Project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and

application of asphalt pavement would also produce VOC emissions; however, the contractor would be required to procure architectural coatings from a supplier in compliance with SCAQMD Rule 1113.

Criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts would be less than significant.

Operational Emissions

Operation of the proposed Project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips; area sources, including the use of consumer products, natural gas hearths, and landscape maintenance equipment; and energy sources. Pollutant emissions associated with long-term operations were quantified using CalEEMod. The combined daily area, energy, mobile, vehicle testing, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with Project-generated operational criteria air pollutant emissions would be less than significant.

Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. The maximum daily PM_{10} and $PM_{2.5}$ emissions would not exceed the significance thresholds during proposed Project construction activities. Fugitive dust, as well as vehicle and equipment exhaust, generated during Project construction would contribute to the SCAB's nonattainment designation for PM_{10} and $PM_{2.5}$; however, this contribution would not be considered cumulatively considerable.

With regard to operational cumulative impacts associated with nonattainment pollutants, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Projects that exceed the SCAQMD project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. The proposed Project's operational emissions would not exceed the SCAQMD significance thresholds. Accordingly, the proposed Project would not result in a cumulatively considerable contribution to the nonattainment pollutants in the SCAB. The proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Localized Significance Threshold

The closest off-site closest off-site sensitive receptors to the proposed Project are single-family and multi-family residences, immediately adjacent to the proposed Project to the west. Furthermore, the closest schools to the proposed Project are Center Street Elementary School, which is located approximately 1,600 feet to the west and El Segundo Middle School, which is located approximately 1,680 feet to the west.

An LST analysis was prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the Project site. Construction

activities associated with the proposed Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. Off-site emissions from vendor trucks, haul trucks, and worker vehicle trips are not included in the LST analysis. Construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction and operation of the proposed Project would be less than significant.

Carbon Monoxide Hotspots

The SCAQMD 1993 Handbook and the 2003 AQMP were used to determine CO attainment under the CAAQS and NAAQS to calculate CO hotspots. The Draft EIR determined potential operational impacts, from future development allowed by the proposed Project, would result in less than significant impacts associated with CO hotspots.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed Project would result in emissions that would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. VOCs would be associated with motor vehicles, construction equipment, and architectural coatings; however, Project-generated VOC emissions would not result in the exceedances of the SCAQMD thresholds. Additionally, compliance with SCAQMD Rule 1113 would restrict the VOC content of coatings for construction applications. VOC and NO_x emissions associated with Project construction and operation could minimally contribute to regional O_3 concentrations and the associated health impacts. Because of the minimal contribution during construction and operation, health impacts would be considered less than significant.

Construction and operation of the proposed Project would also not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct SCAB from coming into attainment for these pollutants. The proposed Project would also not result in substantial DPM emissions during construction and operation, and therefore would not result in significant health effects related to DPM exposure. Additionally, the proposed Project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered less than significant.

Construction and operation of the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of the proposed Project would not create substantial, localized NO_x impacts. Therefore, potential health impacts associated with NO_2 and NO_x would be less than significant.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and is determined to be a less than significant impact. Thus, the proposed Project's CO emissions would not contribute to significant health effects associated with this pollutant.

In summary, construction and operation of the proposed Project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants and potential health impacts associated with criteria air pollutants would be less than significant.

Other Emissions

Construction Impacts

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Operational Impacts

Land uses and industrial operations that typically are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities (SCAQMD 1993). The proposed Project does not propose the aforementioned odor-generating land uses during the operational phase of the proposed Project. Furthermore, the proposed Project would comply with SCAQMD Rule 402, Nuisance, which prohibits the release of odors which may cause annoyance to a considerable number of persons, as well as other SCAQMD rules related to odor generation from restaurant activities. Therefore, the potential for the proposed Project to generate an odor impact is considered less than significant.

Because the SCAQMD air quality plans are regularly updated and consider the cumulative emissions of existing and projected development, it may be concluded that a project that does not have a direct air quality impact would not have a cumulative regional air quality impact. Therefore, the Project would have a less than significant cumulative air quality impact related to long-term regional emissions of all criteria pollutants because direct impacts would be less than significant. As such, the Project potential to result in a cumulatively considerable increase of any criteria pollutant for which the Los Angeles portion of the SCAB is in nonattainment under an applicable NAAQS or CAAQS would be less than significant, including O_3, PM_{10}, and $PM_{2.5}$.

The analysis for local CO hotspot impacts is based on the SCAQMD 2003 AQMP CO analysis. The qualitative assessment that demonstrated a less than significant impact is inherently a cumulative analysis, and the cumulative impact would be less than significant. Because the Project would not include non-permitted stationary sources of TACs onsite and permitted emergency generators would only be used for maintenance and testing, it would not contribute to long-term health risk impacts in the Project area.

The Project is not anticipated to generate nuisance operational odors; therefore, the Project would result in a less than cumulatively considerable operational odor impact.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on air quality as it relates to criteria pollutants, sensitive receptors, and other emissions; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.4 Biological Resources

Under the existing conditions, the Project site is almost entirely developed with paved surfaces and buildings. A limited amount of landscaped areas is located within the Project site and along the public rights-of-way, consisting of small areas of ornamental trees, shrubs, and turf. This vegetation is ornamental in nature, entirely surrounded by urban development, and does not form a cohesive plant community that would provide quality suitable habitat for candidate, sensitive or special status wildlife species, or would support wildlife movement. According to the City's General Plan, the native vegetative cover throughout the City has been displaced by urban structures, and the primary vegetation now consists of domesticated species, including lawn grasses, ground covers, shrubs, and trees, planted for their ornamental qualities (City of El Segundo 1992). No wetlands or other jurisdiction waters are within the Project site (USFWS 2020). Further, any development activities conducted pursuant to the Specific Plan would be required to comply with all applicable requirements set forth by the City, including the City's street tree regulations (El Segundo 2021). All development activities are subject to the requirement to protect nesting birds, in compliance with the Migratory Bird Treaty Act, which prohibits the accidental or "incidental" taking or killing of migratory birds (U.S.C. 2021). Therefore, impacts associated with biological resources would not occur.

Finding

Appendix B of the Notice of Preparation for the Project found no potential for significant impacts to biological resources; therefore, biological resources were not addressed in the Draft EIR. No mitigation would be required and no significant, unavoidable adverse impacts would occur.

2.4.5 Cultural Resources

Historical Resources

The Fairfield Inn and Suites Hotel property (525 Sepulveda Boulevard; Assessor's Parcel Number [APN] 4139-025-091) was evaluated for historical significance and integrity in consideration of NRHP, CRHR, and City of El Segundo designation criteria and integrity requirements.

NRHP/CRHR Statement of Significance

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research indicated that at the time of construction, the Thunderbird Hotel (now Fairfield Inn and Suites Hotel) was one of the largest hotel projects in Southern California; however, this achievement was subsequently overshadowed by a suburban hotel building boom throughout the state that persisted alongside a housing and population boom in the 1950s and 1960s. The size of the Thunderbird Hotel and its status as a popular, local banquet hall and meeting center do not appear to have made a significant contribution to the history of the City of El Segundo or State of California's development. Moreover, with subsequent additions and alterations, the building no longer adequately represents the time period in which these events took place. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners, employees, or long-term guests are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Therefore, the property does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Fairfield Inn and Suites Hotel was constructed in 1959 and received two major additions in 1961 and 1979. The original 1959 hotel volume, 1959 conference room and restaurant wing, and 1961 addition at the time of these construction were excellent examples of the highly artistic Mid-Century Modern-style buildings designed by local Southern California-practicing architects Raymond Stockdale and Maxwell Starkham & Associates. The now-lost character-defining features would have been the curtain wall construction, colored spandrel paneling, cantilevered porches, rectangular and boxy proportions, and decorative concrete and metal screens on the main elevation. Although neither architect could be considered a master architect, the buildings were good examples of their work. However, due to major exterior alterations in 1987, none of the original decorative elements or character-defining features of the Mid-Century Modern buildings remain. The property as a whole has been altered beyond recognition, diminishing its once high artistic value. Finally, due to extensive exterior alterations, the property may no longer be considered representative of a significant and distinguishable entity whose components lack individual distinction. For these reasons, the Fairfield Inn and Suites Hotel property at 525 N. Sepulveda Boulevard does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials, or technologies.

City of El Segundo Statement of Significance

The City of El Segundo's cultural resource designation criteria is based on a combination of age and NRHP/CRHR designation criteria and integrity requirements. Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

The Fairfield Inn and Suites Hotel property maintains integrity of location, as it remains in its original location. The Fairfield Inn and Suites Hotel property, including all three wings have had major exterior renovations since 1987. While the buildings maintain much of their original plan and structure, key-character defining features of the Mid-Century Modern style building were removed and replaced with ordinary modern materials. Therefore, the Fairfield Inn and Suites Hotel property does not maintain integrity of design. The property does not retain integrity of setting, as the setting in all directions has been altered into parking lots, high-rise office or hotels, or strip malls with anchoring grocery and retail stores, in the late 1980s and 1990s. The size, scale, and density of this modern setting would be unrecognizable to a person from the late 1950s or early 1960s. Similar to integrity of design, the Fairfield Inn and Suites Hotel property does not maintain integrity of materials and workmanship, due to the loss of the

highly artistic concrete and metal screens and introduction of modern materials on the main and side elevations. Key original elements such as the cladding, signage, porte-cochere, decorative elements, windows, and doors have all been removed and replaced. The Fairfield Inn and Suites Hotel property does not retain integrity of feeling, as the property no longer retains the ability to express itself as a hotel building constructed in the 1950s, built in the early years of LAX's "jet-age" modernistic expansion. Finally, the property no longer retains integrity of association either with original owners Allen E. and Marc Siegal, or with the original companies: Thunderbird Hotel Corporation or Hacienda Hotels. In summary, Fairfield Inn and Suites Hotel property does not retain the requisite integrity for designation, and does not rise to the level of significance required for designation at the national, state, or local levels.

Summary of Findings

No cultural resources were identified within the Project site as a result of the CHRIS records search, NAHC SLF search, extensive archival research, field survey, and property significance evaluation. The Fairfield Inn and Suites Hotel property located at 525 Sepulveda Boulevard (APN 4139-025-091) does not appear eligible for NRHP, CRHR, or City designation due to a lack of significant historical associations, architectural merit, and physical integrity. Therefore, this property is not considered an historical resource for the purposes of CEQA. Further, no potential indirect impacts to historical resources were identified. The Project would not cause a substantial adverse change in the significance of a historical resource, or otherwise result in a direct impact to a historical resource. No other adjacent resources were identified as a result of the records search or survey that could be indirectly impacted by the proposed Project. Therefore, the Project would have a less than significant impact on historical resources. No mitigation is required.

Disturbance of Human Remains

No prehistoric or historic burials were identified within the Project site as a result of the records searches. Additionally, the Project site is located within an urbanized area that has been subject to disturbance in the past as a result multiple construction projects and development. Moreover, the Project is not part of a dedicated cemetery and as such, the likelihood of disturbing human remains is low. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the Los Angeles County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, they shall notify the NAHC in Sacramento within 24 hours. In accordance with California PRC Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Therefore, compliance with applicable state regulations related to the potential disturbance of human remains would be adequate to address any potential impacts, and no mitigation is required.

Cumulative Effect

The CHRIS record search identified twelve previously identified historic built environment resources within a 1-mile record search radius and no cultural resources immediately adjacent to the Project site. Only one of these, Hangar One at 5701 West Imperial Highway (P-19-174101), has been previously listed in the NRHP, and none of the Project addresses listed appear to be close enough in location to affect this historical resource. All other resources have

been determined ineligible and are not considered historic resources for the purposes of CEQA. The proposed Project was determined to have less than significant direct and indirect impacts on historic resources. Therefore, the proposed Project would not result in any cumulatively considerable impacts to historic resources.

The proposed Project was determined to have less-than-significant direct impacts on human remains. Existing regulations are adequate to address the potential for impacts due to the inadvertent discovery of human remains on the Project site. Other individual projects occurring in the vicinity of the Project site would also be subject to the same state requirements to contact appropriate agencies and coordinate with the County Coroner. Therefore, the proposed Project would not result in any cumulatively considerable impacts related to human remains.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on cultural resources as it relates to historical resources and disturbance of human remains, therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.6 Energy

Wasteful, Inefficient, or Unnecessary Consumption of Energy

Electricity

Construction

Temporary electric power for lighting, heating/cooling, and electronic equipment, such as computers inside temporary construction trailers, as well as lighting for construction activities, would be required during short-term construction activities. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. All sources of electricity would be from existing power lines that serve the site and no new infrastructure would be required. There is nothing unusual about the proposed Project that would result in a wasteful, inefficient, and unnecessary use of electrical energy. The electricity used for construction activities would be temporary and would have a negligible contribution to the proposed Project's overall energy consumption. Impacts to electricity during construction would be less than significant, and no mitigation is required.

Operations

The operational phase would require electricity for multiple purposes including building heating and cooling, lighting, appliances, electronics, and water and wastewater conveyance. It was assumed that multi-family residential savings are 2% of electricity from the 2016 standards. For non-residential buildings, the savings are 10.7% of electricity.

Buildout of the proposed Project is estimated to have a total electrical demand of 3,143,911 kWh per year (or 3 million kWh per year) for proposed Project usage. The proposed Project's electrical consumption would be a small percentage (0.005%) of the County's annual use. SCE forecasts that its total energy consumption in 2024 (the Project buildout year) will be approximately 120,000 gigawatt hours of electricity (CEC 2018b). Based on the

Project's estimated electrical consumption of 3,143,911 kWh/year, the Project would account for approximately 0.0026% of SCE's total projected consumption during 2024 for the Project's buildout year.

In addition, the proposed Project would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency. Also, the provisions of the CALGreen code apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. In mixed occupancy buildings, such as the proposed Project, each portion of a building must comply with the specific green building measures applicable to each specific occupancy. Therefore, due to the inherent increase in efficiency of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of energy. Impacts related to operational electricity use would be less than significant.

Natural Gas

Construction

Natural gas is not anticipated to be required during construction of the proposed Project. Any minor amounts of natural gas that may be consumed as a result of proposed Project construction would be substantially less than that required for proposed Project's operation and would have a negligible contribution to the proposed Project's overall energy consumption.

Operations

Natural gas consumption during proposed Project operation would be required for various purposes, including building heating and cooling. Buildout of the proposed Project would consume approximately 3,898,778 kBTU per year. SoCalGas customers annual natural gas consumption is estimated to be 7,876 million therms per year. Therefore, the proposed Project's estimated natural gas consumption of 3,898,778 kBTU (or 38,988 therms) per year would be a small percentage (0.0005%) of SoCalGas' annual supply to customers. The proposed Project would be required to meet Title 24 requirements applicable at that time, as required by state regulations through the plan review process. Therefore, due to the inherent increase in efficiency of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of natural gas. Impacts related to operational natural gas use would be less than significant.

Petroleum

Construction

Petroleum would be consumed throughout construction of the proposed Project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, vendor trucks, and haul trucks would rely on diesel fuel. Construction workers would travel to and from the Project site throughout the duration of construction. It was assumed that construction workers would travel in gasoline-powered vehicles.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020).

The proposed Project is estimated to consume approximately 202,913 gallons of petroleum during the construction phase. The total expected petroleum use from the proposed Project's construction represents approximately 0.0003% of California's consumption of petroleum over the construction duration. In accordance CARB's Airborne Toxics Control Measure, the proposed Project would be required to restrict heavy-duty diesel vehicle idling time to 5 minutes, which would reduce petroleum usage. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be less than significant.

Operations

The fuel consumption resulting from the proposed Project's operational phase would be attributable to various vehicles associated with each land use. Petroleum fuel consumption associated with motor vehicles traveling within the City during operation is a function of VMT. Mobile sources from buildout of the proposed Project would result in approximately 199,110 gallons of petroleum fuel usage per year. The proposed Project would consume (at buildout), approximately 0.005% of the gasoline and 0.062% of the diesel sold within the County (in 2017). The SCAG region has household 15.3 VMT per capita and the City of El Segundo has a household 14.2 VMT per capita. The proposed Project is estimated to generate an average daily household VMT per resident of 10.9 miles, which is more than 15% less than the City's VMT. Therefore, the Project would not result in a significant transportation impact related to VMT. Over the lifetime of the proposed Project, the fuel efficiency of vehicles is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation would decrease over time. Operation of the proposed Project is expected to use decreasing amounts of petroleum over time due to advances in vehicle fuel economy standards.

Conflict or Obstruct Plan for Renewable Energy

The proposed Project would comply with all applicable regulatory requirements for the design of new buildings. Title 24 of the California Code of Regulations contains energy efficiency standards for residential and nonresidential buildings based on a state mandate to reduce California's energy demand.

Additionally, the proposed Project would receive electricity from SCE, which has the mandate to comply with SB 100. This policy requires that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045, and that the zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling. Thus, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, impacts during construction and operation of the proposed Project would be less than significant.

Cumulative Energy Impact

Buildout of the Project, related projects, and additional forecasted growth in SCE's service area and SoCalGas' service area would cumulatively increase the demand for electricity and natural gas supplies and infrastructure capacity. Although Project development would result in the use of renewable and non-renewable resources during construction and operation, which could limit future availability of non-renewable energy sources, the use of such resources would be on a relatively small scale, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for the service areas. Furthermore, as with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

As with the proposed Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. Furthermore, as described above, the Project would be consistent with the energy efficiency policies emphasized by the 2020 RTP/SCS. Since the Project is consistent with the Connect SoCal (2020 RTP/SCS), its contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on energy as it relates to consumption of energy, conflict or obstruction of a plan for renewable energy, and cumulative impacts to energy, therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.7 Geology and Soils

Expose People or Structures to Fault Rupture

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS 2020). According to the Geotechnical Evaluation, the closest such zone is located along the Newport-Inglewood Fault, located approximately 3.6 miles to the east/northeast of the Project site (Appendix E-1). In addition, as shown in Figure 4.5-1, no known faults traverse the Project site. Furthermore, the Project site would not directly or indirectly cause or exacerbate existing fault rupture risks from the construction of new buildings and associated infrastructure on the Project site. As a result, no impact related to surface rupture of a known earthquake fault would occur.

Expose People or Structures to Strong Seismic Ground Shaking

The Project site is located in the seismically active region of Southern California. The Newport-Inglewood Fault has been mapped in the vicinity of the Project site. This fault, as well as numerous other regional faults (e.g., Palos Verde Fault, Puente Hills Thrust Fault, Santa Monica Fault, Verdugo Fault, Raymond Fault, Whittier Fault, Sierra Madre, San Fernando, and San Andreas Fault), are capable of producing moderate to large earthquakes that could affect the City, including the Project site. The severity of ground shaking would depend on the magnitude of the earthquake, the distance to the Project site, and on-site geologic conditions. Ground shaking could lead to damage to structures and infrastructure, personal injury and death, utility service disruption, fire, explosion, and hazardous material spills.

The soils underlying the Project site fall within the characteristics of Class D (i.e., "Stiff Soil" profile), as defined in Chapter 20 of the American Society of Civil Engineers (ASCE) 7-10. This information was used to calculate the ground motions on the Project site, using the U.S. Geological Survey U.S. Seismic Design Maps tool (Appendix E-1). According to the Geotechnical Evaluation, the site has potential ground acceleration of 0.598. The Geotechnical Evaluation (Appendix E-1) provides the seismic parameters to be used in the structural design of the Project, based on the typical site materials encountered during subsurface exploration at nearby sites and are provides for preliminary design and estimating purposes. These parameters include the mapped spectral acceleration at short periods; the mapped spectral acceleration at a one-second period; the maximum considered earthquake spectral

response for short periods; the maximum considered earthquake spectral response at a one-second period; the design spectral response acceleration for short periods; and the design spectral response acceleration at a one-second period. The Geotechnical Evaluation recommends these parameters be verified by a site-specific geotechnical investigation, in accordance with the requirements set forth in Section J104.2.3, Engineered Grading Requirements, of the ESMC. Furthermore, the Project geotechnical consultant would provide final design parameters following observation and testing of site materials during grading. Depending on actual materials encountered during site grading and actual foundation loads, the design parameters presented in the Geotechnical Evaluation may require modification (Appendix E-1). Per Section J104.2.3, Engineered Grading Requirements, of the ESMC, recommendations in the geotechnical engineering report and the engineering geology report shall be incorporated into the grading plans or specifications.

Project construction would be completed in accordance with the CBC. As with all development within the City of El Segundo, development within the Project site would be required to comply with the seismic safety requirements of the CBC. The CBC provides procedures for earthquake resistant structural design that includes considerations for onsite soil conditions, occupancy, and the configuration of the structure, including the structural system and height. Although substantial damage to structures may be unavoidable during large earthquakes, the proposed structures would be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage, and loss of life.

As previously discussed, the 2019 edition of the CBC is based on the 2018 International Building Code, and all construction must be conducted in compliance with the CBC. Chapters 16 and 16A of the 2019 CBC include structural design requirements governing seismically resistant construction, including factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Therefore, upon Project compliance with the CBC and City policies aimed at minimizing geologic hazards, and the recommendations set forth in the site-specific geotechnical reports, the Project site would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking, and impacts would be less than significant.

Expose People or Structures to Liquefaction

As previously discussed, the depth to historic high groundwater in the Project vicinity is greater than 50 feet below the ground surface; therefore, the potential for liquefaction to occur beneath the Project site is considered to be very low. Furthermore, as shown in Figure 4.5-2, the site is not located within a mapped California Geologic Survey liquefaction hazard zone (Appendix E-1; CGS 2020). As such, seismic-related ground failure due to liquefaction would not be expected to occur on the Project site. The potential for collapsible soils is discussed under Threshold 4.5c below, and impacts would be less than significant.

Expose People or Structures to Landslides

As previously discussed, the Project site is not located within an earthquake-induced landslide zone. Because the Project site is not located within an area identified by the CGS as having potential for seismic slope instability, geologic hazards associated with landsliding are not anticipated at the site (Appendix E-1). Additionally, the Project would not exacerbate the potential for on- or off-site landslides. As such, implementation of the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Impacts would be less than significant.

Soil Erosion or Loss of Topsoil

Construction

Project construction would entail demolition and grading of portions of the Project site, followed by construction of the proposed structures. Construction activities would include site preparation, grading/earthwork, building construction, paving, and architectural coating. PCC-South includes excavations required for the subterranean parking structure. As discussed under Threshold 4.5c below, the Project site has the potential for collapsible soils and would require removal and recompaction of artificial fill soils and the upper 2 to 3 feet of the Dune Sand deposits. As recommended in the Geotechnical Evaluation, the undocumented fills underlying the Project site would be removed and replaced with compacted fill (Appendix E-1). These construction activities could result in temporary, short-term impacts related to a potential for erosion and loss of topsoil during the development of the Project site.

As previously discussed, Section J104.2.3 of the ESMC requires that all grading plans and permits must comply with the provisions of this section for NPDES compliance and that BMPs must be installed before grading begins to prevent erosion and related pollutants from discharging from the site. No grading permit would be issued unless the plans for such work include a SWPPP with details of BMPs, including desilting basins or other temporary drainage or control measures, or both, as may be necessary to control structures-related pollutants which originate from the site as a result of structures related activities. In addition to the SWPPP, a Wet-Weather Erosion-Control Plan may be required (depending on the season of construction), which includes specific BMPs to minimize the transport of sediment and protect public and private property from the effects of erosion. The required SWPPP would establish erosion and sediment control BMPs for construction activities. Typical examples of erosion-related construction BMPs include the following:

- Silt fences and/or fiber rolls installed along with the limits of work and/or the Project construction site
- Stockpile containment and exposed soil stabilization structures (e.g., Visqueen plastic sheeting, fiber rolls, gravel bags and/or hydroseed)
- Runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season
- Wind erosion (dust) controls
- Tracking controls at the site entrance, including regular street sweeping and tire washes for equipment
- Regular inspections and maintenance of BMPs

These BMPs would be refined and/or added to as necessary by a qualified SWPPP professional to meet the performance standards in the Construction General Permit. Compliance with the Construction General Permit would ensure that soil erosion would be minimized.

Although the Project would require excavation of soils related to construction of the subterranean parking structure and related to removal and recompaction of collapsible soils, this would not result in a substantial loss of topsoil. The Project site is currently developed and paved and does not contain available topsoil, with the exception of minimal landscaped areas adjacent to surface parking lots and buildings. The Project site is not used, and is not zoned for, agricultural uses or other activities that require the use of topsoil. Therefore, potential impacts associated with soil erosion and/or loss of topsoil would be less than significant.

Operations

Long-term operation of the Project would not result in substantial soil erosion or loss of topsoil as the majority of the Project site would be covered by the structures and paving, while the remaining portions of the site would be covered with irrigated landscaping. No exposed areas subject to erosion would be created or affected by the Project. In addition, the majority of the area surrounding the Project site is completely developed and would not be susceptible to indirect erosional processes (e.g., uncontrolled runoff) caused by the Project. With the implementation of applicable construction BMPs, impacts related to erosion or loss of topsoil would be less than significant.

Located on or Would Cause Unstable Soil

Landslides

As previously discussed, topographic relief across the site is from approximately 19 feet directed to the southwest toward Indiana Street and East Holly Avenue for PCC-South and PCC-Fairfield Parking, and approximately 11 feet directed toward the east toward PCH and south toward Mariposa Avenue for PCC-North (Appendix E-1). Additionally, the Project site is not within an area identified as having a potential for seismic slope instability. Because the Project site is not located within an area identified by the CGS as having potential for seismic slope instability, geologic hazards associated with landsliding are not anticipated at the site (Appendix E-1). No impacts would occur.

Liquefaction/Lateral Spreading

Potential impacts concerning liquefaction are evaluated under Threshold a(iii) above. Lateral spreading is the finite, lateral movement of gently sloping, saturated soil deposits caused by earthquake-induced liquefaction. Impacts associated with lateral spreading would be similar to those associated with liquefaction and would therefore be less than significant.

Subsidence

According to the Geotechnical Evaluation, once existing artificial fill and the upper 2 to 3 feet of the Dune Sands are removed, they are anticipated to be suitable for reuse as compacted fill (Appendix E-1). Volumetric changes in earth quantities would occur when excavated onsite soil materials are replaced as properly compacted fill. The Geotechnical Evaluation the existing artificial fills and upper collapsible Dune Sand deposits would shrink approximately 10% to 20%. The reprocessing of removed soils are anticipated to result in negligible subsidence; however, the ultimate earthwork quantities based on actual shrinkage and subsidence that occurs during the grading process would be determined in accordance with the requirements set forth in Section J104.2.3 of the ESMC.

In accordance with the CBC Section 1804A, the compacted fill shall comply with the provisions of an approved geotechnical report, which is required by the CBC and the ESMC. The proposed Project would be required to meet the most recent building safety criteria and construction design recommendations of the site-specific final geotechnical reports that would be prepared for the construction of Project buildings, including removal of existing artificial fills. As such, impacts related to subsidence would be less than significant.

Collapsible Soils

The Geotechnical Evaluation indicated that artificial fill soils in the upper 2 to 3 feet of the Dune Sand deposits exhibit collapsible potential upon wetting. If such materials are left in the current condition, excessive settlement of structures and site improvements could result due to the weight of new foundations and the introduction of water from rain or irrigation. Excessive settlement from such materials would be adequately addressed if they are removed and recompacted, as recommended by the Geotechnical Evaluation. Materials anticipated to exhibit this condition consist of the artificial fill soils and upper 2 to 3 feet of the Dune Sand deposits. Soils below the collapsible soil zone are anticipated to exhibit low compressibility characteristics in their current state (Appendix E-1).

The Geotechnical Evaluation concluded that that total settlement of foundations would be less than about 1 inch and bearing pressure is limited to about 4,500 to 5,000 pounds per square foot. Associated differential settlement should be less than 0.5 inches over 30 feet. Such settlement is anticipated to be tolerable for Project site development. The Geotechnical Evaluation recommends that the existing artificial fill be removed and recompacted at depths of about 3 to 6 feet (Appendix E-1).

Design-level geotechnical investigations are required in accordance with existing regulations. The proposed Project must be designed and constructed in accordance with Section J104.2.3, Engineered Grading Requirements, of the ESMC. All new building construction, alteration, or rehabilitation must comply with all applicable building and seismic codes of the City. In accordance with Section 1803A of the CBC, a geotechnical investigation is required that includes soil testing, laboratory testing or engineering calculations to evaluate soil types, soil expansion, depth of groundwater, deep foundations, rock strata, excavation, compacted fill, soil strength, seismic design criteria and other soil characteristics that need to be considered in the structural design and construction of buildings and infrastructure. Geotechnical investigations must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations from geotechnical investigations must be incorporated into the design and construction of the Project, as reviewed and approved by the City's Department of Planning and Building Safety. As such, impacts related to collapsible soils would be less than significant.

In summary, upon Project compliance with the CBC and City policies aimed at minimizing geologic hazards, and the recommendations set forth in the site-specific geotechnical reports, the Project site would not directly or indirectly exacerbate existing conditions related to on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and impacts would be less than significant.

Located on Expansive Soil

As previously discussed, based on soil testing at the site, the near surface soils have a very low to low expansion potential. According to the Geotechnical Evaluation, testing for soil expansion would be required subsequent to rough grading and prior to construction of foundations and other concrete work to confirm these conditions (Appendix E-1). Expansive soils can undergo volume changes when they become wetted or dried, which could affect overlying structures. Given the expansion potential anticipated at the site, only nominal steps will be needed to mitigate adverse effects such as minor steel reinforcing of foundations and slabs, and moisture preparation and jointing details for flatwork. Typical mitigation measures described in Chapter 18 of the CBC to alleviate expansive soils include the following:

- Excavation of expansive soils until such a depth that competent material is encountered
- Installation of foundations designed to resist forces exerted on the foundation due by expansive soils
- Stabilization of the soils by chemical, dewatering, pre-saturation, or equivalent techniques

Such requirements would be set forth in the subsequent design-level geotechnical investigations prepared in accordance with Section J104.2.3, Engineered Grading Requirements, of the ESMC and the CBC. Potential impacts associated with expansive soils would be less than significant.

Soils Incapable of Supporting Septic Tanks

The Project site is currently served by sewer infrastructure, and any new development would require sewer connections. The Project site is located in an urbanized area that is currently connected to sewer lines. No septic tanks or alternative wastewater disposal is proposed; therefore, implementation of the Project would result in no impact.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on fault rupture, strong seismic ground shaking, liquefaction, landslides, erosion, unstable soil, expansive soil, and septic tanks; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.8 Greenhouse Gas Emissions

Greenhouse Gas Emissions

Construction Emissions

Construction of the proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 3,000 MT CO2e per year. Construction of the proposed Project is anticipated to last a total of 34 months. On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks, and worker vehicles. The estimated total GHG emissions during construction of would be approximately 1,977 MT CO_2e over the construction period.

Operational Emissions

Long-term operations of the proposed Project would result in GHG emissions through mobile sources and area sources (landscape maintenance equipment); energy use (natural gas and generation of electricity consumed by the proposed Project); water supply, treatment, and distribution and wastewater treatment; and solid waste disposal. Annual GHG emissions from these sources were estimated using CalEEMod.

The net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and this would represent a cumulatively less than significant impact.

Conflict with an Applicable Plan, Policy, or Regulation

Consistency with the City of El Segundo CAP Measures

The City of El Segundo CAP identifies a variety of measures, which new projects must adhere with to with respect to renewable energy, conservation of energy and water, solid waste, global warming, urban design, transportation, and human health within the City. The proposed project would be consistent with these measures.

Consistency with the Connect SoCal (2020–2045 RTP/SCS)

SCAG's Connect SoCal is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The Connect SoCal incorporates local land use projections and circulation networks in city and county general plans. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth assumptions within the RTP/SCS. The proposed Project would provide a minor amount of growth, estimated at 3.7% of the 2020 estimate and 3.6% in 2040 of the City's projected total population, the proposed 263 residential units could generate 618 persons upon its completion in 2024. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. The proposed Project would accommodate an expected 618 residents which exceed the overall population growth projections included in the Connect SoCal. As stated in the Connect SoCal 2020–2045 RTP/SCS, there is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with the RTP/SCS, and lead agencies have the sole discretion in determining a local project's consistency with the RTP/SCS (SCAG 2020a). Because there is no wholly reliable population, housing, or employment data after 2010, as the U.S. Census is conducted every ten years, all data for years prior to the 2020 Census should be viewed as projections or estimates. The proposed Project would implement the guiding principles, goals and policies of SCAG's 2020–2045 RTP/SCS as they relate to livability, economic prosperity, and sustainability through the development of walkable, mixed use communities along major transportation corridors. The development of a mix of housing and job opportunities within 0.5 miles of transit, thereby alleviating pressure on suburban and open space areas to develop, is fully supportive of SCAG's strategies. Because the proposed Project would support SCAG's goals and strategies for growth in the region, and because the proposed Project would assist the development of new housing and improve the City's job/housing balance, impacts related to population growth assumed in Connect SoCal would be less than significant. The proposed Project would not conflict with any of the goals within SCAG's Connect SoCal. Therefore, the proposed Project would not conflict with the goal to improve GHG emissions in the region.

Consistency with the CALGreen

2019 CALGreen requirements are comprehensive and applicable to the proposed Project. The provisions of the CALGreen code apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. In mixed occupancy buildings, such as the proposed Project, each portion of a building must comply with the specific green building measures applicable to each specific occupancy (CEC 2019).

The proposed Project must comply with all relevant measures applicable to the types of structures to be built, including non-residential, low-rise residential, and high-rise residential. As such, the proposed Project would be consistent with the regulations set forth in CALGreen. The City approved Ordinance No. 1606, which adopted the 2019 edition of the CALGreen with amendments. Therefore, the proposed Project would be implemented consistent with the City's Municipal Code requirements and CALGreen.

Consistency with CARB's Scoping Plan

The Scoping Plan provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan recommends

strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The proposed Project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the proposed Project.

Consistency with EO S-3-05 and SB 32

EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05.

Consistency with General Plan's Air Quality Element

The City of El Segundo General Plan (City of El Segundo 1992) includes various policies related to reducing GHGs (both directly and indirectly) because strategies that reduce criteria air pollutant emissions may also reduce GHG emissions. Total proposed Project emissions, including operation and amortized construction, would be approximately 2,921 MT CO_2e per year, which is less than the SCAQMD significant threshold of 3,000 MT CO_2e per year. Furthermore, based on the considerations previously outlined, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. Therefore, this impact would be less than significant.

Cumulative Effect

GHG emissions inherently contribute to cumulative impacts. The proposed Project would not result in GHG emissions in exceedance of the SCAQMD significance threshold. Therefore, cumulatively, Project greenhouse gas (GHG) emissions would be less than significant.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on emissions generated, consistency with applicable regulations, and cumulative GHG effects; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.9 Hazards and Hazardous Materials

Routine Transport, Use, or Disposal of Hazardous Materials/Release of Hazardous Materials and the Potential for Upset Conditions

Long-Term Operational Impacts

The operational phase of the proposed Project would not be expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials would be limited to use of commercially available cleaning products, chlorine for swimming pools, landscaping chemicals and fertilizers, and various other commercially available substances. Such chemicals are currently in use on the Project site, in association with the hotels. Although the Project would introduce additional amounts of commercially

available potentially hazardous materials, such as cleaning supplies and landscaping products, to the Project site, the routine transport, use, and/or disposal of these substances would be subject to applicable federal, state, and local health and safety laws and regulations, which would minimize health risk to the public associated with hazardous materials. Therefore, impacts would be less than significant and no mitigation is required.

Reasonably Foreseeable Upset and Accident Conditions

Long-Term Operational Impacts

According to the Los Angeles County Department of Public Works (LADPW 2020), the Project site is not located within 300 feet of an oil or gas well or 1,000 feet of a methane-producing site; therefore, methane impacts are not anticipated. Operation of the proposed Project would only require limited use of commercially available hazardous materials, including janitorial and landscaping products. Should the amount of onsite hazardous materials, including hazardous wastes, be greater than reporting thresholds (55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas), a Hazardous Materials Business Plan (HMBP) would be required under California HSC, Division 20, Chapter 6.11, Sections 25404–25404.9. The HMBP, which would be submitted to the El Segundo Fire Department (the local CUPA) via the California Environmental Reporting System, would include emergency and spill prevention and response measures, thereby reducing the potential for an upset or accident condition. Use of extremely hazardous materials and accumulation of acutely hazardous wastes are not anticipated. Operation of the proposed Project is not anticipated to impact nearby hazardous liquid pipelines or the adjacent gasoline service station. Project operational impacts are not anticipated to create a foreseeable upset or accident condition that would release hazardous materials to the environment, and impacts are less than significant.

Hazardous Materials within One-Quarter mile of an Existing or Proposed School

There are no public or private K–12 schools located within 0.25-mile of the Project site, therefore, impacts would be less than significant and no mitigation is required.

Cortese List

Long-Term Operational Impacts

Once operational, the PCC-North portion of the Project would be covered with buildings and minimal landscaping. Should potentially petroleum-contaminated soils be present at the gas station, they would be beneath the surface and covered. Therefore, operation of the proposed Project would not expose the public or environment to any potentially contaminated soils. Additionally, should contaminated soils be encountered during construction, the local regulatory agency, El Segundo Fire Department would be notified in accordance with state and local regulation. Under local agency oversight, contaminated soils would be excavated and/or remediated in accordance with state and local laws and regulations to minimize potential impacts to the public or environment, including potential vapor intrusion. With adherence to applicable laws and regulations, no impacts to operation of the proposed Project would occur.

Water is supplied to the Project by the City of El Segundo; therefore, direct use of groundwater is not required during operation of the proposed Project. The groundwater contaminated by volatile organic compounds identified to the southeast of the Project site is expected to flow south-southwest, away from the Project site. Therefore, the potential for vapor intrusion associated with this contamination is low. Impacts associated with potentially contaminated groundwater are not anticipated and no mitigation is required.

Near an Airport or within an Airport Land Use Plan

Short-Term Construction Impacts

The Project site is not located within the boundaries of the LAX Airport Influence area, and is therefore not subject to the ALUP requirements, including those for safety and noise. The Project site is located within 0.5-mile of LAX and is therefore regulated under 14 CFR 77.9 – Construction or Alteration Requiring Notice. In accordance with 14 CFR 77.9, the Project applicant or their contractor must file FAA Form 7460-1, Notice of Proposed Construction or Alteration at least 45 days before the start date of the proposed construction. The FAA will review the proposed construction and approve, deny, or require alterations to the construction in order to avoid impacts to navigational equipment and prevent safety hazards. With adherence to FAA regulations, the Project would not result in safety hazards for people residing or working in the Project area, and impacts would be less than significant.

Long-Term Operational Impacts

The Project would adhere to FAA regulations, and therefore safety hazards associated with airport navigation would be less than significant. Additionally, the Project site is not located within the LAX ALUP noise boundaries, therefore there are no anticipated impacts associated with excessive noise for people residing or working in the Project area. Therefore, impacts would be less than significant.

Impair or Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan

Long-Term Operational Impacts

The eastbound lane of Mariposa Avenue at PCH would be reconfigured as a part of the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane. The proposed right-turn lane would be approximately 69 feet in length from stop bar or crosswalk with a 60-foot taper with an overall length of approximately 90 feet, including the taper, which would accommodate peak hour 95th percentile queues. Therefore, the proposed Project improvement would improve the queue length on Mariposa Avenue, thereby improving Project access and circulation. Access to PCH and I-105 for emergency evacuation would not be impacted by Project implementation and no mitigation is required.

Wildland Fires

The proposed Project site is located in a highly urbanized area and is not located within an area of high wildfire hazard. Therefore, people and structures would not be subject to significant risks related to wildland fires, and impacts would be less than significant.

Cumulative Effect

For cumulative analysis, the hazardous materials geographic scope is generally restricted to the area immediately surrounding the Project site as the potential for risk is limited to the area immediately surrounding an affected hazardous material site or risk generator.

Cumulative projects would also be subject to federal, state, and local regulations related to hazardous materials and other public health and safety issues. In a manner similar to the proposed Project, adherence to these regulatory requirements would reduce incremental impacts associated with public exposure to health and safety hazards in each of the affected project areas. Additionally, most hazardous material and safety-related risks are

localized, generally affecting a specific site and immediate surrounding area, thus minimizing the potential for an impact to combine with another project to create a cumulative scenario.

Because cumulative projects would be fully regulated, thus reducing potential for public safety risks, cumulative impacts associated with exposure to hazards and hazardous materials would be less than significant. Through mitigation and compliance with regulatory requirements, the construction or operation of the proposed Project itself would not create significant human or environmental health or safety risks that could combine with other project impacts to create a significant and cumulatively considerable impact. For these reasons, the proposed Project would not result in cumulatively considerable impacts related to hazards and hazardous materials.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on hazards and hazardous materials as it relates to the proximity of an existing or proposed school; the proximity of the project to an airport or an airport land use plan; wildland fires; and cumulative impacts to hazards and hazardous materials; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.10 Hydrology and Water Quality

Violate Water Quality Standards or Waste Discharge Requirements

Short-Term Construction Impacts

Grading and construction would potentially result in short-term erosion and associated siltation that could lead to adjacent storm drain infrastructure. Erosion-induced sedimentation affects water quality and interferes with photosynthesis; oxygen exchange; and the respiration, growth, and reproduction of aquatic species. Additionally, other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported to downstream drainages leading to the Pacific Ocean which could contribute to the degradation of water quality. Other pollutants that could affect surface-water quality during the construction phase include petroleum products (gasoline, diesel, kerosene, oil, and grease), hydrocarbons from asphalt paving, construction equipment leaks, paints and solvents, detergents, fertilizers, and pesticides (including insecticides, fungicides, herbicides, and rodenticides).

In accordance with the State NPDES General Construction Permit and WDR Permit, as established by the Porter-Cologne Water Quality Act, the development of an acre or more of land must file a notice of intent with the SWRCB, followed by development of a site-specific SWPPP for construction activities. The property owner/developer must comply with the Construction General Permit applicable at the time a grading permit is issued. The SWPPP must include erosion- and sediment-control BMPs that will meet or exceed measures required by the determined risk level of the Construction General Permit, as well as BMPs that control the other potential construction-related pollutants. A Construction Site Monitoring Program that identifies monitoring and sampling requirements during construction is a required component of the SWPPP. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality.

Incorporation of required BMPs for temporary materials and waste storage and handling during construction, and equipment and vehicle maintenance and fueling would reduce the potential discharge of polluted runoff from

construction sites, consistent with the State NPDES General Construction Permit and the ESMC requirements for construction activities.

The Project site is not located in an area with high groundwater levels, and excavation activities associated with the PCC-South parking garage are not expected to encounter groundwater. However, perched groundwater conditions are dependent on seasonal precipitation, land use, among other factors, and may vary as a result through time. Additionally, the proposed drywells are anticipated to reach depths between 30 feet and 52 feet; therefore, it is possible that the construction of the drywells could encounter perched groundwater. In the event that groundwater is encountered during excavations, potentially polluted groundwater could be released to adjacent storm drains during dewatering activities, resulting in adverse impacts to downstream surface waters.

In the event that groundwater is encountered during excavations, the Project applicant/developer would be required by existing regulatory requirements to procure a dewatering permit from the Los Angeles RWQCB for pumping and disposal of groundwater. Groundwater dewatering would be controlled in compliance with the Waste Discharge Requirements for the Discharge of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, NPDES No. CAG994004). This permit requires permittees to conduct monitoring of dewatering discharges and adhere to effluent and receiving water limitations contained within the permit so that the water quality of surface waters is protected.

Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff. Therefore, compliance with existing regulations would ensure that the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface quality from demolition and construction activities. Impacts would be less than significant and no mitigation is required.

Long-Term Operational Impacts

The Project site falls within the Santa Monica Bay (SMB) Enhanced Watershed Management Program (EWMP), which includes numerous existing regional BMPs. Existing distributed BMPs were identified through the data request that included a total 2,212 BMPs in the SMB EWMP Group area. Of these distributed BMPs, 340 exist within the City of Los Angeles and 1,872 exist within the City of Santa Monica; however, there are no reported regional BMPs within the City of El Segundo. Therefore, LID BMPs would be implemented at the Project site to meet the local MS4 Permit requirements and remain consistent with the objectives of the SMB EWMP.

Project design, construction, and operation would be completed consistent with the SMB EWMP, and in accordance with the City Stormwater and Urban Runoff Pollution Control Ordinance, Municipal NPDES Permit, and the City's LID Manual, with the goal of reducing the amount of pollutants in stormwater and urban runoff. The LID Manual requires that post-construction stormwater runoff from new developments be infiltrated, evapotranspired, captured and reused, and/or treated through a high efficiency BMP onsite for the 85th percentile storm event, or 0.75 inches of precipitation, whichever is greater. The LID Manual states that BMPs are to be designed to manage and capture stormwater runoff. Infiltration systems are the first priority type of BMP improvements, as such systems provide percolation and infiltration of stormwater into the ground, which not only reduces the volume of stormwater runoff entering the MS4, but also contributes to groundwater recharge in some areas. The second priority BMP is capturing and reusing stormwater onsite for either landscape irrigation or toilet flushing. Proposed drainage for the proposed Project would include stormwater treatment features on all three development sites, in accordance with the City of El Segundo LID requirements.

Based on the Geotechnical Due-Diligence Evaluation, prepared by Albus-Keefe & Associates (see Appendix E-1 of the Draft EIR), the Utility Report determined that infiltration is feasible for stormwater treatment. One drywell at each proposed development site (PCC-South, PCC-Fairfield Parking, PCC-North) would be able to capture the required volume and treat that volume as quickly as it enters the drywell system. The infiltration rate for the site is 0.00186 feet per second, and a drywell with a diameter of 4 feet and an infiltration depth of 22 feet would provide a disposal rate of 0.514 cubic feet per second and would dispose of 88,819 cubic feet in 48 hours. Drywells are proposed below structure or on grade, with 20 feet of separation between the bottom of the sublevel or grade and infiltration zone.

The drywells would include overflow piping to convey stormwater to Indiana Street or Mariposa Avenue. Thus, stormwater in the proposed condition would flow only to the City of El Segundo storm drains The proposed peak flow rate that would be used to design the overflow piping is the reduced peak flow rate generated after infiltration. Because the peak flow rate would be reduced in the proposed condition, it is assumed that the City of El Segundo storm drains will have more than enough capacity to handle the flow rate generated by the proposed Project.

Once the water quality volume is met through the drywells, the "higher flows" would enter overflow pipes, which would discharge stormwater to the local storm drain systems. Therefore, capture and re-use BMPs to be constructed as part of the Project would result in the treatment of the entire required volume for the Project site and the elimination of pollutant runoff up to the 25-year storm event. In the post-Project condition, all stormwater overflow would be conveyed into the City's storm drain system and would not be conveyed to Caltrans facilities.

The implementation of LID features would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); improper management of hazardous materials; and trash and debris during Project operations. In accordance with the all applicable state and local regulations, Project source controls to improve water quality would be provided for outdoor trash storage/waste areas and outdoor loading/unloading areas. As a result of compliance with existing regulations, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during the long-term Project operations. Impacts would be less than significant and no mitigation is required.

Deplete Groundwater Supplies or Interfere with Groundwater Recharge

Implementation of the proposed Project would decrease the amount of impervious area within each of the three development areas. PCC-South would decrease from 88.6% to 86.3% impervious; PCC-Fairfield Parking would decrease from 100% to 96.3% impervious, and PCC-North would decrease from 100% to 88.4% impervious. The proposed Project would incorporate drywells to facilitate infiltration in compliance with applicable LID requirements. The Project site is not currently used for groundwater infiltration, either by spreading or by groundwater injection. Upon construction and operation of the drywells, groundwater recharge at the site would increase in comparison to existing conditions, resulting in beneficial impacts. The West Coast Basin Barrier Project, which consists of groundwater injection wells that prevent seawater from intruding into the underlying aquifers of the West Coast Groundwater Basin, is near the Project site. However, development of the Specific Plan would not interfere with the operation of this barrier system.

The proposed Project is not anticipated to encounter groundwater during excavation for the subterranean parking garage on PCC-South. However, perched groundwater conditions may vary over time, and in the unlikely event that groundwater is encountered during excavations, the Project applicant/developer would be required by existing regulatory requirements to procure a dewatering permit from the Los Angeles RWQCB for pumping and disposal of groundwater. Groundwater dewatering would be controlled in compliance with the Waste Discharge Requirements for the Discharge

of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, NPDES No. CAG994004). Temporary dewatering, if required, would be short-term and would not substantially interfere with groundwater supplies.

Additionally, the Project site is within the Coastal Plain of Los Angeles-West Coast (Groundwater Basin 4-011.03), which has been designated as Very Low Priority with respect to establishment of a GSA and completion of a Groundwater Sustainability Plan (SGMA 2020). Therefore, the proposed Project would not substantially decrease groundwater supplies and no mitigation is required.

Alter Existing Drainage Pattern (Erosion, Surface Runoff, Exceed Capacity Drainage System, Impede or Redirect Flood Flows)

The proposed Project site is fully developed in the existing condition and is located in a highly urbanized portion of El Segundo, surrounded by developed properties. Implementation of the proposed Project would not alter the existing drainage patterns on the site such that downstream streams or rivers would be affected. The Project would infiltrate stormwater in accordance with all applicable LID regulations and would continue to outflow into the existing storm drain system. No naturalized drainages or creeks would be affected. Additionally, post-Project runoff is anticipated to be less than in the existing condition and the amount of impervious surfaces would also be reduced. Therefore, the Project would not substantially alter the existing drainage pattern of the site, including through the alteration of the course of a stream or river or through the addition of impervious surfaces. Impacts would be less than significant and no mitigation is required.

Flood Hazard, Tsunami, or Seiche Zones

As stated in the City's General Plan Public Safety Element, along the City's coastal areas, tsunamis and seiches associated with seismic events could cause devastating damage. The coastal portion of the City and adjacent portions of the City of Los Angeles are identified by the State as tsunami hazard areas, and as a result, there is the potential for damage to Southern California Edison and Chevron facilities, and the Hyperion Treatment Plant located along the coast. Residential portions of the City are located above the potential hazard area and are not at high risk. The Project site is not located within a tsunami inundation map for emergency planning, as delineated by the California Emergency Management Agency, California Geologic Survey (CGS 2009).

The Project site is located in FEMA Zone X, which is an area of minimal flood hazard, and an area determined to be outside the 0.2% annual chance floodplain (i.e., 500-year floodplain) (FEMA 2020). Therefore, the Project would not be located in an area with any significant risks of flooding and would not have the potential to impede or redirect floodwater flows. In addition, the Project site is not located adjacent to or immediately downstream of any large body of water susceptible to seiches (i.e., oscillations in a body of water due to earthquake shaking).

The main document addressing emergency preparedness in the City is the Emergency Operations Plan. The Emergency Operations Plan provides a basis for operations and for managing critical resources during emergencies, delineation of lines of authority and responsibility, and procedures for requesting interagency and private assistance. The General Plan determined that the level of risk associated with a tsunami and seiche are "low" (City of El Segundo 1992). Therefore, existing state, regional and local regulations related to emergency preparedness would be sufficient to address potential hazards associated with floods, tsunamis, or seiches, which have not been identified as hazards for the Project site. Impacts would be less than significant and no mitigation is required.

Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

The proposed Project would comply with applicable water quality regulatory requirements, including implementation of a SWPPP, stormwater BMPs, and LID design, which would minimize potential off-site surface water quality impacts and contribute to a reduction in water quality impacts within the Dockweiler Subwatershed and the overall South Santa Monica Bay Watershed. In addition, with compliance with these regulatory requirements, the Project would reduce potential water quality impairment of surface waters such that existing and potential beneficial uses of key surface water drainages throughout the jurisdiction of the Los Angeles RWQCB Basin Plan would not be adversely impacted. As a result, the Project would not conflict with or obstruct the Los Angeles RWQCB Basin Plan.

With respect to groundwater management, SGMA empowers local agencies to form GSAs to manage basins sustainably, and requires those GSAs to adopt Groundwater Sustainability Plans for crucial groundwater basins in California. A GSA has not been established for the West Coast Basin, as it is not considered a high priority basin. Further, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. As a result, the Project would not conflict with or obstruct this sustainable groundwater management plan. Impacts would be less than significant and no mitigation is required.

Cumulative Effect

Water Quality

The geographic context for the analysis of cumulative impacts associated with water quality is the South Santa Monica Bay Watershed, which is already largely urbanized with impervious surfaces. The cumulative effect of past projects—both point sources of pollution and non-point sources caused by urbanization—have resulted in substantial water quality problems in the region's major waterways. Cumulative development could add new sources of stormwater runoff. Construction activities associated with development could temporarily increase the amount of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff.

Although the land surrounding the Project site is largely developed with impervious surfaces, continued redevelopment within the Project area could slightly increase the amount of impervious surfaces that could increase stormwater runoff rates and amounts, as well as changes in land use that may increase the amount of pollutants in stormwater runoff. The release of such pollutants, however, would be minimized through compliance with terms and conditions of the NPDES permit, CALGreen Code, California Building Code, ESMC, and the ordinance codes of other authorities in the region—which all require implementation of a SWPPP for development and redevelopment projects. In summary, all cumulative development would be subject to existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. All development within the South Santa Monica Bay Watershed would be subject to the water quality standards outlined in the Basin Plan and would comply with any established TMDLs. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

In addition, the Project would comply with existing and future regulations to protect water quality, including the Construction General Permit. Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing additional sources of polluted runoff. Therefore, Project

impacts associated with water quality standards and polluted runoff would be less than significant, and the Project would not contribute considerably to cumulative impacts.

Drainage

The South Santa Monica Bay Watershed is already largely urbanized with impervious surfaces. Cumulative development within the City could potentially increase the amount of impervious surfaces that could cause or contribute to storm drain system capacity exceedance, alter the existing storm drain system, and/or require construction of new or expanded facilities. However, new development within the watershed would be subject to the same requirements for LID infrastructure and BMPs to address the potential for increased runoff from development sites. All projects must comply with current state and local environmental regulations, such as the ESMC mandates. Potential impacts to drainage associated with the Project would be less than significant, and the Project would not contribute considerably to cumulative impacts.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on hydrology and water quality. Therefore, no mitigation is required, and no significant, unavoidable adverse impacts would occur.

2.4.11 Land Use

Physically Divide an Established Community

The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

The proposed Project involves the implementation of the proposed Specific Plan, which would redevelop the existing surface parking lots of the Fairfield Inn and Suites Hotel and Aloft Hotel properties, as well as the old Hacienda Restaurant, through the adoption of a Specific Plan that allows for the development of 263 new housing units and approximately 11,252 square feet of commercial/retail uses. Under the existing condition, the Project site is developed land and is not used as a connection or thoroughfare between established communities. Instead, connectivity within the area surrounding the Project site is facilitated via local roadways. The proposed Project would not result in the construction of new driveways; rather, the Project would allow for access via existing driveways on PCH and Indiana Street. Further, the eastbound lane of Mariposa Avenue at PCH would be reconfigured as a part of the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane. Therefore, the Project does not include the construction of a new roadway, which would impair mobility within the existing Project site or the surrounding area. Rather, the Project would increase access at existing driveways and provide improved level of service at Mariposa Avenue and PCH through improvements at Mariposa Avenue. As such, the Project would not impede movement within the Project site, within an established community, or from one established community to another. In addition, the Project has specific objectives which focus on access and mobility: Enhance vehicular circulation through intersection improvements and street widening. Therefore, impacts associated with the division of an established community would be less than significant. No mitigation is required.

Conflict with an Applicable Land Use Plan, Policy, or Regulation

Consistency with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

The proposed Project would not conflict with the applicable goals in the RTP/SCS adopted for the purpose of avoiding or mitigating an environmental effect. The Project would redevelop the Project site's existing conditions and would produce approximately 56 new employees within the Specific Plan area within the City of El Segundo. In addition, the Project site's vicinity is served by existing public transit such as various bus routes (Metro Line 232, Metro Line 625, Beach Cities Line 109, Los Angeles Department of Transportation [LADOT] Commuter Express 438, and LADOT Commuter Express 574) as well as the Metro C Line. The Metro C Line is a light rail line, which runs between Redondo Beach and Norwalk. The nearest station is the Mariposa Station, which is just over 0.5-mile from the Project site. The Project site would bring residential development to nearby major employers, including LAX, energy/gas/oil and aerospace companies and near the City's "super block" development, which contains a mixture of office and research and development uses, thereby reducing travel demands by developing a mix of residential housing opportunities in proximity to employment centers. For these reasons, the Project would not conflict with the applicable goals in the RTP/SCS adopted for the purpose of avoiding or mitigating an environmental effect.

City of El Segundo General Plan Consistency

A review of the General Plan shows that the Specific Plan is compatible and consistent with the goals and policies outlined in the General Plan. The Specific Plan was prepared to provide the essential relationship between the policies of the General Plan and actual development of the Project site. By functioning as a regulatory document, the Pacific Coast Commons Specific Plan provides a means of implementing the City's General Plan. All future development plans and entitlements within the Specific Plan boundaries must be consistent with the standards set forth in the Specific Plan The Specific Plan would be consistent with applicable goals and policies of the General Plan. While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. Through the implementation of the Specific Plan, these two hotels would be brought into full conformity with the land use designation and zoning for the Project site. COM-1 and COM-2 allows hotels and several other commercial uses that are either accessory to hotel uses or complementary uses. The existing hotel properties are consistent with this definition, and thus, would no longer be considered non-conforming uses within the Specific Plan area. Additionally, it should be noted there will be no additional floor area added to the hotel properties.

The Project requests the approval of a General Plan Amendment (No. GTA 19-01) to change the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use map change. Upon approval of the proposed amendment, the Project would be brought into compliance with the General Plan Land Use Designation.

City of El Segundo Municipal Code

<u>Amendments to the Zoning Code</u>

The Project requests a Zone Text Amendment No. ZTA 19-08 to add a new ESMC Section15-3-2(A)(12) "Pacific Coast Commons Specific Plan (PCCSP)". Approval of the proposed Project, in accordance with the provisions outlined in Title 15 of the ESMC, would ensure compliance with applicable zoning standards. Additionally, through the application

process, the City would thoroughly review all plans for the proposed Project to ensure compliance with the ESMC, and other relevant plans, policies, and regulations.

Specific Plan

When a specific plan is adopted in accordance with the procedure outlined above, the specific plan may effectively supersede portions or all of the current zoning regulations for specified parcels or plan area, and becomes an independent set of zoning regulations that provide specific direction to the type and intensity of uses permitted, and may define other types of design and permitting criteria. The proposed Specific Plan is adopted by ordinance and serves as the primary zoning document for the Plan Area. Where the Specific Plan is silent, the relevant sections and requirements of the zoning regulations shall apply. The development standards would be regulated by the Specific Plan and administered and enforced by the City in accordance with the ESMC. The Specific Plan supersedes any conflicts with ESMC zoning regulations. Therefore, upon approval of the proposed Project, the Project would be consistent with the El Segundo Zoning Code for the purposes of avoiding or mitigating environmental effect.

Cumulative Land Use and Planning Impacts

Cumulative land use impacts could occur if any of the related projects would result in incompatible land uses, or result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. Given the built-out conditions of the greater Los Angeles Metropolitan region, including the Project site, cumulative development would likely convert existing underutilized properties in the Project site's area to revitalized higher-density developments to respond to the need for housing, sources of employment, and associated retail land uses. The Project would benefit the surrounding community by replacing underutilized properties; add residential uses to a job-rich community; and improve local and regional access to the regional transportation network. Furthermore, by providing additional housing and employment in close proximity to transit, the Project would assist the City in achieving short- and long-term planning goals and objectives related to reducing urban sprawl, efficiently using existing infrastructure, reducing regional congestion, and improving air quality through the reduction of vehicle miles traveled. This is consistent with SCAG and other regional policies for promoting more intense land uses adjacent to transit stations and job centers.

Land use conflicts are also typically site-specific and not cumulative in nature; in other words, despite the number of cumulative projects in a given area, they would not necessarily compound to create cumulative land use conflicts. Cumulative incompatibility issues associated with surrounding developments or projects are anticipated to be addressed and mitigated for on a project-by-project basis. Further, all related projects in the City would be subject to the same local development standards, such as those identified in the ESMC, as the proposed Project. Therefore, cumulative impacts related to land use and planning would be less than significant. No mitigation is required.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on land use and planning; therefore, no mitigation is required, and no significant, unavoidable adverse impacts would occur.

2.4.12 Mineral Resources

There are no oil wells or oil/mineral extraction activities on the Project site (CalGEM 2020). Current on-site land uses do not allow for oil/mineral extraction. According to the Department of Conservation's Mineral Lands Classification map, the City is within the Mineral Resources Zone-3, which is characterized as areas containing

mineral deposits of significance of which cannot be evaluated from available data (DOC 1979). Ordinarily, classification of a mineral deposit as MRZ-2a or MRZ-2b by the State Geologist will constitute adequate evidence that an area contains significant mineral deposit; thus, the Project would not result in the loss of mineral resources of known importance to the state (DOC 2002). Although the El Segundo Oil Field underlies the City, production has declined since 1967 and only five wells continue to produce oil resources (City of El Segundo 1992). Therefore, the Project is not expected to result in the loss of availability of a locally-important mineral resource recovery site delineated on the local general plan or other land use plan. Thus, impacts associated with mineral resources would not occur and will not require further evaluation in the Draft EIR.

Finding

Appendix B of the Notice of Preparation for the Project found no potential for significant impacts to mineral resources; therefore, mineral resources were not addressed in the Draft EIR. No mitigation would be required and no significant, unavoidable adverse impacts would occur.

2.4.13 Noise

Generation of a Substantial Temporary or Permanent Increase in Ambient Noise Levels

Traffic Noise Exposure to Future Project Occupants

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly created Project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed Project. Nevertheless, the California Building Code requires that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Traffic noise exposure analysis at the exteriors of occupied residences and outdoor living areas is provided for informational purposes. Additionally, this analysis of outdoor environmental noise to the newly created Project residences would be consistent with the "post-construction acoustical analysis" per Program N1-1.9A from the City's General Plan Noise Element.

An open window or an open sliding door to an adjoining patio or balcony greatly compromises the overall sound insulation performance of the studied wall assemblies. However, when such windows and doors are closed, all studied sample facades are anticipated to exhibit a predicted STC rating of at least 35, and thus would provide sufficient exterior-to-interior sound insulation from outdoor traffic noise to yield interior background sound levels that are less than 45 dBA CNEL and thus compliant with the City and state standards. Recall that none of the predicted exterior traffic noise levels at the studied receptor locations exceeded 72 dBA CNEL; thus, the STC rating value (for closed windows and doors) subtracted from these exterior noise values must result in interior noise levels of less than 45 dBA CNEL (e.g., 72 – 36 = 36 dBA CNEL, which is less than 45). The apparent requirement for

closed windows and doors means that the design of these habitable rooms should feature mechanical ventilation or an air-conditioning system to provide interior comfort for the occupants.

Stationary Operations Noise

The incorporation of new multi-family homes and a mix of commercial uses attributed to development of the proposed Project would add a variety of noise-producing mechanical equipment.

Residential Unit Heating, Ventilation, and Air Conditioning Noise: Each of the new occupied residential units would be expected to feature a split-system type air-conditioning unit. For the PCC-South buildout, 34 ACC units were modeled on rooftops. Each ACC unit has an SPL of 71 dBA at 3.28 feet based on available data from the manufacturer (Goodman 2020). The predicted sound emission level from the combination of all operating condenser units at off-site single-family receptors would be as high as 57 dBA L_{eq} to the west of the PCC-South and 61 dBA L_{eq} to the west of PCC-North. The effect of building structure occlusion (i.e., rooftop mass and parapet blocks the direct sound path between noise-producing equipment and the off-site residential receptors) on the predicted HVAC sound exposure levels at nearest existing off-site residences is expected to be at least 10 dB of noise reduction. The operation of these Project residential air-conditioning units would result in a less-than-significant noise impact to the surrounding residential community.

At the outdoor area (i.e., pool and outdoor amenities) of the existing Aloft hotel that is north of the PCC-South area and its collection of operating rooftop ACC units, application of the aforementioned 10 dB structural occlusion to predicted operation noise results yield a Project-attributed aggregate ACC noise level no greater than 47 dBA, which is below the estimated existing nighttime sound level of 61.5 dBA L_{eq} for this offsite commercial property location. The operation of these Project residential air-conditioning units would result in a less-than-significant noise impact to the surrounding commercial properties.

Excessive Groundborne Vibration or Groundborne Noise Levels

Under the right conditions, construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. The impact of vibration-induced annoyance to occupants of nearby existing homes would be less than significant. No mitigation is required.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, the predicted 0.035 ips PPV at the nearest residential receiver 46 feet away from on-site operation of the bulldozer during grading would not surpass the guidance limit of 0.3 ips PPV for preventing damage to residential structures (Caltrans 2013b). Because the predicted vibration level at 46 feet is less than both the annoyance and building damage risk thresholds, vibration from conventional construction activities would be less than significant. No mitigation is required.

Once operational, the Project would not be expected to feature major onsite producers of groundborne vibration. Anticipated onsite mechanical systems like pumps, compressors, and fans are designed and manufactured to feature rotating or reciprocating components (e.g., impellers, rotors, and pistons) that are well-balanced with

isolated vibration within or external to the equipment casings. On this basis, potential vibration impacts due to Project operation would be less than significant. No mitigation is required.

Expose People Residing or Working in Airport Land Use Plan to Excessive Noise Levels

There are no private airstrips within the vicinity of the Project site. The closest airport to the Project site is the Los Angeles International Airport approximately 0.66-mile north of the site. According to the Final LAX Part 150 Noise Exposure Map Update Report (ESA 2016), the Project site is outside of the 65 dBA CNEL aviation operation noise contour predicted in the report for 2020, and therefore would not expose workers or new occupants of the proposed Project residences or exterior uses to aviation overflight noise levels greater than 65 dBA CNEL. Hence, on this basis the potential impact with respect to aviation traffic noise would be less than significant.

Cumulative Noise Impacts

Temporary/Periodic Increases in Ambient Noise Levels

The Project would result in temporary noise increases during construction activities. The construction period of future developments under the Project has the potential to overlap with the construction of other development projects in the City; however, none of the anticipated cumulative projects are in close enough proximity to the Project site. Noise due to construction of other projects would not meaningfully combine with future development under the Project to produce a cumulative noise effect during construction.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dB change).

Additionally, all future development under implementation of the Project, as well as unrelated construction projects within City limits, would be required to comply with limits on allowable construction hours per relevant portions of the City's noise ordinance. Cumulative impacts due to cumulative construction noise would be less than significant.

Vibration

Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2025 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. The noise level increases associated with both of these scenarios would generate a noise level increase of less than 3 dBA along the studied sample roadways in the vicinity of the Project. As such, anticipated increases would be below the

significance threshold of 3 dBA; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Stationary Sources

Noise from operation of stationary electro-mechanical equipment added to the outdoor ambient sound environment as a result of Project implementation would include permanent on-site noise sources (e.g., rooftop HVAC equipment). A cumulative impact could occur if noise produced from such sources due to implementation of the Project were to combine with noise produced from the operation of other unrelated projects in the vicinity to create a cumulatively significant permanent increase in ambient noise levels. However, noise emission from HVAC equipment attenuates with distance and can be occluded by structures and terrain. Additionally, the operation of future projects under the Project, along with the operation of other unrelated projects, would be subject to applicable requirements from the City's noise ordinance, which limits the exterior noise levels at residences. Hence, for these two reasons, cumulative impacts to outdoor ambient noise levels resulting from Project stationary sources would be less than significant.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on noise as it relates to groundborne vibration, exposing people residing or working within an airport land use plan to excessive noise levels, and cumulative noise impacts; therefore, no mitigation is required and no significant, unavoidable adverse impacts would occur.

2.4.14 Population and Housing

Induce Substantial Population Growth

Short-Term Construction Impacts

Construction activities at the Project site would lead to the temporary need for construction workers, which may come from the City, other areas of Los Angeles County, or elsewhere within the SCAG region. The proposed Project involves fairly common construction requirements that would not require a highly specialized labor force to permanently relocate from other regions. Construction of the Project is anticipated to last approximately 34 months. The different construction activities require specific skill sets for a much shorter duration than the overall construction schedule. Because construction workers would not be needed continuously and only for varying portions of the Project phases, it is reasonable to assume that workers/crews would work at the Project site on a temporary basis only, and thus, are not likely to relocate their households as a consequence of the construction job opportunities presented by the Project. Because the demand for construction workers would be short-term, and because the Project site within an urban metropolitan region with a high diversity of skilled labor, a permanent need for new workers to relocate in order to accommodate the proposed Project's temporary construction workforce is not anticipated. Any changes in the City or regional population, housing, or employment due to short-term construction activities would be less than significant.

Long-Term Operational Impacts

The proposed Project would redevelop the existing surface parking lots of the Fairfield Inn and Suites Hotel and Aloft Hotel properties through the adoption of the Specific Plan to allow for the development of 263 residential units

and 11,252 square feet of commercial space. The Specific Plan's three development areas are Pacific Coast Commons – South (PCC-South); Pacific Coast Commons – Fairfield Parking (PCC-Fairfield Parking); and Pacific Coast Commons – North (PCC-North). PCC-North would be developed with 143 residential units and 2,223 gross square feet of commercial space. PCC-Fairfield Parking would be developed with approximately 3,273 gross square feet of ground-floor commercial and a parking structure for the Fairfield Inn and Suites Hotel. PCC-South would be redeveloped with 120 residential units and 5,756 gross square feet of commercial space. Up to 3,700 square feet of the commercial space across all three sites could be fast casual restaurant space and the remainder would be other commercial uses allowed in the Pacific Coast Commons Specific Plan area. The Project would replace the existing General Commercial (C-3) and Automobile Parking (P) zones with the proposed Specific Plan, thereby enabling future development within the Specific Plan area. As such, the proposed Project would directly result in the building new housing where housing currently does not exist. The redevelopment of existing parking lots could result in new and unplanned population growth within the City.

Population Projections

SCAG estimates that Los Angeles County would have 10,407,000 residents by 2020 and 11,647,000 residents by 2045. SCAG and the Department of Finance estimate that the City would have 16,777 residents by 2020 and 17,200 residents by 2045. SCAG's forecasted population growth for the City of El Segundo is 500 persons between 2016 and 2045.

Using population and housing estimates from the California Department of Finance, the City has an occupancy rate of 2.35 persons per household (DOF 2020). It is likely that the proposed residential units would accommodate a combination of existing residents and new residents that either currently work within the City and/or new residents that would be hired as a result of projected employment generation within the City. Additionally, the City's 2020 housing vacancy rate of 4.7% is less than Los Angeles County's housing vacancy rate 6.1% (DOF 2020). As such, the proposed Project is anticipated to be growth-accommodating rather than growth-inducing.

Because the proposed Project would support SCAG's goals and strategies for growth in the region and because the proposed Project would assist the development of new housing and improves the City's job/housing balance, impacts related to population growth would be less than significant. Although the proposed Project would provide a resident population that exceeds SCAG's projections, this growth is not considered substantial and it would further attainment of local and regional goals, as described above.

Employment Projections

The proposed Project would introduce 11,252 gross square feet of commercial uses to the Project site. Based on the assumption that up to 3,700 square feet of the commercial development would be fast-casual restaurant use, the proposed Project is estimated to generate approximately 56 new employees within the Specific Plan area. With the occupancy of the proposed Project, the number of jobs in the City would increase by approximately 56 positions, which could be filled by unemployed persons in the City or by unemployed persons in Los Angeles County. The proposed Project's anticipated employment would represent a nominal percent (0.009%) of SCAG's projected 639,000 new jobs in Los Angeles County between 2016 and 2045. SCAG estimates that the City would have 52,400 jobs by 2045. The proposed Project's anticipated employment would represent a nominal percent (1.36%) of SCAG's projected 4,100 new jobs in the City between 2016 and 2045. The estimated 56 new full-time employees resulting from the proposed Project would make up a small percentage of the overall expected growth in the City and would not exceed the SCAG employment projections.

Housing Projections Analysis

SCAG projects that Los Angeles County will have an increase of 800,000 housing units between 2016 and 2045, and that the City will have an increase of 300 units during this same period. The proposed Project's 263 residential units would represent 0.03% of SCAG's projected housing for Los Angeles County and 87.7% of the projected housing for the City. Therefore, the proposed Project's housing units would not exceed the projections for housing within the City, as set forth in the 2020–2045 RTP/SCS.

California's housing element law requires that each city and county develop local housing programs designed to meet its fair share of existing and future housing needs for all income groups. This effort is coordinated when preparing the state-mandated Housing Element of the City's General Plan. The 5th Cycle RHNA allocation for 2013 to 2021 sets forth the City's fair share allocation for the planning period is 69 units for the City's Housing Element. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 29 low income units, and a portion of the City's requirement for 40 moderate/above income units, as set forth in the Housing Element.

Because the proposed Project will be occupied within the timeframe of the 6th Cycle (2021 to 2029), it is most relevant to the analysis. The City's fair share allocation for the planning period is 492 units. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation. As such, the proposed Project's 263 new residential units would assist the City in meeting the mandated RHNA allocation and would be consistent with and supportive of the City's Housing Element projections for new residential units within the City.

Jobs/Housing Balance

As previously described, the City is considered to be a very jobs-rich community. The proposed Project would generate additional housing available for the community, as the jobs-housing balance of the proposed Project would be 0.3:1, which is a very housing-rich project. Therefore, the proposed Project would facilitate a more balanced jobs-housing profile for the City, which currently maintains an approximately 6.9:1 jobs/housing balance.

Displace Substantial Numbers of Existing Housing or People

The Project site consists of surface parking areas of the Fairfield Inn and Suites Hotel and Aloft Hotel properties, as well as the underutilized commercial space associated with the hotel. No housing uses are located on the Project site, and Project implementation would not require demolition of existing housing or displace people or housing. The proposed Project would include the construction of a mixed-use development that would add approximately 263 housing units to the City. Impacts would be less than significant.

Cumulative Effect

Assuming 2.35 persons per household, the proposed Project's residential units would accommodate 618 individuals. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. Other than the proposed Project, only the proposed

540 E. Imperial Avenue and 1225 Mariposa Avenue proposals, are anticipated to include residential development in the City. Therefore, the remaining cumulative projects would be primarily increasing employment in the City and potentially further exacerbating the jobs-rich profile of the City, which could increase the vehicle miles traveled between employment centers and residential land uses. While the proposed Project would provide employment opportunities to the local and regional area, the employment growth caused by the Project falls well within current projections for employment growth in the City and Los Angeles County. The proposed housing growth generated by the Project would further the goals and strategies of SCAG and the City's General Plan by providing housing in an urban setting in close proximity to transit, while contributing to a more balanced jobs-housing community. Although, the proposed Project's residential population would exceed SCAG's population projections, it can be assumed that many of the residential units would accommodate workers within the City and could reduce vehicle miles traveled by providing housing in proximity to employment centers. Therefore, the unplanned population growth is not considered to be substantial and impacts would be less than significant. Therefore, in combination with other future foreseeable projects, it is not anticipated that the proposed Project would create a cumulatively considerable impact to population, housing or employment.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on population and housing related to inducing growth during construction and displacing a substantial number of people or housing; therefore, no mitigation is required, and no significant, unavoidable adverse impacts would occur.

2.4.15 Public Services and Recreation

Fire Protection

Construction

Construction activities associated with the proposed Project may temporarily (i.e., 48 months during proposed construction) increase demand for fire protection and emergency medical services. Construction activities may involve the operation of construction equipment and machinery, storage, handling, and disposal of combustible materials, and the use of flammable or toxic materials. To comply with California Department of Industrial Relations, Division of Occupational Safety and Health and Fire and Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response, and fire suppression equipment specific to construction would be maintained on site. Project construction would comply with all applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Thus, compliance with regulatory requirements would reduce the potential for construction activities to expose people to the risk of fire explosion related to hazardous materials.

Due to compliance with applicable codes and fire safety standards, Project construction would not adversely impact firefighting and emergency services to maintain acceptable service ratios, response times or other performance objectives for fire protection. Therefore, impacts would be less than significant, and no mitigation is required.

Operation

The need for new or expanded public services (such as fire protection facilities) is typically associated with a population increase. Project employment and new residential uses would result in approximately 56 new employees and 618 residents on the Project site. In the context of the City's population projections, the proposed Project would

exceed the forecasted population growth. The proposed Project would accommodate an expected 618 residents which from the implementation of the Specific Plan exceed the overall population growth projections included in the Connect SoCal. ESFD has reviewed the proposed Project and has determined existing protection facilities were sufficient for the proposed Project (Carver 2020). Therefore, it is expected that the population and employment growth associated with the Project would not outpace the existing or future service capacity of the ESFD.

The Project site is currently served by two existing fire stations. No expansion of these facilities is currently contemplated. Payment of development fees by the Project applicant/developer would be used to offset the costs of increased personnel or equipment that could be required to maintain acceptable service ratios, response times, or other performance objectives.

Furthermore, the proposed Project would be designed and constructed in accordance with all applicable provisions of the fire code, which includes requirements for adequate fire flows, width of emergency access routes, turning radii, automatic sprinkler systems, fire alarms, and floor to sky height limits along emergency access routes.

The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities. Impacts would therefore be less than significant. No mitigation is required.

Police Protection

Construction

There is the potential for Project construction activities to create an increase in demand for police protection services, as construction sites can be sources of attractive nuisances, can provide hazards, and can invite theft and vandalism when not properly secured. This could result in an increase in the demand for police protection services. Consequently, developers and construction contractors typically take precautions to prevent trespassing through construction sites. During construction, the Project applicant/developer or its construction contractor would implement temporary security features including security fencing, lighting, and locked entry. These features would reduce the need for police protection services during the Project's construction phase. Potential short-term construction impacts to police services would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, and impacts would be less than significant.

Operation

The increased use of the Project site attributable to the proposed Project would be expected to increase the frequency of emergency and non-emergency calls to the ESPD. While the Project site currently places some demand on the ESPD due to the occupied hotel uses, the proposed Project would increase demands relative to existing conditions. The ESPD has stated that the existing police station facilities are sufficient to provide service to the proposed Project and that the development of the proposed Project would not result in the need for new facilities and/or physically altered facilities to maintain acceptable service ratios, response times, or other performance objectives (McDaniel 2020).

The Project site is currently served by the ESPD at 348 Main Street. No expansion of this facility is currently contemplated (McDaniel 2020). Payment of development fees by the Project applicant/developer would be used to offset the costs of increased personnel or equipment that could be required to maintain acceptable service ratios, response times, and other performance objectives. The proposed Project would incorporate operational practices and design elements to increase safety and to reduce the potential for crime to occur, which could lessen the demand for police protection

services at the Project site. The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities and potential impacts would be less than significant.

Schools

The proposed Project's approximately 56 new employees and 618 residents would generate students that would attend ESUSD schools. Using the student generation rates from ESUSD, at 263 dwelling units, the Project could generate approximately 35 elementary school students, 20 middle school students, and 28 high school students (Farris 2020).

All the schools with the exception of Center Street Elementary School continue to have capacity with the addition of proposed Project enrollment. However, communication with EUSD indicates the existing schools are sufficient to support the proposed Project (Farris 2020). Education Code Section 17620 allows school districts to assess fees on new residential and commercial construction within their respective boundaries. Pursuant to California Government Code Section 65995, the payment of these fees by a developer serves to fully mitigate all potential project impacts on school facilities from implementation of a project to less-than-significant levels. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. These fees can be collected without special city or county approval, to fund the construction of school facilities necessitated by the impact of residential and commercial development activity.

Therefore, with the payment of the applicable school fees, the operation of the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts to maintain acceptable service ratios, or other performance objectives for schools. Such impacts on schools are considered less than significant. No mitigation is required.

Parks

The Project would include 56 new employees and 618 residents. At least a portion of these residents are anticipated to patronize the various public parks and recreation facilities located in proximity to the Project site. Since the City's Parks are within the State of California Parks Department standard of park space at about 3.5 acres of park space per 1,000 residents (Petit 2020), the additional 618 residents would not exceed existing standards of service for parks.

Additionally, the Project would be subject to the City's Development Impact Fee, which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for other new and existing infrastructures. Pursuant to the Development Impact Fee Program, the Project applicant/developer would pay its fair share of impact fees based on the fee category and adopted Development Impact Fee rates. The Project would contribute funds to the El Segundo Recreation and Parks Department through Development Impact Fees. Further, the Project would include common open space areas, including rooftop pools and community rooms. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. Therefore, impacts associated with the need for new or expanded park facilities would be less than significant. No mitigation is required.

Other Public Facilities

Other public facilities and services provided within the City include library services and City administrative services. Library services are provided at ESPL located at 111 West Mariposa Street, approximately 1.8 miles west of the Project site. The proposed Project would generate approximately 56 new employees and 618 residents. Pursuant to the Development Impact Fee Program, the Project applicant/developer would pay its fair share of impact fees based on the fee category and adopted Development Impact Fee rates. The ESPL indicated that no new facilities would be required as part of the proposed Project; although the digital library needs to be enhanced. Therefore, impacts to other public facilities in the area resulting from the proposed Project would be less than significant. No mitigation is required.

Increase in the Use of an Existing Neighborhood, Regional Park, or Recreational Facility

The Project would include 56 new employees and 618 residents. The City's Recreation and Parks Department is responsible for developed park land that provides a wide variety of attractions and amenities including more than 15 parks, athletic fields, recreational water amenities, a skate park, dog park and community garden. In addition, the City also offers recreational programs and activities for residents, including adult sports, swimming classes, a teen center with a variety of activities and programs, and the Senior Club of El Segundo hosts a wide variety of activities and socials at the Joslyn Center. At least a portion of these residents are anticipated to patronize the various public parks and recreation facilities located in proximity to the Project site. The Project would include common open space areas, which would consist of a central community space with a variety of recreational amenities, as well as landscaped areas around the Project site. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. The El Segundo Recreation and Parks Department indicated no new facilities would be required as part of the proposed (Petit 2020). Additionally, the Project would be subject to the City's Development Impact Fee, which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for other new and existing infrastructures. Pursuant to the Development Impact Fee Program, the Project applicant/developer would pay its fair share of impact fees based on the fee category and adopted Development Impact Fee rates.

As such, with payment of the required development impact fees related to parks and recreation in combination with provision of on-site recreational facilities, the Project would meet the anticipated demand for neighborhood and regional parks or other recreational facilities. Project residents and the public would have access to adequate on-site recreational facilities, which would offset increased use of existing parks and recreational facilities in the City. Therefore, implementation of the Project would not result in a substantial increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur. Impacts to neighborhood and regional parks would be less than significant. No mitigation is required.

Inclusion of or Requirement for Construction/Expansion of Recreational Facilities

The Project would include common open space areas, which would consist of a central community space with a variety of recreational amenities, as well as landscaped areas around the Project site. The construction of these common open space areas and associated recreational amenities is analyzed throughout the Draft EIR. Additionally, the Project would be subject to the City's Development Impact Fee, which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for other new and existing

infrastructures. Pursuant to the Development Impact Fee Program, the property owner/developer would pay its fair share of impact fees based on the fee category and adopted Development Impact Fee rates. As such, Project implementation would not require the construction or expansion of recreational facilities, and impacts would be less than significant.

Cumulative Effect

As defined in the State CEQA Guidelines Section 15130, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for population, housing, and employment. The cumulative study area used to assess potential cumulative population and housing impacts includes the City of El Segundo, ESFD and ESPD service areas, and ESUSD. Cumulative impacts on public services including fire and police protection, parks, and schools would result when projects collectively increase demand on services such that additional facilities or services must be constructed or provided. Cumulative projects would likely result in an incremental increase in the demand for fire protection, police protection, parks, schools (for cumulative projects that have a residential component), and other public services. Because the City is nearly built out, the proposed Project and all cumulative projects are located in areas currently served by ESFD, EPSD, and ESUSD. Therefore, in combination with other past, present, and future foreseeable projects, it is not anticipated that the proposed Project would create a cumulatively considerable impact on public facilities or recreational facilities.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on police and fire protection services, parks, schools, and other public facilities as well as impacts related to recreation; therefore, no mitigation is required, and no significant, unavoidable adverse impacts would occur.

2.4.16 Transportation

Conflict with Circulation System Plan, Ordinance, or Policy

RTP/SCS Consistency Analysis

The Project would redevelop the Project site's existing conditions and would produce approximately 56 jobs in operation within the City of El Segundo. In addition, the Project site's vicinity is served by existing public transit such as various bus routes (Metro Line 232, Metro Line 625, Beach Cities Line 109, LADOT Commuter Express 438, and LADOT Commuter Express 574) as well as the Metro C Line. The Metro C Line is a light rail line, which runs between Redondo Beach and Norwalk. The nearest station is the Mariposa Station, which is just over 0.5-mile from the Project site. The proposed Project would not conflict with the applicable goals in the RTP/SCS.

City of El Segundo General Plan Consistency

The Project requests the approval of a General Plan Amendment (No. GPA 19-01) to change the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use map change. Upon approval of the proposed amendment, the Project would be brought into compliance with the General Plan Land Use Designation.

General Plan Buildout Comparison

Because the adoption of the proposed Specific Plan would change the overall framework development for the Project site established in the General Plan, a comparison of trip generation estimates of the proposed Project with the currently designated General Plan land uses was conducted. The City's General Plan identifies the portion of the site that is south of Mariposa Avenue as General Commercial, with a maximum floor area ratio of 1.0 for PCC-Fairfield Parking and PCC-South, and the portion to the north of Mariposa Avenue as Parking. The General Plan land uses are projected to generate an estimated 4,026 daily trips, including 203 trips (112 inbound/91 outbound) during the AM peak hour and 262 trips (145 inbound/117 outbound) during the PM peak hour. The Project is projected to generate an estimated net increase of 2,517 daily trips, including 132 trips (47 inbound/85 outbound) during the AM peak hour and 178 trips (103 inbound/75 outbound) during the PM peak hour. The General Plan land uses are projected to generate 1,509 more daily trips than the proposed Project, including 71 more trips during the AM peak hour and 84 more trips during the PM peak hour. The proposed Project would generate fewer trips compared to the General Plan land uses.

Level of Service Analysis for General Plan Consistency

Although the City's LOS policy would not be applicable as a transportation impact under CEQA per SB 743, the study area intersection operations analysis results are summarized below for the following scenarios:

Existing Plus Project Traffic Conditions

CEQA Guidelines Section 15064.3(b) focuses on newly adopted criteria (VMT) pursuant to SB 743 for determining the significance of transportation impacts. Pursuant to SB 743, the focus of transportation analysis changed from vehicle delay to VMT. As stated in CEQA Guidelines Section 15064.3(c), the provisions of Section 15064.3 shall apply prospectively, and a lead agency may elect to be governed by the provision of Section 15064.3 immediately. However, the information below related to LOS is provided for information purposes and for assessment of consistency with General Plan policies.

The Existing plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Existing Base and Existing plus Project with improvement conditions. The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length.

Future Plus Project Traffic Conditions

The Future plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Future Base and Future plus Project with improvement conditions at Mariposa Avenue. The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length.

City of El Segundo Climate Action Plan

The City's CAP includes measures related to the circulation, including parking, multi-modal streets, pedestrian/bicycle networks, and transit accessibility. The Project would provide a combination of electric vehicle charging and alternative fuel vehicles and carpooling parking in compliance with El Segundo Municipal Code and CALGreen requirements. The proposed Project would include shared parking, which would provide a more efficient use of land. As such, a shared parking analysis for the Project has been prepared to assess the potential parking demand and determine if adequate parking supply would be available on the site.

Bicycle parking and storage would be provided in compliance with CALGreen and the City's Municipal Code. The proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro C Line and multiple bus lines. Additionally, the proposed Project would reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown. The Project would not conflict with the applicable measures related to the circulation system in the City's CAP.

Transit, Bicycle, and Pedestrian Facilities

The Project would not conflict with any plans or policies regarding existing or proposed transit, bicycle, and pedestrian facilities in the study area. During construction, sidewalk closures around the perimeter may be expected during street improvements. During this time, pedestrians would generally be routed to the other side of the street, but temporary covered pedestrian routes would be provided for access to the existing hotels. There are no identified Safe Routes to School along streets fronting the Project site; therefore, the construction of the Project would not temporarily affect such routes. During long-term operations of the Project site, when residences are occupied with families, it is expected that some students would walk from the site to the local schools. Local public schools that would serve the Project site are located to the west and would not require students to cross the PCH or other major roadways.

There are no existing bicycle facilities that would be temporarily impacted by Project construction. The South Bay Bicycle Master Plan indicates that additional Class II and III bicycle facilities are planned along Mariposa Avenue. No plans for the completion of the additional Class II and II bicycle facilities are anticipated to occur during Project construction. Bus stops are located east of the Project site, on Mariposa Avenue and on PCH. Construction is not anticipated to affect bus operations as construction and staging would not be immediately adjacent to these bus stops. The Metro C Line and Mariposa Station are located over 0.5 miles from the Project site and would not be impacted by Project construction. Therefore, the Project construction would not require relocation of bus stops and the construction impacts on transit, bicycle, and pedestrian facilities would be less than significant.

Once operational, bicycle and pedestrian access to the Project site would not be affected as no new driveways are being added. Bicycle access to the Project site would continue to be available on Indiana Street, Mariposa Avenue, and PCH. Further, the Project would not preclude implementation of the South Bay Bicycle Master Plan, including any future plans to complete the additional Class II and II bicycle facilities on Mariposa Avenue. The bus stops and other transit facilities would not be affected by Project operations. Due to the distance between the Project site and the Metro C Line, and because the Project would not impact right of way currently used or planned to be used for bus or light rail activities, the Project would not conflict with any plans or policies related to transit. Given the various transit facilities available near the Project site, sufficient transit capacity in the study area is available. Therefore, the Project's impact on transit, bicycle, and pedestrian facilities would be less than significant.

Conflict with CEQA Guidelines Section 15064.3 (b)

State CEQA Guidelines Section 15064.3(b) focuses on newly adopted criteria (VMT) adopted pursuant to SB 743 for determining the significance of transportation impacts. The VMT per capita assumed for the Project site was therefore based on the vehicle trips and average trip lengths for the TAZ in which the Project is located from the SCAG model, which indicates a daily household VMT per capita of 10.9 for all home-based production trips within the TAZ.

For residential projects, OPR recommends that a project exceeding a level of 15% below existing daily household VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as

regional VMT per capita or as city VMT per capita. The SCAG regional daily household VMT per capita (15.3) is higher than the City's daily household VMT per capita (14.2). Therefore, to be conservative, existing daily household VMT per capita is measured against the City's daily household VMT per capita for this analysis.

Per the SCAG model, the existing City daily household VMT per capita for residential land uses are 14.2 per resident. The threshold of 15% below the City average is 12.1 daily household VMT per capita (i.e., per resident). The proposed Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita. Therefore, proposed Project would not conflict with State CEQA Guidelines Section 15064.3(b) and impacts would be less than significant.

Hazards Due to Geometric Design Feature

Project access would not substantially increase hazards due to design features or incompatible uses. The Project would not result in the construction of new driveways; rather, the Project would allow for full access onto Mariposa Avenue, Palm Avenue, and Indiana Street, where access is currently limited to in-only/out-only. The proposed driveways at PCC-North would allow for full access in/out via Mariposa Avenue and Palm Avenue, and the existing curb cut on PCH would be removed. The residential access from Indiana Street at PCC-South would allow for full access in/out rather than access out-only, as under the existing conditions. No changes are proposed to access for the PCC-Fairfield Parking site. Additionally, as part of the Project, the eastbound leg of Mariposa Avenue at PCH would be reconfigured from one left lane and one through-right lane to one left, one through, and one right-turn lane.

All new driveways and internal access points would be designed and constructed to ensure appropriate line of sight and appropriate turning radii. Additionally, to ensure the Project would not result in driveway queueing onto PCH, a major corridor in the Project vicinity, which could create hazards to oncoming traffic, a queuing analysis was conducted for the PCH/Pacific Coast Commons South Driveway.

A queuing analysis, from within the Project site, was conducted for the driveway approach at the PCH/PCC-South driveway to show the estimated length of queues for vehicles exiting the Project site. Queues at the driveway are anticipated to be minimal given the volume of outbound Project trips at this driveway. Future plus Project Conditions, queues are anticipated to be minimal given the volume of outbound Project trips at this driveway. Therefore, the unsignalized and stop-controlled PCC-South driveway on PCH would not substantially increase hazards for vehicles using this Project access.

A signal warrant analysis conducted for the two unsignalized intersections at PCH and Palm Avenue and PCH and Holly Avenue, determined neither intersection trigger a signal warrant for both Existing plus Project and Future plus Project. Therefore, Project traffic at these intersections would not create increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant.

Inadequate Emergency Access

Construction

Short-Term Construction Parking

An analysis of parking availability is not a requirement pursuant to CEQA. Vehicle access would be accommodated for the existing hotel uses on the Project site throughout the duration of construction. It is possible that the construction of PCC-Fairfield Parking, PCC-South, and PCC-North would occur sequentially. During Phase 1

construction, Fairfield Inn and Suites Hotel guests would continue to park at the existing surface lot at PCC-North. Once Phase 1 is completed, parking for the Fairfield Inn and Suites Hotel guests could be moved into the newly constructed garage. During Phase 2 construction, Aloft Hotel parking would be accommodated via the existing surface lot at PCC-North. Once Phase 2 is completed, PCC-South and its respective land uses would park on-site at the new garage. Phase 3, the North site, would begin construction and during this buildout no vehicles would need special parking accommodations. It is possible that Phase 2 and Phase 3 would be constructed at the same time. Under a concurrent timeline, Phase 1 would construct the replacement parking and new retail for the Fairfield Inn and Suites Hotel site adjacent to the existing hotel. During Phase 1, the Aloft Hotel and Fairfield Inn and Suites Hotel would continue to be in operation. During the construction of Phase 2 and Phase 3, both hotels would continue to operate, and new retail built in Phase 1 would be occupied. During Phase 1 of construction, Fairfield Inn and Suites Hotel and Aloft Hotel guests would continue to park at the existing surface lots at their respective sites. The existing Fairfield Inn and Suites Hotel surface lot has 232 parking spaces and the existing Aloft Hotel surface lot has 165 parking spaces, for a total of 397 parking spaces. During construction hours, a peak demand of 171 parking spaces for the Fairfield Inn and Suites Hotel and 119 parking spaces for the Aloft Hotel would need to be accommodated, along with a peak demand of 60 construction employee parking spaces. The total demand of 350 spaces would be entirely accommodated by the existing 397 spaces. However, only the newly-constructed PCC-Fairfield Parking structure (215 parking spaces) would be available for parking during PCC-South and PCC-North construction. Construction of Phases 2 and 3 would require 442 spaces, resulting in a deficit of 227 parking spaces.

As described under Development Agreements/Conditions of Approval above, if the total parking demand would exceed the total parking supply during construction activities, the Project applicant/developer would be required to accommodate the excess parking demand at an off-site location and provide shuttle service to and from the Project site accordingly to ensure that that parking is adequately provided during short-term construction activities.

Operation

All areas of the Project site would be accessible to emergency responders for the long-term operation of the proposed Project. Local access to the Project site would be provided via PCH, Indiana Street, Mariposa Avenue, and Palm Avenue. All of the Project access points would be confirmed to be designed according to applicable design standards. The proposed Project would provide adequate access to the Project site, including access for emergency vehicles. The internal drive aisles and loading and parking areas would be designed to comply with City's width, clearance, and turning radius requirements of the Fire Department. A fire access driveway would be constructed within PCC-North to provide access to the development.

The Specific Plan requires structures, roadways, and facilities to comply with applicable local, regional, state, and/or federal requirements related to emergency access and evacuation plans. The Project would require approval of a Site Plan Review No. 19-01 to allow the site plan and architectural design to construct the mixed-use commercial and residential development. Thus, all development proposed under the Specific Plan, including the proposed Site Plan, would be reviewed and approved during plan check review to ensure appropriate emergency access. Adherence to these requirements would ensure that impacts due to inadequate emergency access are below a level of significance. Therefore, potential impacts associated with inadequate emergency access would be less than significant.

Long-Term Shared Parking

An analysis of parking availability is not a requirement pursuant to CEQA.

The Shared Parking Analysis was conducted to determine the minimum amount of parking needed to adequately park the Project's proposed and existing land uses. This analysis assumes that a number of parking spaces on site can be shared between the residential guests, hotel guests, and patrons of the on-site retail and restaurant uses. Because a shared parking supply is proposed, the Project would not be providing excess parking spaces that could encourage the driving of non-residents to/from the site. In fact, the Project would be providing a parking supply lower than the City's Municipal Code requirements, but would adequately support the Project's parking demand through shared parking.

The PCC-North site plan proposes 253 parking spaces (with 12 of those spaces in individual garages), with 189 parking spaces reserved for residential tenant use. The remaining 51 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites. PCC-North is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the PCC-North is projected to have a surplus of three shared parking spaces during the peak demand period.

The PCC-Fairfield Parking peak parking demand is estimated to be 191 spaces. The site plan proposes 215 parking spaces, indicating sufficient supply for the anticipated demand with a surplus of 24 spaces during the peak demand period.

The PCC-South site plan proposes 336 parking spaces, with 165 parking spaces reserved for residential tenant use. The remaining 171 spaces would be shared between the residential guest parking, hotel, commercial uses, and for overflow if needed from the other sites. The PCC-South is estimated to have a peak residential parking demand of 144 parking spaces and a peak shared parking demand of 192 spaces. As such, PCC-South would have a deficit of 21 shared parking spaces during the peak demand period. The excess demand can be accommodated by the surplus of spaces at the PCC-North and PCC-Fairfield Parking garages, which have a combined surplus of 26 spaces.

It is noted that the Specific Plan allows an adjustment to the parking requirements of Development Standard D1 if a separate parking study can justify the need for adjustments to parking. The shared parking analysis demonstrates that sufficient parking would be provided to meet the demand of the various uses on-site, as proposed by the site plan. The shared parking would serve to efficiently use available developable land and would avoid an "over-parked" Project that could inadvertently encourage single-occupancy vehicle use.

Cumulative Transportation Impacts

Plan, Program, Ordinance, or Policy Addressing Circulation

The proposed Project is consistent with the following plans addressing the circulation system and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities under cumulative conditions. Therefore, cumulative impacts related to a program, plan, ordinance, or policy related to addressing the circulation system would be less than significant.

CEQA Guidelines Section 15064.3(b)

The long-term cumulative impacts related to VMT have been reviewed per the SCAG VMT thresholds. The Project is located within an urbanized area served by public transit. The Project would not exceed the SCAG threshold for

VMT; therefore, the Project's contribution to cumulative VMT would not be cumulatively considerable and would be a less-than-significant impact.

Hazardous Design Features

The Project would not result in the construction of new driveways; rather, the Project would allow for full access onto Mariposa Avenue, Palm Avenue, and Indiana Street, where access is currently limited to in-only/out-only. The proposed Project has a completed circulation analysis using a LOS methodology that indicates that the trips generated by the proposed Project would not result in adverse circulation conditions. Because the impacts related to Project access points and circulation are site specific, and would be less than significant, the Project would not contribute to cumulative impacts with respect to hazardous design features.

Emergency Access

The Project would not result in inadequate emergency access and Project impacts to emergency access would be less than significant. As with the proposed Project, driveways and/or circulation modifications proposed in the surrounding area would comply with applicable local, regional, state, and/or federal requirements related to emergency access and evacuation plans. Further, since modification to access are largely confined to the Project site and the immediately surrounding area, Project-specific emergency access impacts would likely not impact other cumulative projects. Therefore, the Project's contributions to cumulative impacts would be less than significant.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on transportation as it relates to conflict with circulation system plan, ordinance, or policy; conflict with CEQA Guidelines Section 15064.3 (b); inadequate emergency access; and cumulative impacts. Therefore, no mitigation is required, and no significant, unavoidable adverse impacts would occur.

2.4.17 Utilities and Service Systems

Require or Result in the Construction of New Water, Wastewater Treatment, Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities

Water Service

The water service connection for domestic water and fire protection would be made to one or more of the existing City water lines surrounding each development area. The specific location of these connections and pipe sizing would be based upon the City's approval. The system would provide adequate water supply for operation of the building's domestic requirements, automatic sprinkler systems and on-site fire hydrants, if required by the state or City Fire Marshal. Fire flows for the proposed Project would be based on the requirements listed in the version of the California Fire Code that is in effect at the time of plan submission, as amended by the City. Impacts within the Project site as part of construction of the proposed Project have been evaluated throughout the Draft EIR. Thus, the construction of new fire hydrants within the Project site would not cause a significant environmental effect.

The proposed Project is located in the high pressure zone of the City. The results of the modeling identified the service size necessary for the Project as less than-inches for each of the sites. Because the modeled flows are much higher than the estimated flows and the results of the analysis for the higher modeled flows prove that the

City main does not need to be upsized, it can be concluded that the City main would have more than enough capacity for the lower estimated flows and will not need to be upsized. Therefore, impacts to water facilities would be less than significant.

Sanitary Sewer

The City's sanitary sewer lines are located on all sides of the proposed Project. New sewer laterals are proposed for all the new buildings. It is anticipated that the new sewer laterals would connect to several of the existing gravity lines surrounding the Project. The proposed Project does not currently impact the existing pressure lines. Both the existing and proposed project sewer flows are considered in the average dry weather flow. It was assumed that all commercial spaces would consist of restaurants, which generates the highest flow compared to other commercial uses. The total flow from the Project is estimated to be 40,330 GPD or 0.0403 MGD. It appears that all sewer systems analyzed would still flow less than 50% full with the additional flows from the Project and that the sewer systems have capacity to serve the new developments. Therefore, no upgrades to the existing sewer pipeline infrastructure would be required as a result of Project implementation. Impacts would be less than significant.

Stormwater Drainage

There are two existing storm drains near the Project site that are owned by Caltrans and the City. Infiltration is feasible for stormwater treatment, in compliance with City of El Segundo low-impact development requirements. Because the peak flow rate would be reduced in the proposed condition, it is assumed that the City of El Segundo storm drains will have more than enough capacity to handle the flow rate generated by the proposed Project. Therefore, no upgrades to the existing storm water drainage infrastructure would be required as a result of Project implementation. Impacts would be less than significant.

Dry Utilities

Natural gas is provided to the Project area by the SoCal Gas, and gas utility infrastructure is located in all streets adjacent to the Project site, including PCH, Palm Avenue, Mariposa Avenue, Indiana Street, and Holly Avenue. New connections would be required for all the new buildings. The existing gas service would be maintained and future gas service would be provided through the Project's private gas service line connections to the SoCal Gas utilities in the surrounding streets. SoCal Gas has confirmed that there are existing facilities in the area and that service would be provided to the Project site in accordance with applicable policies and rules set forth by the CPUC.

Electrical power is provided to the Project area by SCE. There are existing underground electrical lines below PCH and Mariposa Avenue adjacent to the Project site. New underground utility conduit systems would be needed to intercept the existing underground electric system and provide electrical power to the proposed improvements. Final locations and points of connection for the electrical system will be based on a final approved design, in coordination with SCE. SCE has confirmed that there are existing facilities in the area, and service would be provided to the Project site in accordance with applicable policies and rules set forth by the CPUC.

There are existing underground telecommunication lines below PCH, Palm Avenue, and Mariposa Avenue adjacent to the Project site. It is anticipated that Velocity and Sonify would continue to provide service to the Aloft Hotel and the Fairfield Inn and Suites Hotel. Verizon, CenturyLink, and Charter Communications have all confirmed that they have existing services in the area. New underground utility conduit systems would intercept the existing underground telecommunications system and provide services to the proposed buildings.

Upgrades to dry utilities could be required based on the change in land use (i.e., higher density and increase in onsite technology). Any required upgrades are anticipated to be limited the lateral connections to the Project site and not any centralized facilities. This significance criterion is generally applicable to projects that are not already served by municipal utilities, or for greenfield development projects outside of urban areas, because it is those projects that either need to construct new electrical power, natural gas, and telecommunication centralized facilities, or that would tax existing infrastructure.

Upgrades would be coordinated with appropriate service providers (such as SCE, SoCal Gas) to minimize disruptions on service and would be completed by either trenchless technology or open trenching to the depth of the underground utilities. Potential environmental impacts associated with trenching for utilities, including areas of temporary earth disturbance and the operation of construction equipment, are assessed throughout the Draft EIR. Additionally, the Project would be required to comply with all regulatory requirements and mitigation measures outlined within this draft EIR for the purposes of mitigating impacts associated with utility construction activities and the use of heavy machinery. No adverse physical effects beyond those already disclosed in this Draft EIR would occur as a result of implementation of the Project's proposed utility system connections. Therefore, impacts to dry utilities would be less than significant.

Sufficient Water Supplies

The estimated water demand for the proposed Project based on 120% of the estimated sewer demand for the Specific Plan area. The total domestic (potable) water demand from the Project is estimated to be 48,396 GPD or 0.048 MGD or 54.2 AFY. The proposed Project is estimated to require approximately 48,396 GPD (54.2 AFY) of new demand of potable water, based on the calculations provided in the Utility Report (Appendix G of the Draft EIR). Therefore, the Project's water demand would be far below the estimated 210 AFY benchmark for determining whether a Water Supply Assessment is required under SB 610 for a water use equivalent to a 500 dwelling unit development.

Although the proposed Project would not meet the threshold for the preparation of a Water Supply Assessment, it would generate a demand for potable water supplies that were not anticipated during the preparation of the City's 2015 UWMP, as the proposed Project would introduce new land uses that are not currently anticipated in the General Plan. The proposed Project's estimated 54.2 AFY would be approximately 0.31% of the City's overall supply total in 2025, and would be both within the estimates, and exceed the estimates, depending on whether it is a normal, wet, and multiple dry years.

The City of El Segundo will serve the proposed Project and will both provide and require the development to have redundant potable water connections, subject to the City's Water Department approval for all water connections. The City will charge various fees for providing potable water and wastewater services, which include but are not limited to readiness to serve, water usage (quantity), treatment, and utility user taxes.

The MWD is a primary source of water supply within Southern California. Because the City of El Segundo purchases the entirety of its water supply from the WBMWD, which is supplied through MWD, the reliability of the City's water supply is heavily dependent on the reliability analyses of these agencies. The amount of water the City obtains from these sources may vary from year to year, depending on weather conditions and demand. During multiple dry year scenarios, the demand exceeds the supply, however, WBMWD will be able to supply this difference. It was estimated in the MWD 2015 UWMP that surplus supplies are available to meet the increased demands during normal, dry, and multiple dry year scenarios through 2035. If the City uses more water than is naturally replenished during these years the City, WBMWD, and MWD can enact the measures outlined in their respective Water Shortage Contingency

Plans (WSCPs) to ensure that water is used as efficiently and sparingly as possible. This will help preserve the water supplies available, and ensure continued reliability for the future (City of El Segundo 2016).

While additional imported water from MWD can be purchased, if required, to address any additional demands, the City has also implemented measures to address potential water shortages. To respond to potential water supply shortages, including up to a 50% reduction in supply, the City has developed a four-stage rationing plan to be implemented if the City experiences a shortage in the water supply. Mandatory conservation is always required to prevent water waste. The City has also adopted a WSCP as part of its Municipal Code. The WSCP describes the measures to take in the event of a water shortage, including different stages of action corresponding to different levels of drought. Since the City of El Segundo receives its imported water supplies from the WBMWD and MWD, the City is also subject to the WSCPs of these Districts. Each District has water rationing stages and a WSCP that specifies the actions to be taken during a water shortage of 50% or greater. In the event that a water shortage becomes severe and a 50% reduction is necessary, the City will comply with the conservation measures as provided by the WBMWD and MWD WSCPs (City of El Segundo 2016).

WBMWD's 2015 UWMP has identified plans to reduce its imported water use by 17% within the next 20 years through diversifying its water sources; namely developing a full-scale ocean water desalination plant and expanding recycled water use. Water desalination is not included as a potential source in the City's UWMP because WBMWD would be the operator of the desalination plant; however, the City may be able to purchase desalination water as a part of the City's overall purchased water supply (City of El Segundo 2016). The WBMWD's environmental review of their Ocean Water Desalination Project was completed on November 20, 2019, which would include construction and operation of an ocean water desalination facility in El Segundo, with offshore ocean water intake and brine discharge structures, and an inland water conveyance system. The project would produce 20 MGD of potable drinking water and would provide a reliable local water supply, thereby offsetting the need for imported water from the SWP and increasing drought resiliency (WBMWD 2019b).

The City's UWMP must be updated every 5 years, and at the time of the preparation of this evaluation, the City is in the process of preparing the 2020 UWMP. Planned growth is incorporated into the supply and demand projections within the UWMP, in compliance with applicable regulations and standards. The Update to the UWMP would also consider changes to future supplies, such as desalination water. As described above (see Appendix G-2), the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years (Xu pers. comm. 2020). Therefore, the City would have sufficient water supplies available to serve the proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years and impacts would be less than significant. No mitigation is required.

Adequate Capacity for Wastewater Treatment

Wastewater generated from the Project site would be treated at the HTP, which has the capacity to treat a maximum daily dry weather flow of 450 MGD of wastewater and a peak wet weather flow of 800 MGD, while on average dry weather days, the facility treats 275 MGD (City of Los Angeles 2020). The difference between the average dry weather flows and the maximum flows is 175 MGD. The City of El Segundo has an agreement with the City of Los Angeles that permits an average flow of 2.75 MGD of wastewater treatment and disposal capacity in HTP. Project wastewater discharges would be typical of the wastewater already generated at nearby properties; it would not include large quantities of unusual industrial/hazardous discharges that can interfere with the ability of a treatment plant meeting the water quality requirements for its discharges.

To be conservative, it was assumed that commercial areas of the proposed Project would consist of restaurants, which generate a higher demand of 1,000 GPD compared to other commercial spaces. Based on the Utility Report, the proposed Project would generate 40,330 GPD (0.0403 MGD) of sewer demand. This wastewater flow would represent approximately 1.46% of the City's permitted average flow to HTP, as well as would represent approximately 0.024% of HTP's remaining capacity. As such, the increase in wastewater generation attributable to the Project would be accommodated within the existing treatment capacity of the HTP and would represent a minimal to negligible percentage of the facility's remaining capacity. Additionally, the requirement to maintain capacity at HTP is monitored through permit requirements with the Los Angeles Regional Water Quality Control Board, which required the submittal of a report within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75% of the design capacity of the plant (0.75 x 450 MGD = 337 MGD) of waste treatment and/or disposal facilities. This report must include A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. Therefore, the Project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitment. Furthermore, water conservation measures as established at the local and state level would be implemented and would help reduce the amount of wastewater generated by the Project. Therefore, impacts would be less than significant.

Generation of Solid Waste

Construction

The proposed Project would involve redevelopment of the existing surface parking lots of the Fairfield Inn and Suites Hotel and Aloft Hotel properties, as well as the Fairfield Inn and Suites Hotel Food and Beverage Building (formerly the Hacienda Restaurant). Redevelopment activities associated with the proposed Project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Per CALGreen standards, 65% of construction and demolition waste must be diverted from landfills (CalRecycle 2020b). As such, at least 65% of all construction and demolition debris from the site would be diverted. Additionally, any hazardous wastes that are generated during demolition and construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction and demolition material that is not required to be recycled would either be disposed of in a regional landfill or voluntarily recycled at a solid waste facility with available capacity. The inert landfill in the County (Azusa Land Reclamation landfill) has a remaining capacity of 51,512,201 tons and is expected to remain open for approximately 25 years, as of 2020. Due to the temporary nature of construction and required compliance with the City's recycling mandates, construction would not generate waste in excess of standards or in excess of the capacity of local infrastructure and would not otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

Operation

Once operational, the proposed Project would produce solid waste on a regular basis, in association with operation and maintenance activities. The proposed Project would generate approximately 86.34 tons of solid waste per day. This amount assumes compliance with AB 939 requirements for 50% waste diversion from landfills. Solid waste generated by the proposed Project would be collected and transported to a local or regional landfill. Scholl Canyon landfill has a remaining capacity of 9,900,000 tons and is expected to remain open for another 10 years. Burbank Landfill Site No. 3 has a remaining capacity of 5,174,362 tons and is expected to remain open for another 33 years. Calabasas landfill has a remaining capacity of 14,500,000 tons and is expected to remain open for another 9 years.

The proposed Project is expected to generate approximately 86.34 tons per year. Collectively, the Scholl Canyon Landfill, Burbank Landfill Site No. 3, and the Calabasas Landfill have approximately 29,574,362 tons of available space remaining. As such, the net solid waste that is anticipated to be produced by the proposed Project would equate to approximately 0.00029% of the available capacity of the combined landfills through their estimated closure dates. This number would be further reduced in order to comply with CALGreen requirements for 65% waste diversion, which would require the Project Applicant/Developer to either submit a construction waste management plan to the City that identifies the C&D waste materials to be diverted from the landfills, or use a waste management company that can provide verifiable documentation that the percentage of C&D waste material diverted from the landfill meets CALGreen's 65% requirement

Once the Scholl Canyon Landfill, Burbank Landfill Site No. 3, and the Calabasas Landfill reach capacity, additional landfills and strategies would be identified so that disposal needs continue to be met. Furthermore, according to the latest annual report for the Countywide Integrated Waste Management Plan, there are landfills used by the County with up to 100 years of remaining life (County of Los Angeles Department of Public Works 2019). For example, the Prima Deshecha Sanitary Landfill in Orange County is expected to remain open for another 85 years, the Mesquite Regional Landfill in Imperial County is expected to remain open for another 100 years, and the Simi Valley Landfill in Ventura County is expected to remain open for another 67 years (CalRecycle 2020a). As such, in the event of closure of the Scholl Canyon Landfill, Burbank Landfill Site No. 3, and the Calabasas Landfill, other landfills in the region would be able to accommodate solid waste from the proposed Project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future.

For the reasons described above, Project operations would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant**.** No mitigation is required.

Solid Waste Statutes and Regulations

The proposed Project would be required to comply with all applicable local and state regulations related to solid waste. The solid waste facilities in proximity to the Project site, Scholl Canyon Landfill, Burbank Landfill Site No. 3, and the Calabasas Landfill, are regulated under federal, state, and local laws. Additionally, the City is required to comply with the solid waste reduction and diversion requirements set for in AB 939, AB 341, AB 1327, and AB 1826. Per AB 1826, businesses that generate 2 cubic yards or more of commercial solid waste per week are required to arrange for organic waste recycling services. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws.

In addition to the City's requirements for recycling construction and demolition waste, the state has set a goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill, and AB 1826 is mandatory organics recycling. Waste generated by the proposed Project would enter the City's waste stream but would not adversely affect the City's ability to meet AB 341 or AB 1826, because the proposed Project's waste generation would represent a nominal percentage of the waste created within the City and because the businesses and residents at the Project site would be subject to recycling and diversion requirements. In addition, waste diversion and reduction during Project construction and operations would be completed in accordance with CALGreen standards, CalRecycle standards, City requirements, and the County Integrated Waste Management Plan. As a result, the Project would comply with federal, state, and local management and reduction statues and regulations related to solid waste. Impacts would be less than significant**.**

Cumulative Utilities and Service Systems Impact

Water

Implementation of the Project, in conjunction with cumulative projects would increase demand for water services provided in the City's water supply system. The Project area and each cumulative projects would incrementally increase the amount of water that is required in the area. However, as previously described, the existing water lines that serve the Project site have the capacity to convey the estimated peak flow generated from the Project. Similar to the Project, the capacity of water lines associated with cumulative project development would be determined on a project-specific basis. In the event that water line upgrades are required due to cumulative projects, all construction work within the City public rights-of-way would be subject to local municipal code and applicable agency requirements, and would be subject to CEQA review accordingly. Based on the analysis presented in the Utility Report (Appendix G of the Draft EIR), the proposed Project is not anticipated to contribute to a cumulative impact related to water infrastructure.

The City (through its UWMP) anticipates its projected water supplies will meet demand through the year 2035. In terms of the City's overall water supply condition, any cumulative project that is consistent with the City's General Plan has been taken into account in the planned growth of the water system. The City is currently preparing the 2020 UWMP, which is anticipated to be available in the Fall of 2021. The City's 2020 UWMP will account for anticipated growth within the City through 2040. Cumulative projects that propose changing the zoning or other characteristics beyond what is within the General Plan would be required to evaluate the change under necessary CEQA approval. The CEQA analysis would compare the existing to the proposed uses and the ability of the City and water utility providers to provide a sufficient level of water service.

For projects that meet the requirements established pursuant to SB 610, SB 221, and Sections 10910–10915 of the State Water Code, a Water Supply Assessment demonstrating sufficient water availability is required on a project-by-project basis. Similar to the Project, each cumulative project would be required to comply with City and State Water Code and conservation programs for both water supply and infrastructure to partially offset the cumulative demand for water. As a result, no significant cumulative water supply impacts are anticipated from development of the Project and cumulative projects, and the Project's incremental effect would not be cumulatively considerable. No mitigation is required.

Wastewater

The Project area and each cumulative project would incrementally increase the amount of wastewater that is being generated in the area. However, as previously described, the existing sewer lines that serve the Project site have the capacity to convey the estimated peak flow generated from the Project. Similar to the Project, the capacity of receiving sewer lines associated with cumulative project development would be determined on a project-specific basis. In the event that sewer upgrades are required due to cumulative projects, all construction work within the City public rights-of-way would be subject to local municipal code and applicable agency requirements, and would be subject to CEQA review accordingly. Based on the analysis presented in the Utility Report (Appendix G of the Draft EIR), the proposed Project is not anticipated to contribute to a cumulative impact related to sewer infrastructure.

Similarly, the proposed Project would generate 40,330 GPD (0.0403 MGD) of sewer demand. This wastewater flow would represent approximately 1.46% of the City's permitted average flow to HTP, as well as would represent approximately 0.024% of HTP's remaining capacity. As cumulative increases in wastewater treatment demand within the service area require facility upgrades, the City would continue to regulate public sewer facilities in

accordance with Title 12 of the El Segundo Municipal Code and the HTP would continue to assess potential expansions to their treatment facilities in accordance with regulatory permit requirements. As such, impacts to wastewater services would not be cumulatively considerable. No mitigation is required.

Electric Power, Natural Gas, and Telecommunication

The City of El Segundo is built-out and upgrades in electrical power, natural gas, and telecommunication capabilities are anticipated primarily due to development in the form of the revitalization of outdated or underserved areas, and redevelopment of specific properties that will increase density and require more sophisticated technology, such as the proposed Project. However, such upgrades would generally be confined to the lateral connections to the individual project sites and not any centralized facilities. Upgrades to centralized power, natural gas, and telecommunication facilities would be determined by each of the power, gas, and telecommunications providers, as build-out continues within the region. Individual projects would be required to provide for specific project needs. As a result, cumulative impacts associated with upgrades of electric, natural gas, and telecommunication facilities would not be significant. As such, impacts to electric power, natural gas, and telecommunication services would not be cumulatively considerable.

Solid Waste

Development of the Project in combination with cumulative projects would increase land-use intensities in the area, resulting in increased solid waste generation in the service area for the Scholl Canyon Landfill, Burbank Landfill Site No. 3, and the Calabasas Landfill. However, due to the built-out nature of the City, the Project and cumulative projects are considered urban infill and/or redevelopment projects. As such, solid waste is already being generated at the Project site and the majority, if not all, of the cumulative project sites. Further, AB 939, or the Integrated Waste Management Act of 1989, mandates that cities divert from landfills 50% of the total solid waste generated to recycling facilities. In order to satisfy CALGreen requirements of diverting 65% of solid waste and to offset impacts associated with solid waste, the proposed Project and all cumulative projects would be required to implement waste reduction, diversion, and recycling during both demolition/ construction and operation.

Through compliance with City and state solid waste diversion requirements, and due to the recycling collection process that would be part of the proposed Project design and the design of many typical urban infill projects, impacts to solid waste services would not be cumulatively considerable. Impacts would be less than significant, and no mitigation is required.

Finding

The City finds that, based upon substantial evidence in the record, the Project would have a less than significant impact on utility and service systems; therefore, no mitigation is required.

2.4.18 Wildfire

The Project site is in a highly urbanized area and is not within a Very High Fire Hazard Severity Zone and would not exacerbate or expose people or structures to wildfire risks or substantially impair an adopted emergency response plan. Based on the CAL FIRE's Fire Hazard Severity Zones maps (CAL FIRE 2020), the entire City, including the Project site, is not located in or near state responsibility areas or lands classified as Very High Fire Hazard Severity Zones. Therefore, impacts associated with wildland fire would not occur.

Finding

Appendix B of the Notice of Preparation for the Project found no potential for significant impacts to wildfire; therefore, wildfire was not addressed in the Draft EIR. No mitigation would be required and no significant, unavoidable adverse impacts would occur.

3 Findings on Project Alternatives

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project, and to evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a], [f]). As defined by the CEQA Guidelines, "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR needs to examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project" (14 CCR 15126.6[f]).

Additionally, CEQA Guidelines section 15091(a)(3) requires findings to be made as to why project alternatives were rejected. While an alternative may be potentially feasible under Guidelines section 15126.6 for inclusion in an EIR, the ultimate determination of feasibility is to be made by the decision-making body under section 15091(a)(3). As stated above, alternatives may be rejected when specific economic, legal, social, technological or other considerations make the Project infeasible. In making these findings, the City Council finds that there are six objectives for the Project, five of which are dependent upon intensifying the land use. However, the primary objectives of the Project are (1) addressing the regional housing shortage by providing additional housing opportunities, including affordable housing, that support the goals of the Housing Element of the General Plan, and (2) improving the job/housing balance in the City of El Segundo.

3.1 Alternatives Carried Forward for Consideration

This section discusses a reasonable range of alternatives to the Project, including a no project alternative, in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- Alternative A: No Project/Existing Development
- Alternative B: Reduced Development Alternative: Exclusion of PCC-North
- Alternative C: Reduced Development: Reduce 1 Level from PCC-South and PCC-North

These alternatives are evaluated for their ability to avoid or substantially lessen the impacts of the Project identified in the EIR, as well as consideration of their ability to meet the basic objectives of the proposed project as described in the Final EIR.

3.1.1 Alternative A - No Project/Existing Development

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of a no project alternative. The "purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project" (14 CCR 15126.6[e][1]). When defining the no project alternative, the analysis shall be informed by "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (14 CCR 15126.6[e][2]).

Description

The City's General Plan identifies the portion of the site that is south of Mariposa Avenue as General Commercial and the portion to the north of Mariposa Avenue as Parking. The zoning for the Project site corresponds to the designations of General Commercial (C-3) and Automobile Parking (P). According to the City's General Plan, the General Commercial designation permits all retail uses, including hotel uses, and major medical facilities, at a maximum floor area ratio (FAR) of 1.0. Office uses are not permitted except for those providing personal services not exceeding 5,000 square feet such as travel and insurance agents (City of El Segundo 1992). The City's General Plan parking designation permits areas for parking automobiles, motorcycles, and bicycles in surface or structured parking (City of El Segundo 1992). While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. The Aloft Hotel is 98,741 net square feet in size with an existing 0.992 FAR based upon its current lot size and configuration where a maximum of 1.0 FAR is allowed. The three buildings that comprise the Fairfield Inn and Suites Hotel total 190,026 net square feet in size with an existing 1.94 FAR where 1.0 FAR is allowed (existing legal, non-conforming condition). Both properties are non-conforming in regard to many development standards as they were built prior to the current development standards of the General Commercial (C-3) Zone. Further, no further intensification of the land uses could occur with the current FAR standards. Therefore, the continuation of the City's General Plan would not allow for additional development to occur.

Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The existing hotel uses would remain in place and operational, the existing surface parking lots would be retained, no new buildings or parking garages would be constructed, no on-site landscaping improvements would occur, and no intersection improvements would occur.

Finding

Therefore, the City rejects the No Project/Existing Development as it fails to satisfy the Project's underlying purpose and to meet any of the Project objectives, and because specific economic, legal, social, technological or other considerations make the alternative infeasible.

Rationale

No Project/Existing Development would have fewer impacts compared to the Project in terms of aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, recreation, short-term transportation, tribal cultural resources, and utilities and service systems. The No Project/Existing Alternative would result in greater land use and planning impacts and long-term transportation impacts. The No Project/Existing Alternative would eliminate significant and unavoidable impacts related to air quality. In terms of achieving the Project objectives, the No Project/Existing Alternative would meet none.

3.1.2 Alternative B - Reduced Development Alternative: Exclusion of PCC–North

Description

Alternative B proposes a reduction in the Project to eliminate the significant impacts related to population growth projections and the AQMP, as well as lessen the proposed development intensity by eliminating PCC-North from the Specific Plan boundaries.

The Southern California Association of Government's (SCAG) forecasted population growth for the City of El Segundo is 500 persons between 2016 and 2045. Assuming 2.35 persons per household, the proposed Project's 263 residential units would accommodate 618 individuals at full occupancy of all units. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. Alternative B would not exceed SCAG's estimated projection through 2045. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. Thus, Alternative B would eliminate an adequate amount of residential units to eliminate this significant and unavoidable impact.

All mitigation measures required under the proposed Project would be implemented prior to or during Project construction for all sites, with the exception of MM-HAZ-1, which is specifically related to PCC-North. Therefore, Alternative B is proposed as a reduced development alternative to exclude PCC-North. Under Alternative B, there would be no development north of Mariposa Avenue, which is included in the proposed Specific Plan as PCC-North. The Specific Plan would be prepared under Alternative B, excluding PCC-Mixed Use 2 (PCC-North) from the land use district. The PCC-North property would remain surface parking lot and no changes to the general plan land use designation or zoning would occur for that area.

Under Alternative B, there would be two phases of Project construction, similar to the proposed Project; however, Phase 2 would only involve construction of PCC-South, rather than PCC-South and PCC-North overlapping. Alternative B would include development of one multi-level parking garage, 120 residential units, and 5,756 square feet of commercial at PCC-South, and one multi-level parking garage and 3,273 square feet of commercial at PCC-Fairfield Parking, for a total of 120 units and 9,029 square feet of commercial, in addition to the continuation of the existing two hotels, as under the proposed Project.

Phase 1 for PCC-Fairfield Parking would include a five-level parking garage (65 feet in height) with commercial/retail on a portion of the ground floor fronting PCH, as set forth in the proposed Project. During Phase 1, all hotel guests would continue to park at surface parking lots north of Mariposa Avenue (PCC-North), which includes 232 parking spaces, as well as the parking lot north of Holly Avenue, which includes 165 parking spaces, for a total of 397 spaces. This would accommodate the peak parking demand at full occupancy for both hotels of 352 parking spaces. Once Phase 1 is completed, parking for the Fairfield Inn and Suites Hotel would move from PCC-North to the newly constructed garage at PCC-Fairfield Parking, which would include 215 replacement parking spaces for the Fairfield Inn and Suites Hotel and would be shared between the hotel and the commercial/retail uses. The 215 spaces from PCC-Fairfield Parking plus the 165 parking spaces at the surface parking lot for the Aloft Hotel, totaling 380 parking spaces, would provide adequate parking for the 352 hotel spaces and 28 spaces for the proposed 3,273 square feet of commercial at PCC-Fairfield Parking.

Phase 2 of development would include the construction of eight levels of parking garage (i.e., two levels of subterranean and six levels above ground) located behind the commercial/retail uses and adjacent to the existing Aloft Hotel and fronting PCH, as set forth in the proposed Project. During Phase 2, the Aloft Hotel would remain in operation and hotel patrons would park at the PCC-North lot (232 parking spaces), which can accommodate the demand of 145 vehicles at full hotel occupancy (Appendix J-2). Once Phase 2 is completed, parking for the Aloft Hotel would move from PCC-North to the eight-level parking garage, which would provide a total of 336 parking spaces, including 165 spaces for the residential units, and 171 shared spaces. The parking provided between the five-level parking garage at PCC-Fairfield Parking and the eight-level garage at PCC-South would be sufficient for the long-term operation of the proposed uses at both sites, in addition to the hotel parking.

Under Alternative B, the eastbound lane of Mariposa Avenue at PCH would be reconfigured in the same manner as the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane.

Once operational, Alternative B would represent a reduction in proposed square footage, as well as a reduction in the overall footprint of Specific Plan area. Alternative B would reduce the Specific Plan total development square footage from 622,398 square feet to 437,398 square feet, to be located only within PCC-South and PCC-Fairfield Parking.

The exclusion of the PCC-North property from the Specific Plan under Alternative B, and the fact that PCC-South and PCC-Fairfield Parking would provide for all parking requirements for the proposed Specific Plan land uses, would make the surface parking lot at PCC-North available for other potential future uses. Potential future uses, if any, would be based on market conditions would likely require a future General Plan Amendment and zone change; however, any future uses at PCC-North would be too speculative for evaluation in this Draft EIR (State CEQA Guidelines Section 15145). Therefore, for the purposes of this analysis under Alternative B, it is assumed no changes to the PCC-North site would occur.

Finding

While Alternative B satisfies most of the Project Objectives, it does so to a lesser degree. Alternative B is rejected because specific economic, legal, social, technological or other considerations make the alternative infeasible.

Rationale

The Reduced Development Alternative: Exclusion of PCC–North would have fewer impacts compared to the Project in terms of air quality, energy, land use and planning, population and housing, public services, recreation, and transportation. The Reduced Development Alternative: Exclusion of PCC–North would be similar to the Project in terms on cultural resources, geology and soils, long-term hazards and hazardous materials, long-term hydrology and water quality, long-term transportation, and tribal cultural resources. The Reduced Development Alternative: Exclusion of PCC–North would reduce significant and unavoidable impacts related to air quality in relation to inconsistency with the AQMP. However, while the Reduced Development Alternative: Exclusion of PCC–North would meet all, with the exception of partially meeting one objective to facilitate a safe and walkable community along Pacific Coast Highway by providing a mix of land uses, including commercial at the street-level with residential uses above, it would do so to a lesser degree.

While the Project would still achieve most of the Project objectives, the objectives would not be achieved to the same extent and would not achieve the primary objectives. Since the time that this project was submitted, the City received its 6th Cycle Housing Element Regional Housing Needs Assessment. The City's allocation included 207

very low units and 99 low-income units. These allocations included a carryover of all of the lower income housing units that had been allocated to the City during the 5th Cycle of the Housing Element as no affordable housing was built during that time period at the former school site which was the City's primary strategy for meeting the RHNA for the 5th Cycle. The Project as proposed provides 32 of these lower income units, including 29% of the low-income allocation. Additionally, the City's housing stock is aging. Less than 7% was built in the last 20 years and more than 62% is more than 50 years old. From a policy perspective, Alternative B is infeasible because it would mean losing the opportunity for an additional 137 new housing units, including six condominium units, and would eliminate 17 affordable housing units. The need for affordable housing and improvement of the jobs/housing balance is critical. Additionally, Alternative B will do nothing to promote a walkable community along that portion of Pacific Coast Highway.

Alternative B is also not financially feasible. An independent development feasibility analysis commissioned by the City and conducted by Keyser Marston Associates determined that restricting 10% of the proposed residential units to affordable households would allow for a feasible project but would leave little ability to negotiate for additional benefits. Nevertheless, through the Development Agreement, the applicant has agreed to increase the affordable housing component to 12%. Additionally, the applicant has agreed to include one very low unit at PCC South and 2 very low units at PCC North. If PCC North is eliminated, then there are no apartments and condominiums to help offset the costs of PCC South and the PCC Fairfield parking structure, which is acknowledged to be costly due to its design.

3.1.3 Alternative C - Reduced Development: Reduce 1 Level from PCC-South and PCC-North

Description

Alternative C proposes to implement a reduced unit count on PCC-South and PCC-North to lessen population growth impacts and aesthetic impacts, and to eliminate the significant and unavoidable impact associated with conflicts with the AQMP. The Southern California Association of Government's forecasted population growth for the City of El Segundo is 500 persons between 2016 and 2045. Assuming 2.35 persons per household, the proposed Project's 263 residential units would accommodate 618 individuals. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. Alternative C would not exceed SCAG's estimated projection through 2045. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, which was used in the development of the AQMP, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP by 18 individuals. Alternative C would eliminate an adequate number of residential units to eliminate this significant and unavoidable impact.

Alternative C would not include Level L-5 from PCC-South and PCC-North, which contain 25 units and 29 units, respectively (see Figure 3-4E, PCC-South Levels L-2 to L-5 and Figure 3-6D, PCC-North Levels L-2 to L-5). Therefore, Alternative C would accommodate 491 individuals. Level L-5 contains 34 spaces on PCC-South and 39 parking spaces on PCC-North. Thus, parking would be reduced from 336 to 302. Additionally, Alternative C would reduce PCC-South from 84 feet to 74 feet in height from finished grade to the highest point of measurement and would reduce PCC-North from 78 feet to 68 feet in height from finished grade to the highest point of measurement.

Once operational, Alternative C would represent a reduction in proposed square footage; however, the footprint of the building area would remain the same. Alternative C would reduce the Specific Plan total development square footage from 622,398 square feet to 584,686 square feet, excluding parking.

Finding

Therefore, the City rejects the Reduced Development: Reduce 1 Level from PCC-South and PCC-North as specific economic, legal, social, technological or other considerations make the alternative infeasible. While Alternative B satisfies most of the Project objectives, it does so to a lesser degree. Alternative B is rejected because specific economic, legal, social, technological or other considerations make the alternative infeasible.

Rationale

The Reduced Development: Reduce 1 Level from PCC-South and PCC-North would have fewer impacts compared to the Project in terms aesthetics, air quality, energy, greenhouse gas emissions, long-term noise, population and housing, public services and recreation, long-term transportation, and utilities and service systems. The Reduced Residential Alternative would be similar to the Project in terms on cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, short-term noise, short-term transportation, and tribal cultural resources. The Reduced Development: Reduce 1 Level from PCC-South and PCC-North would reduce significant and unavoidable impacts related to air quality.

While the Project would still achieve most of the project objectives, the objectives would not be achieved to the same extent and would not achieve the primary objectives. Since the time that this project was submitted, the City received its 6th Cycle Housing Element Regional Housing Needs Assessment. The City's allocation included 207 very low units and 99 low-income units. These allocations included a carryover of all of the lower income housing units that had been allocated to the City during the 5th Cycle of the Housing Element as no affordable housing was built during that time period at the former school site which was the City's primary strategy for meeting the RHNA for the 5th Cycle. The Project as proposed provides 32 of these lower income units, including 29% of the low-income allocation. Additionally, the City's housing stock is aging. Less than 7% was built in the last 20 years and more than 62% is more than 50 years old. From a policy perspective, Alternative C is infeasible because it would mean losing the opportunity for an additional 54 new housing units and would reduce the number of new units that could be made available to lower income households. The need for affordable housing and improvement of the jobs/housing balance is critical.

3.2.4 Environmentally Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

Alternative A would result in reduced environmental impacts to all environmental topics in the short-term because construction activity would not occur. Similarly, Alternative A would result in reduced environmental impacts to all environmental topics in the long-term, including elimination of the significant unavoidable impact related to conflicts with the AQMP, because no operational changes would occur. Although, no mitigation measures would be required for Alternative A, the two hotels would continue to be inconsistent with applicable zoning and land use regulations for the Project site. Under Alternative A, the Project site would remain in its existing condition and potential benefits of the proposed Project related to providing new living and working opportunities in close proximity

to transit would not occur. Additionally, the proposed Project would redevelop surface parking lots and construct a mix of land uses including residential and commercial, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing, which would not occur under Alternative A. Nevertheless, the elimination of all construction and operational impacts associated with the proposed Project would result in a more environmentally superior alternative when compared to the proposed Project, Alternative B, or Alternative C.

As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives

Alternative B would reduce short-term construction-related impacts when compared to the proposed Project for all environmental topics. Alternative B would eliminate the necessity of MM-HAZ-2 since no development would occur at PCC-North. For long-term operational impacts, most environmental factors would have similar, albeit reduced, impacts under Alternative B to the proposed Project. Alternative B would have similar impacts to the proposed Project in the six areas: cultural resources, geology and soils, long-term hazards and hazardous materials, long-term hydrology and water quality, land use and planning, short-term transportation and tribal cultural resources. Alternative B would eliminate the significant unavoidable impact related to conflicts with the AQMP.

Alternative C would not eliminate any mitigation measures required under the proposed Project. Additionally, Alternative C would have similar impacts to the proposed Project in ten areas: cultural resources, geology and soils, short- and long-term hazards and hazardous materials, short- and long-term hydrology and water quality, land use and planning, short-term noise, short-term transportation, and tribal cultural resources. Alternative C would eliminate the significant unavoidable impact related to conflicts with the AQMP.

Because Alternative B would eliminate the need for MM-HAZ-2 and would reduce the intensity of development and the population growth when compared to both the proposed Project and Alternative C, Alternative B would be the environmentally superior alternative.

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4 General CEQA Findings

Based on the information contained in the administrative record and based on the facts stated below, the City makes the Findings set forth in Sections 4.1 and 4.2.

1. The plans for the proposed project have been prepared and analyzed so as to provide for public involvement in the planning and the CEQA processes.
2. To the degree that any impacts described in the Draft EIR are perceived to have a significant effect on the environment, or such impacts appear ambiguous as to their effect on the environment, any significant effect of such impacts has been substantially lessened or avoided by the mitigation measures set forth in the Draft and Final EIR.
3. Comments regarding the Draft EIR received during the public review period have been adequately addressed in Chapter 2, Responses to Comments Received, in the Final EIR. Any significant effects described in such comments were avoided or substantially lessened by the mitigation measures described in the Draft and Final EIR.

4.1 Findings Regarding Recirculation

The City finds that the Draft EIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5). CEQA Guidelines Section 15088.5 requires recirculation of an EIR prior to certification of the Final EIR when "significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review." As described in CEQA Guidelines Section 15088.5:

> New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:
>
> 1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
> 2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
> 3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it;
> 4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

In addition, CEQA Guidelines Section 15088.5(b) provides that "recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR." Recirculation also is not required simply because new information is added to the EIR — indeed, new information is oftentimes added given CEQA's public/agency comment and response process and CEQA's post-Draft EIR circulation requirement of proposed responses to comments submitted by public agencies. In short,

recirculation is "intended to be an exception rather than the general rule." *(Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132.)

As such, the City makes the following Findings:

1. None of the public comments submitted to the City regarding the Draft EIR present any significant new information that would require the Draft EIR to be recirculated for public review.
2. No new or modified mitigation measures are proposed that would have the potential to create new significant environmental impacts.
3. The Draft EIR adequately analyzed project alternatives and there are no feasible project alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project.
4. The Draft EIR was not fundamentally and basically inadequate and conclusory in nature and did not preclude meaningful public review and comment.

In this legal context, the City finds that recirculation of the Draft EIR prior to certification is not required. In addition to providing responses to comments, the Final EIR and Additional Responses include revisions to expand upon information presented in the Draft EIR (Chapter 3, Changes to the EIR); explain or enhance the evidentiary basis for the Draft EIR's findings; update information; and to make clarifications, amplifications, updates, or helpful revisions to the Draft EIR. These revisions, clarifications and/or updates do not result in any new significant impacts or increase the severity of a previously identified significant impact. These changes are not substantial, do not deprive the public of a meaningful opportunity to comment on a substantial adverse environmental effect, a feasible way to mitigate or avoid such an effect or a feasible project alternative.

In sum, the Final EIR and Additional Responses demonstrates that the proposed project would not result in any new significant impacts or increase the severity of a significant impact, as compared to the analysis presented in the Draft EIR. The changes reflected in the Final EIR also do not indicate that meaningful public review of the Draft EIR was precluded in the first instance. Accordingly, recirculation of the EIR is not required as revisions to the EIR are not significant as defined in Section 15088.5 of the CEQA Guidelines.

4.2 Legal Effects of Findings

To the extent that these Findings conclude that the proposed mitigation measures outlined herein are feasible and have not been modified, superseded, or withdrawn, the City hereby commits to implementing these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the City approves the proposed project.

The mitigation measures that are referenced herein and adopted concurrently with these Findings will be effectuated through the process of construction and implementation of the proposed project.

5 Statement of Overriding Considerations

Pursuant to California Public Resources Code, Section 21081(b), and CEQA Guidelines Section 15093(a) and (b), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits of the project against its unavoidable environmental risks when determining whether to approve a project. If the specific economic, legal, social, technological, or other benefits of the project outweigh the unavoidable adverse environmental effects, those effects may be considered "acceptable" (14 CCR 15093 (a)). CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the Final EIR or elsewhere in the administrative record (14 CCR 15093(b)).

Courts have upheld overriding considerations that were based on a variety of policy considerations including, but not limited to, new jobs, stronger tax base, and implementation of an agency's economic development goals, growth management policies, redevelopment plans, the need for housing and employment, conformity to community plan, and provision of construction jobs, See *Towards Responsibility in Planning v. City Council* (1988) 200 Cal App. 3d 671; *Dusek v. Redevelopment Agency* (1985) 173 Cal App. 3d 1029; *City of Poway v City of San Diego* (1984) 155 Cal App. 3d 1037; *Markley v. City Council* (1982) 131 Cal App.3d 656. In accordance with the requirements of CEQA and the CEQA Guidelines, the City finds that the mitigation measures identified in the Final EIR and the MMRP, when implemented, will avoid or substantially lessen virtually all of the significant effects identified in the Final EIR for the Pacific Coast Commons Specific Plan. However, certain significant impacts of the proposed project are unavoidable even after incorporation of all feasible mitigation measures. These significant unavoidable impacts result from air quality impacts due to conflict with SCAQMD 2016 AQMP (see Section 2.2).

The City finds that all feasible mitigation measures identified in the Final EIR that are within the purview of the City would be implemented with the proposed project. As identified below, the City further finds that the remaining significant unavoidable effects are outweighed and are found to be acceptable due to the following specific overriding economic, legal, social, technological, or other benefits, based upon the facts set forth above, the Final EIR, and the record.

The City finds that any one of the benefits set forth below is sufficient by itself to warrant approval of the proposed project. This determination is based on the findings herein and the evidence in the record. Having balanced the unavoidable adverse environmental impacts against each of the benefits, the City hereby adopts this Statement of Overriding Considerations for the following reasons:

a. The proposed project would maintain the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood.
b. The proposed project would provide additional housing opportunities that support the goals of the Housing Element of the City's General Plan, including facilitating the development of affordable housing units and meeting the City's Regional Housing Needs Allocation.
c. The proposed project would improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.
d. The proposed project would enhance bicycle, pedestrian and vehicular circulation through roadway intersection improvements that facilitate a safe and walkable community along Pacific Coast Highway including:

1. Construction of a right-turn only lane from eastbound Mariposa Avenue onto southbound Pacific Coast Highway and widening of the two existing eastbound lanes;
2. Widening and sidewalk reconstruction along Holly Avenue between Pacific Coast Highway and Indiana Street;
3. Installation of street trees along Pacific Coast Highway, Holly Avenue, Indiana Street, Mariposa Avenue, and Palm Avenue; and
4. Installation of public seating along Pacific Coast Highway.

e. The proposed project would eliminate underutilized surface parking lots and provide parking garages that allow for sharing among hotel, commercial, and residential land uses in order to allow the development of needed housing units as well as retain services and restaurant uses to serve the neighboring residents and businesses.

f. The proposed project would reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line, existing bus routes, and the City's downtown.

g. The proposed project is consistent with the City's housing strategy to direct growth in regional centers and areas near transit stations, major bus centers, and bus stops along major bus routes. The proposed project is also consistent with regional growth strategies, such as the SCAG 2020-2045 Regional Transportation Plan and Sustainable Communities Strategy, by increasing density within the Plan area.

h. The proposed project would implement the majority of the proposed measures by the California Air Pollution Control Officers Association (CAPCOA) to reduce GHG emissions, which also reduce criteria pollutants.

On balance, the City finds that there are specific economic, legal, social, technological, and other considerations associated with the proposed project that serve to override and outweigh the significant unavoidable effects of the proposed project and, thus, the adverse effects are considered acceptable. Therefore, the City hereby adopts this Statement of Overriding Considerations.

6 Conclusion

The mitigation measures listed in conjunction with each of the findings set forth above, as implemented through the MMRP, will eliminate or reduce to a less-than-significant level most of the adverse environmental impacts of the Project. The significant and unavoidable impacts of the Project would be rendered acceptable by the specific economic, legal, social, technological, or other benefits identified in Section 5, Statement of Overriding Considerations.

Taken together, the EIR which consists of the Draft EIR, Final EIR, and the Additional Responses, the mitigation measures, and the MMRP provide an adequate basis for approval of the Project.

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RESOLUTION NO. 2906

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL (1) RESCIND THE APPROVALS OF SUB NO. 14-05, LOT TIE COVENANT NO. MISC 14-03 AND OFF-SITE PARKING COVENANT NO. MISC 14-06; (2) AMEND CONDITIONAL USE PERMIT NO. 14-01 TO ALLOW THE CONTINUED OPERATION OF AN EXISTING 350-ROOM HOTEL (NORTH HOTEL SITE OF THE FORMER HACIENDA HOTEL PROPERTY) IN ADDITION TO THE PREVIOUSLY APPROVED ALCOHOL SERVICE AT 525 NORTH PACIFIC COAST HIGHWAY; AND (3) APPROVE OFF-SITE PARKING FOR THE NORTH HOTEL SITE

(PROJECT NO. EA-1248; MODIFICATION OF CONDITIONAL USE PERMIT NO. CUP 14-01; AND OFF-SITE PARKING).

(NORTH HOTEL)

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: The Commission finds and declares that:

A. On October 9, 2014 the Planning Commission approved Resolution No. 2759 approving an application to modify the then 619-room Hacienda Hotel into two hotels, a 350-room north hotel site (the "North Hotel") and a 246-room south hotel site (the "South Hotel"). Along with approving this modification, Resolution No. 2759 approved an amendment to an existing conditional use permit (CUP No. 87-01) to allow operation of a bar serving alcohol (BAR 525), and alcohol service in meeting, banquet and breakfast rooms, the pool and patio area, and alcohol sales in the hotel convenience market in the North Hotel (the amended conditional use permit is designated CUP No. 14-01), a tentative map to reconfigure the existing lots into two separate parcels for the North Hotel and South Hotel (SUB No. 14-05), an off-site parking covenant to permit 213 off-site parking spaces for the North Hotel in a surface parking lot located north of Mariposa Avenue (Off-Site Parking Covenant No. MISC 14-06) and a lot-tie covenant holding the existing three parcels underlying the existing off-site parking lot as one property for parking purposes (Lot Tie Covenant No. MISC 14-03). The property owner never recorded the map.

B. Subsequent to the approvals listed above, the property was sold on May 13, 2019. BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC (collectively "BRE") filed several applications to develop the hotel properties with a mixed-use development known as the Pacific Coast Commons Specific Plan. Under the proposed Specific Plan, hotels will be allowed as a conditionally permitted use. BRE's application includes a request to amend the existing Conditional Use Permit (CUP No. 14-01) for the North Hotel Site (Fairfield Inn and Suites Hotel) located at 525 Pacific Coast Highway (the "Project

Site") to allow the continued use of the hotel, the continued alcohol service in the existing bar, (BAR 525), meeting, banquet and breakfast rooms, in the pool and patio area, alcohol sales in the convenience market in the hotel, and the modification of the off-site parking.

C. As part of the Pacific Coast Commons Specific Plan, the City Council will consider Vesting Tentative Map. No. 82806 that will combine the 12 existing parcels comprising the hotel properties into 4 parcels and create two parcels at the north parking lot site that is currently comprised of 3 parcels held together by a lot-tie covenant. Additionally, the Council will consider a Shared Parking Agreement in conjunction with a Parking Demand Study and Shared Parking Analysis to establish the parking requirements among the various uses.

D. The Pacific Coast Commons Specific Plan Project (the "Project") includes the discretionary actions contemplated herein and all of the discretionary actions required for the Project are collectively identified as Environmental Assessment No. EA-1248.

E. The Project has been reviewed by the City's Development Services Department for, in part, consistency with the General Plan and conformity with the El Segundo Municipal Code ("ESMC");

F. In addition, the City reviewed the Project's potential environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA") and the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

G. The Development Services Department completed its review and scheduled a public hearing regarding the application before this Commission for November 18, 2021; along with consideration of all the approvals required for the Pacific Coast Commons Specific Plan project including Environmental Assessment No. EA-1248;

H. On November 18, 2021, the Commission held a noticed public hearing to receive public testimony and other evidence regarding the application including, without limitation, information provided by BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC and its representatives;

I. On November 18, 2021, the Planning Commission continued the public hearing to December 9, 2021;

J. On December 8, 2021 a letter was submitted to the City by Mitchell M. Tsai, Attorney At Law, on behalf of the Southwest Regional Council of Carpenters ("Carpenters' Letter") objecting to the Project and referring to an earlier letter which had never been received by the City which raised issues with the EIR; and

K. Based on the submission of the Carpenters' Letter the City determined that it would be necessary to continue the hearing to allow time to respond, but nevertheless took testimony on December 9, 2021; and

L. During the public testimony portion of the hearing, a letter was submitted by the Lozeau Drury law firm on behalf of Supporters Alliance For Environmental Responsibility ("SAFER letter");

M. On February 10, 2022, the Planning Commission held a new duly noticed public hearing to receive public testimony and other evidence regarding the application;

N. The Commission considered the information provided by City staff, public testimony, and the representatives for the applicant; and

O. This Resolution, and its findings are made based upon the entire administrative record including, without limitation, testimony and evidence presented to the Commission at its November 18, 2021, December 9, 2021, and February 10, 2022 public hearings including, without limitation, the staff reports submitted by the Development Services Department.

SECTION 2: *Factual Findings and Conclusions*. The Planning Commission finds that the following facts exist:

A. The North Hotel is comprised of one five-story hotel building, one nine-story hotel building, and a two-story conference center ("food and beverage building"). The existing 350-room hotel will be located in the Pacific Coast Commons Specific Plan (PCCSP) Zone upon adoption of the Pacific Coast Commons Specific Plan.

B. The North Hotel site consists of six legal lots. The hotel site is located on the west side of Pacific Coast Highway and includes the northern half of the block between East Mariposa Avenue to the north, East Holly Avenue to the south and Indiana Street to the east. The North Hotel site will consist of one lot (Lot 3) after the recordation of Vesting Tentative Map No. 82806. The total lot area will be 67,487 square feet.

C. The North Hotel utilizes two parking area. Currently, parking is provided through a combination of 33 on-site parking spaces and 213 off-site parking spaces at the existing hotel surface parking lot immediately north of Mariposa Avenue with three driveway access points from Pacific Coast Highway, Holly Avenue and Indiana Street. The parking at the 236-space surface parking lot north of Mariposa is provided through an off-site parking covenant. A Shared Use Parking Agreement will replace the off-site parking covenant after the recordation of Vesting Tentative Map No. 82806. After construction of the Fairfield Parking Structure that will be located on the newly created lot immediately north of the Fairfield Inn and Suites hotel, 26

parking spaces will remain on site. The remainder of the parking will be provided off-site at the Fairfield Parking Structure with additional overflow parking provided through the Shared Use Parking Agreement. When the Pacific Coast Commons project is built out there will be parking structures on Lots 1, 4 and 5 of Vesting Tentative Map No. 82806, which will accommodate parking for the North Hotel, the South Hotel, other commercial uses and the multiple-family residential development. A Shared Use Parking Agreement will be recorded to share parking for any overflow needs for the hotel, other commercial uses, and multiple-family residential guest parking within the Pacific Coast Commons Specific Plan.

D. The North Hotel includes an existing bar with alcohol service. The applicant sells a full line of alcoholic beverages for consumption in the following locations in the North Hotel: bar; meeting, banquet and breakfast rooms, and the pool and patio area. The applicant sells beer and wine in a hotel convenience market. Conditional Use Permit No. 14-01 for alcohol service runs with the land and will continue to allow sales between the hours of 6 a.m. and 2 a.m. daily. The applicant has a California Department of Alcoholic Beverage Control for a Type 47 license (on-site beer, wine and distilled spirits).

E. The Project includes a request to amend the existing North Hotel conditional use permit (CUP No. 14-01) to be applicable to the North Hotel and its existing associated alcohol uses (for on-site sales of beer, wine and distilled spirits and sales of beer and wine in the hotel convenience market) in order to be consistent with the conditionally permitted uses allowed with the adoption of the Pacific Coast Commons Specific Plan (PCCSP).

SECTION 3: *Environmental Assessment*. The modifications set forth in this Resolution were part of the overall Pacific Coast Commons Project analyzed as part of EA-1248. An environmental impact report was prepared for the project and, by separate resolution (Resolution No. 2905), the Planning Commission has recommended that the City Council certify the Final Environmental Impact Report. The findings and recommendation set forth in Resolution No. 2905 and are incorporated herein by reference.

SECTION 4: *General Plan Findings*. The changes approved by this resolution will further the goals, policies and objectives of the General Plan and will not obstruct their attainment. Specifically:

A. The hotel use and alcohol use are existing uses and are conditionally permitted in the Pacific Coast Commons Specific Plan.

B. The hotel use is consistent with Economic Development Element Policy ED 1-2.2 to “maintain and promote land uses that improve the City’s tax base, balancing economic development and quality of life goals.” The existing renovated hotel facility has resulted in a site that improves the City’s tax base because the hotel is a more attractive destination to visitors, which has improved occupancy and room rates. The North Hotel contributes to the

City's quality of life as it improves the appearance of existing hotel buildings located on Pacific Coast Highway, the City's major commercial corridor.

C. The North Hotel is consistent with Circulation Element Objective C3-2 to "ensure the consideration of the impacts of land use decisions on the City's parking situation." The Project will provide parking in compliance with the parking requirements established in the Pacific Coast Commons Specific Plan and the Parking Demand Study and Shared Use Analysis for the hotel and other planned uses. Currently, parking is provided through a combination of 33 on-site parking spaces and 213 off-site parking spaces at the existing hotel surface parking lot north of Mariposa Avenue. The parking at the surface parking lot north of Mariposa is provided through an off-site parking covenant. A Shared Use Parking Agreement will replace the off-site parking covenant after the recordation of Vesting Tentative Map No. 82806. The Fairfield Inn and Suites hotel will have direct pedestrian access from the hotel lobby to an entrance to the Fairfield Parking Structure across the driveway.

D. Noise Element Objective N1-2 to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards." The North Hotel is required to operate in compliance with the City's noise ordinance.

SECTION 5: *Conditional Use Permit Amendment Findings.* Pursuant to ESMC § 15-23-6, the Planning Commission finds that amending CUP No. 14-01 to allow for the continued use of the North Hotel with alcohol service is appropriate based on the following:

A. The North Hotel with alcohol service meets the objectives of ESMC Title 15 and the purposes of the zone in which the site is located. The PCC COM-3 Land Use District in the Pacific Coast Commons Specific Plan (PCCSP) Zone allows for a hotel as a conditionally permitted use. A bar serving alcohol is a typical accessory use in a hotel and is also allowed in the PCC COM-3 Land Use District pursuant to a conditional use permit. The hotel including the bar are existing uses. A bar is a typical amenity for this class of hotel. The alcohol service at the existing bar, meeting, banquet and breakfast rooms, and in the outdoor pool and patio area, as well as the alcohol sales in the convenience market in the hotel is appropriate for a hotel use. Therefore, the proposed location meets the objectives of the Pacific Coast Commons Specific Plan (PCCSP) Zone and Title 15.

B. The North Hotel and the continued service of alcohol will not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity. The existing hotel has been in operation at the site for over 64 years. The proposed amendment will not change hotel operations at the North Hotel site in any significant manner. The bar must be operated in a manner consistent with the conditions of approval as well as with ESMC noise and nuisance standards. The alcohol service proposed for the North Hotel will be the same as existing operating conditions.

Compliance with project conditions of approval, ABC requirements, and ESMC noise and nuisance requirements will result in a conditional use not detrimental to public health, safety and welfare.

C. The North Hotel and the continued service of alcohol will comply with each of the applicable provisions of ESMC Chapter 15-23. The bar serving alcohol in the North Hotel is compatible with the hotel use at the site. The existing hotel has been in operation approximately 64 years and has had alcohol service over this time. The North Hotel alcohol service in the existing indoor bar as well as the meeting, banquet and breakfast rooms and the alcohol sales in the hotel convenience market are screened from view and have no visual or noise impacts on other uses, including residential uses, in the general vicinity. Outdoor alcohol service around the patio and pool area are screened from nearby residential and commercial neighbors by on-site buildings and walls. Any noise generated in the outdoor alcohol service areas are subject to ESMC Chapter 7-2 “Noise and Vibration” requirements. Impacts such as smoke, dust, or fumes are not associated with the requested conditional use. Furthermore, the use will generate traffic generally consistent with the existing operation of the site, as the site currently is developed as a hotel with alcohol service.

D. The North Hotel must comply with State of California Department of Alcohol Beverage Control licensing requirements and maintain all applicable licenses.

E. The North Hotel with alcohol service is compatible with the particular use of the site and with other existing and potential uses in the general area. The long-established hotel use at the site is compatible with alcohol service. The hotel with alcohol service has been operating at the site for approximately 64 years and a hotel is a compatible use for a major commercial thoroughfare. The alcohol service operations at the North Hotel is not different from current hotel operations at the site. Indoor alcohol service will have no impact or adjacent residential properties. Outdoor alcohol service will be screened from adjacent residential properties.

F. The use is consistent and compatible with the purpose of the PCCSP Zone in that this zone allows for a range of commercial uses such as office, hotels, restaurants, retail, and on-site and off-site alcohol sales. A hotel with alcohol service including a bar serving alcohol is consistent with the purpose of this commercial zone and is compatible with other existing hotel, retail and restaurant uses in the area, some of which also sell alcohol.

G. The North Hotel with alcohol service will not be operated or maintained in a way detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity. As discussed in Finding No. 5.B above, the Project was conditioned to avoid impacts and the Project is required to meet ESMC and Building Code requirements regarding noise and safety.

SECTION 6: *Off-Site Parking Approval Findings (ESMC § 15-15-3(H)(3).).* After considering the factual findings of this Resolution, the Commission continues to find that off-site parking is appropriate for the North Hotel use based on the following:

A. The North Hotel is in close proximity of the off-site parking facilities. The existing off-site surface parking lot is within reasonable walking distance of the North Hotel. The south end of the surface parking lot is within 100 feet of the North Hotel lobby entrance. Additionally, after construction of the Fairfield Parking Structure, the North Hotel will meet its parking needs with 26 on-site parking spaces and the spaces provided in the Fairfield Parking Structure. Although the Fairfield Parking Structure will be located off-site as a result of the newly created lots from the recordation of the Vesting Map No. 82806, the Fairfield Parking Structure will have direct pedestrian access across the driveway from the hotel lobby entrance on the lot to the north.

B. The North Hotel has good pedestrian access to the existing off-site parking facilities. Pedestrians can easily access the off-site parking from the North Hotel on the Pacific Coast Highway sidewalk. The intersection of Pacific Coast Highway and Mariposa Avenue has a controlled crosswalk and the off-site parking area is located less than 100 feet from the north end of this crosswalk. The parking lot can be accessed from both Mariposa Avenue and Pacific Coast Highway. Additionally, after construction of the Fairfield Parking Structure, the North Hotel will meet its parking needs with 26 on-site parking spaces and the spaces provided in the Fairfield Parking Structure. Although the Fairfield Parking Structure will be located off-site as a result of the newly created lots from the recordation of the Vesting Map No. 82806, the Fairfield Parking Structure will have direct pedestrian access across the driveway from the hotel lobby entrance on the lot to the north.

C. There is no need for transportation to and from this off-site parking facilities because of the close proximity of the parking lot to the hotel. Additionally, after construction of the Fairfield Parking Structure, the North Hotel will meet its parking needs with 26 on-site parking spaces and the spaces provided in the Fairfield Parking Structure. Although the Fairfield Parking Structure will be located off-site as a result of the newly created lots from the recordation of the Vesting Map No. 82806, the Fairfield Parking Structure will have direct pedestrian access across the driveway from the hotel lobby entrance on the lot to the north.

D. Hotel parking is an appropriate use type for off-site parking. Hotel parking is typically low turnover with guests leaving cars parked overnight and leaving the site for extended periods with infrequent travel to and from the site.

SECTION 7: *Actions.*

A. Based on the information and findings set forth above, the Planning Commission hereby recommends that the City Council approve the

modification of Conditional Use Permit No. CUP 14-01 which authorized the service of alcohol at the North Hotel to also allow the continued operation of a 350-room hotel. The Planning Commission further recommends that the City Council approve the use of off-site parking for the North Hotel in accordance with a Shared Use Parking Agreement. The Planning Commission recommends that these approvals be made subject to the conditions set forth in Exhibit "A".

B. The Planning Commission recommends that the City Council rescind approval of Subdivision No. SUB 14-05, Lot Tie Covenant No. MISC 14-03, and Off-Site Parking Covenant No. MISC 14-06.

SECTION 8: *Reliance on Record*. Each and every one of the findings and determinations in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole. The absence of any particular fact from any such summary is not an indication that a particular finding is not based in part on that fact.

SECTION 9: *Limitations*. The Planning Commission's analysis and evaluation of the project is based on the best information currently available. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. One of the major limitations on analysis of the project is the Planning Commission's lack of knowledge of future events. In all instances, best efforts have been made to form accurate assumptions.

SECTION 10: *Operative Date.* This Resolution shall take effect immediately upon its passage and adoption.

SECTION 11: The Commission Secretary is directed to mail a copy of this Resolution to BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC and to any other person requesting a copy.

SECTION 12: This Resolution may be appealed within ten (10) calendar days after its adoption. All appeals must be in writing and filed with the City Clerk within this time period. Failure to file a timely written appeal will constitute a waiver of any right of appeal.

PASSED, APPROVED AND ADOPTED this ___ day of February 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2906

Exhibit A

CONDITIONS OF APPROVAL

In addition to all applicable provisions of the El Segundo Municipal Code ("ESMC"), BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC agrees to comply with the following provisions as conditions for the City of El Segundo's approval of modification of CUP No. 14-01 and approval of Off-Site Parking ("Project Conditions"):

Planning Division Conditions

1. Any subsequent modification to the North Hotel as approved, including the site plan and landscaping, must be referred to the Director of Development Services to determine if the proposed modification in compliance with the Pacific Coast Commons Specific Plan.

2. The final irrigation plans must comply with the following:

    a. Efficient irrigation systems must be installed which minimize runoff and evaporation and maximize the water which will reach plant roots (e.g., drip irrigation, automatic sprinklers equipped with moisture sensors).

    b. Automatic sprinkler systems must be set to irrigate landscaping during early morning hours or during the evening to reduce water losses from evaporation. Sprinklers must also be reset to water less often in cooler months and during the rainfall season so that water is not wasted by excessive landscaping irrigation.

3. A Shared Use Parking Agreement shall be prepared and reviewed and approved by the Director of Development Services and the City Attorney. The Shared Use Parking Agreement will grant Lots 1 through 5 of Vesting Map No. 82806 rights to shared use of parking provided on Lots 1, 4 and 5 of Vesting Map No. 82806. The shared parking will be permitted for all commercial uses, including hotel uses, and guest parking for the multi-family residential uses located on Lots 1 and 5 of Vesting Map No. 82806. Guest parking for the townhomes that are located on Lot 6 will be provided on Lot 5 of Vesting Map No. 82806.

    The Shared Use Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance and Use of Off-Site Parking" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway), recorded on July 1, 2015, as Instrument No. 20150792117, of Official Records, Recorder's Office of the County of Los Angeles, California. The Shared Use Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance of Parking Site" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway) recorded

on April 1, 2015, as Instrument No. 20150351986, of Official Records, Recorder's Office of the County of Los Angeles, California.

4. A Reciprocal Easement Agreement shall be prepared to provide reciprocal access between Lot 2 and 3 of Vesting Tentative Map No. 82806 and reciprocal access to the Indiana Street public right-of-way. The Reciprocal Easement Agreement shall be reviewed and approved by the Director of Development Services and the City Attorney. The Reciprocal Easement Agreement shall not be recorded until the final map for Vesting Tentative Map No. 82806 is recorded.

5. A Reciprocal Easement Agreement shall be prepared to provide reciprocal access between Lots 3 and 4 of Vesting Tentative Map No. 82806 and reciprocal access to the public rights-of-way of Pacific Coast Highway and Indiana Street. The Reciprocal Easement Agreement shall be reviewed and approved by the Director of Development Services and the City Attorney. The Reciprocal Easement Agreement shall not be recorded until the final map for Vesting Tentative Map No. 82806 is recorded.

6. The existing turnout area on Pacific Coast Highway must be designated as the loading zone for the North Hotel.

7. The applicant must maintain all licenses required by the Alcohol Beverage Control Act (Business & Professions Code §§ 23300, *et seq*.). The applicant must continue to maintain all applicable licenses at the site.

8. Hours of operations for alcohol service at the North Hotel is limited to the hours between 6 a.m. and 2 a.m. daily.

9. Taxicab phone numbers must be posted in a conspicuous location at all times in the area(s) where alcohol is served to customers.

10. The premises must be maintained in a litter and graffiti-free manner. Any graffiti that appears on the premises must be removed within 48 hours.

11. The applicant must comply with all regulations of the Alcoholic Beverage Control Act and the regulations promulgated by the Alcoholic Beverage Control Board including, without limitation, the regulations set forth in 4 Cal. Code of Regs. §§ 55, *et seq.*

12. The applicant must post a sign in a clear and conspicuous location listing a phone number at which a responsible party may be contacted during all open hours of the establishment to address any concerns of the community regarding noise at the North Hotel. Said contact's name and phone number must also be available through hotel staff at all times.

13. The applicant must, at all times, display a *Designated Driver* sign of at least ten inches by ten inches (10" X 10") in the service area of the "food and beverage"

building. The sign must be worded in a way that reminds patrons who are consuming alcohol to designate a *non*-drinking driver.

14. There shall not be exterior advertising of any kind or type, including advertising directed to the exterior from within, promoting or indicating the availability of alcoholic beverages. Interior displays of alcoholic beverages which are clearly visible to the exterior also violate this condition.

15. All employees serving alcoholic beverages to patrons must enroll in and complete a certified training program approved by the State Department of Alcoholic Beverages Control (ABC) for the responsible sales of alcohol. The training must be offered to new employees on not less than a quarterly basis.

16. Any and all employees hired to sell alcoholic beverages must provide evidence that they have either:

    a. Completed training from the State of California Department of Alcoholic Beverage Control (ABC), Long Beach/Lakewood District Office administered *Leadership and Education in Alcohol and Drugs* (LEAD) Program in the form of an ABC-issued certificate; or

    b. Completed an accepted equivalent by the ABC, Long Beach/Lakewood District Office to ensure proper distribution of beer, wine and distilled spirits to adults of legal age;

    c. If any prospective employee designated to sell alcoholic beverages does not currently have such training, then the ABC-licensed proprietors must have confirmed with the Development Services Department within fifteen (15) days of the Director's decision, or by final project approval, that a date certain has been scheduled within the local ABC Office to complete the LEAD course.

    d. Within thirty (30) days of taking said course, the employees, or responsible employer must deliver each required certificate showing completion to the Police Department.

Building Safety Division Conditions

17. The project is required to comply with storm water requirements per NPDES Permit No. CAS0040001 Order Number R4-2021-0105

Public Works Department Conditions

18. The applicant must provide a water service connection and water meter for each parcel.

19. The project must comply with ESMC Chapter 5-4 regarding MS4 permit requirements.

Police Department Conditions

20. Street addressing must be a minimum of 6 inches tall, visible from the street or driving surface, of contrasting color to the background and directly illuminated during hours of darkness.

21. A safe for use by the hotel operator must be installed in a secured location and must be anchored. The location and anchoring is subject to review and approval by the Police Chief, or designee.

22. A sign that identifies the location is private property and that no trespassing is allowed must be installed at the entrance of the pool.

23. A minimum security camera plan must be prepared for the hotel building. The number of cameras and the locations of cameras are subject to Police Chief, or designee, review and approval. Monitoring and recording equipment must be stored in a secured area.

24. Cameras recording driveways and driving surfaces must monitor and record vehicle occupants and vehicle license plate number as they enter/exit.

25. Any security cameras must meet the City's minimum camera specifications and requirements as determined by the Police Chief, or designee.

26. The location and number of exterior mounted ladders are subject to Police Chief, or designee's, review and approval.

Fire Department Conditions

27. The applicant must provide the following conditions for any fire features:

    a. A barrier must be provided around the fire feature to prevent accidental access into the fire feature.

    b. The distance between the fire feature and combustible material and furnishings must meet the fire feature's listing and manufacturer's requirements.

    c. If the fire feature's protective barrier exceeds ambient temperatures, all exit paths and occupant seating must be a minimum 36 inches from the fire feature.

28. The applicant must provide for a central control station for Fire Department operations in the North Hotel. The rooms must comply with California Fire Code 915.4, as adopted by the ESMC.

Miscellaneous Conditions

29. BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC agrees to indemnify and hold the City harmless from and against any claim, action, damages, costs (including, without limitation, attorney's fees), injuries, or liability, arising from the City's approval of modification of Conditional Use Permit No. CUP 14-01 and re-approval of Off-Site Parking. Should the City be named in any suit, or should any claim be brought against it by suit or otherwise, whether the same be groundless or not, arising out of the City approval of modification of Conditional Use Permit No. CUP 14-01 and re-approval of Off-Site Parking, the Applicant agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise. For purposes of this section "the City" includes the City of El Segundo's elected officials, appointed officials, officers, and employees.

30. The Planning Commission is authorized to hear and act upon future applications for amendments to Conditional Use Permit 14-01 and the off-site parking approval.

31. The release of Lot-Tie Covenant MISC No. 14-03 for the parking lot at 629 North Pacific Coast Highway may not be recorded until Vesting Tentative Map No. 82806 is recorded.

By signing this document, Patrick Volz, Vice President, BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC, certifies that he has read, understood, and agree to the Project Conditions listed in this document.

_____

Patrick Volz, Vice President
BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC

RESOLUTION NO. 2907

A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL AMEND CONDITIONAL USE PERMIT NO. 14-02 TO ALLOW THE CONTINUED OPERATION OF AN EXISTING 246-ROOM HOTEL IN ADDITION TO THE PREVIOUSLY APPROVED ALCOHOL SERVICE AT 475 NORTH PACIFIC COAST HIGHWAY AND APPROVE OFF-SITE PARKING FOR THE SOUTH HOTEL SITE

(PROJECT NO. EA-1248; AMENDMENT OF CONDITIONAL USE PERMIT CUP NO. 14-02; AND OFF-SITE PARKING).

(SOUTH HOTEL)

The Planning Commission of the City of El Segundo does resolve as follows:

SECTION 1: The Commission finds and declares that:

A. On October 9, 2014 the Planning Commission approved Resolution No. 2760 approving an application to modify the then 619-room Hacienda Hotel into two hotels, a 350-room north hotel site (the "North Hotel") and a 246-room south hotel site ("the South Hotel"). Along with approving this modification, Resolution No. 2760 approved a conditional use permit to allow operation of a bar serving alcohol and alcohol service in meeting spaces, the patio, and pool area in the South Hotel (CUP No. 14-02), a tentative map to reconfigure the existing lots into two separate parcels for the North Hotel and South Hotel (SUB No. 14-05), an off-site parking covenant to permit 23 off-site parking spaces for the South Hotel in surface parking lot located north of Mariposa Avenue (Off-Site Parking Covenant No. MISC 14-02) and a lot-tie covenant holding the existing three parcels underlying the existing off-site parking lot as one property for parking purposes (Lot Tie Covenant No. MISC 14-03). The property owner never recorded the map.

B. Subsequent to the approvals listed above, the property was sold on May 13, 2019. BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC (collectively "BRE") filed several applications to develop the hotel properties with a mixed-use development known as the Pacific Coast Commons Specific Plan. Under the proposed Specific Plan hotels will be allowed as a conditionally permitted use. BRE's application includes a request to amend the existing Conditional Use Permit (CUP No. 14-02) for the South Hotel Site (Aloft Hotel) located at 475 Pacific Coast Highway (the "Project Site") to allow the continued use of the hotel, the continued alcohol service in the existing bar/lounge area, conference room and multi-purpose rooms, and pool deck and outdoor patio and the modification of the off-site parking.

C. As part of the Pacific Coast Commons Specific Plan, the City Council will consider Vesting Tentative Map. No. 82806 that will combine the 12 existing

parcels comprising the hotel properties into 4 parcels and create two parcels at the north parking lot site that is currently comprised of 3 parcels held together by a lot-tie covenant. Additionally, the Council will consider a Shared Parking Agreement in conjunction with a Parking Demand Study and Shared Parking Analysis to establish the parking requirements among the various uses.

D. The Pacific Coast Commons Specific Plan Project (the "Project") includes the discretionary actions contemplated herein and all of the discretionary actions required for the Project are collectively identified as Environmental Assessment No. EA-1248.

E. The Project has been reviewed by the City's Development Services Department for, in part, consistency with the General Plan and conformity with the El Segundo Municipal Code ("ESMC");

F. In addition, the City reviewed the Project's potential environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

G. The Development Services Department completed its review and scheduled a public hearing regarding the application before this Commission for November 18, 2021; along with consideration of all the approvals required for the Pacific Coast Commons Specific Plan project including Environmental Assessment No. EA-1248;

H. On November 18, 2021, the Commission held a noticed public hearing to receive public testimony and other evidence regarding the application including, without limitation, information provided by BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC and its representatives;

I. On November 18, 2021, the Planning Commission continued the public hearing to December 9, 2021;

J. On December 8, 2021 a letter was submitted to the City by Mitchell M. Tsai, Attorney At Law, on behalf of the Southwest Regional Council of Carpenters ("Carpenters' Letter") objecting to the Project and referring to an earlier letter which had never been received by the City which raised issues with the EIR; and

K. Based on the submission of the Carpenters' Letter the City determined that it would be necessary to continue the hearing to allow time to respond, but nevertheless took testimony on December 9, 2021; and

L. During the public testimony portion of the hearing, a letter was submitted by the Lozeau Drury law firm on behalf of Supporters Alliance For Environmental Responsibility ("SAFER letter");

M. On February 10, 2022, the Planning Commission held a new duly noticed public hearing to receive public testimony and other evidence regarding the application;

N. The Commission considered the information provided by City staff, public testimony, and the representatives for the applicant; and

O. This Resolution, and its findings are made based upon the entire administrative record including, without limitation, testimony and evidence presented to the Commission at its November 18, 2021, December 9, 2021, and February 10, 2022 public hearings including, without limitation, the staff reports submitted by the Development Services Department.

SECTION 2: *Factual Findings and Conclusions*. The Planning Commission finds that the following facts exist:

A. The existing nine-story, 246-room hotel will be located in the Pacific Coast Commons Specific Plan (PCCSP) Zone upon adoption of the Pacific Coast Commons Specific Plan.

B. The South Hotel site consists of six legal lots. The hotel site is located on the west side of Pacific Coast Highway and includes the southern half of the block between East Mariposa Avenue to the north, East Holly Avenue to the south and Indiana Street to the east. The South Hotel site will consist of one lot (Lot 2) after the recordation of Vesting Tentative Map No. 82806. The total lot area will be 39,425 square feet.

C. The South Hotel utilizes two parking areas. The existing off-street parking area located immediately to the south of the hotel lobby entrance is fully developed with a surface parking lot containing 175 parking stalls and three driveway access points from Pacific Coast Highway, Holly Avenue and Indiana Street. The parking area will become Lot 1 of Vesting Tentative Map No. 82806. Parking for the South Hotel also includes the use of 23 parking spaces through a parking covenant on a lot located on the west side of Pacific Coast Highway in the block between East Mariposa Avenue to the south and East Palm Avenue to the north comprised of 236 parking spaces. This off-site parking lot will become Lot 5 of Vesting Tentative Map No. 82806. When the Pacific Coast Commons project is built out there will be parking structures on Lots 1, 4 and 5 which will accommodate parking for the South Hotel, the North Hotel, other commercial uses and the multiple-family residential development. A Shared Use Parking Agreement will be recorded to share parking for any overflow needs for the hotel, other commercial uses, and multiple-family residential guest parking within the Pacific Coast Commons Specific Plan.

D. The South Hotel includes an existing bar with alcohol service. The applicant sells a full-line of alcoholic beverages for consumption in the following locations in the South Hotel: bar and lounge area of the south hotel lobby; outdoor patio and pool deck area; three pool adjacent hotel suites; ground-floor multipurpose rooms and two meeting rooms on the second floor. Conditional Use Permit No. 14-02 for alcohol service runs with the land and will continue to allow sales between the hours of 6 a.m. and 2 a.m. daily. The applicant has a California Department of Alcoholic Beverage Control for a Type 47 license (on-site beer, wine and distilled spirits).

E. The Project includes a request to amend the existing South Hotel conditional use permit (CUP No. 14-02) to be applicable to the South Hotel and its existing associated alcohol uses in order to be consistent with the conditionally permitted uses allowed with the adoption of the Pacific Coast Commons Specific Plan (PCCSP).

SECTION 3: *Environmental Assessment*. The modifications set forth in this Resolution were part of the overall Pacific Coast Commons Project analyzed as part of EA-1248. An environmental impact report was prepared for the project and, by separate resolution (Resolution No. 2905), the Planning Commission has recommended that the City Council certify the Final Environmental Impact Report. The findings and recommendation set forth in Resolution No. 2905 are incorporated herein by reference.

SECTION 4: *General Plan Findings*. The changes approved by this resolution will further the goals, policies, and objectives of the General Plan and will not obstruct their attainment. Specifically:

A. The hotel use and alcohol use are existing uses and are conditionally permitted in the Pacific Coast Commons Specific Plan.

B. The hotel use is consistent with Economic Development Element Policy ED 1-2.2 to “maintain and promote land uses that improve the City’s tax base, balancing economic development and quality of life goals.” The existing renovated hotel facility has resulted in a site that improves the City’s tax base because the hotel is a more attractive destination to visitors, which has improved occupancy and room rates. The South Hotel contributes to the City’s quality of life as it improves the appearance of existing hotel buildings located on Pacific Coast Highway, the City’s major commercial corridor.

C. The South Hotel is consistent with Circulation Element Policy C2-2.2 to “encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist’s work destination.” The South Hotel includes existing bicycle parking.

D. The South Hotel is consistent with Circulation Element Objective C3-2 to “ensure the consideration of the impacts of land use decisions on the City’s parking situation.” The project will provide parking in compliance with the

parking requirements established in the Pacific Coast Commons Specific Plan and the Parking Demand Study and Shared Use Analysis for the hotel and other planned uses through a combination of off-site parking provided immediately to the south of the hotel lobby entrance with an additional off-site parking spaces at the existing hotel surface parking lot north of Mariposa Avenue. The parking at the surface parking lot north of Mariposa is provided through an off-site parking covenant. A Shared Use Parking Agreement will replace the off-site parking covenant after the recordation of Vesting Tentative Map No. 82806.

E. Noise Element Objective N1-2 to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards." The South Hotel is required to operate in compliance with the City's noise ordinance.

SECTION 5: *Conditional Use Permit Amendment Findings.* Pursuant to ESMC § 15-23-6, the Planning Commission finds that amending CUP No. 14-02 to allow for the continued use of the South Hotel with alcohol service is appropriate based on the following:

A. The South Hotel with alcohol service meets the objectives of ESMC Title 15 and the purposes of the zone in which the site is located. The PCC COM-1 Land Use District in the Pacific Coast Commons Specific Plan (PCCSP) Zone allows for a hotel as a conditionally permitted use. A bar serving alcohol is a typical accessory use in a hotel and is also allowed in the PCC COM-1 Land Use District pursuant to a conditional use permit. The hotel including the bar are existing uses. The 25-foot long bar in the lobby area of the South Hotel is a typical amenity for the class of hotel. The alcohol service area of the bar/lobby lounge, conference and multi-purpose rooms, pool deck and patio areas and three guest rooms is appropriate for a hotel use. Therefore, the proposed location meets the objectives of the Pacific Coast Commons Specific Plan (PCCSP) Zone and Title 15.

B. The South Hotel and the continued service of alcohol will not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity. The alcohol serving bar use was reviewed by the City's Police and Fire Departments. Both Departments recommended conditions of approval incorporated into this Resolution. The bar must be operated in a manner consistent with the conditions of approval as well as with ESMC noise and nuisance standards. The alcohol service proposed for the South Hotel will be the same as existing operating conditions. Compliance with project conditions of approval, ABC requirements and ESMC noise and nuisance requirements will result in a conditional use not detrimental to public health, safety and welfare.

C. The South Hotel and the continued service of alcohol will comply with each of the applicable provisions of ESMC Chapter 15-23. The bar serving alcohol in the South Hotel is compatible with the hotel use at the site. The existing hotel has been in operation approximately 64 years and has had alcohol service

over this time. The South Hotel indoor bar/lounge areas as well as alcohol service in conference room and multi-purpose rooms will be screened from view and have no visual or noise impacts on other uses, including residential uses, in the general vicinity. Outdoor alcohol service around the pool deck and patio are screened from nearby residential and commercial neighbors by on-site structures and walls. Any noise generated in the outdoor alcohol service areas are subject to ESMC Chapter 7-2 "Noise and Vibration" requirements. Failure to comply with ESMC noise requirements could result in the Director imposing additional restrictions on outdoor alcohol service, such as limitations on hours of outdoor alcohol service and where outdoors alcohol may be served. Continued non-compliance with ESMC noise and nuisance requirements could result in revocation of the conditional use. Impacts such as smoke, dust, or fumes are not associated with the requested conditional use. Furthermore, the use will generate traffic generally consistent with the existing operation of the site, as the site currently is developed as a hotel with alcohol service.

D. The South Hotel must comply with State of California Department of Alcohol Beverage Control licensing requirements; the South Hotel has a Type 47 ABC license before operating alcohol service at the hotel.

E. The South Hotel with alcohol service is compatible with the particular use of the site and with other existing and potential uses in the general area. The long-established hotel use at the site is compatible with alcohol service. The hotel with alcohol service has been operating at the site for approximately 64 years and a hotel is a compatible use for a major commercial thoroughfare. The alcohol service operations at the South Hotel is different from current hotel operations at the site. Indoor alcohol service will have no impact or adjacent residential properties. Outdoor alcohol service will be screened from adjacent residential properties.

F. The use is consistent and compatible with the purpose of the PCCSP Zone in that this zone allows for a range of commercial uses such as office, hotels, restaurants, retail, and on-site and off-site alcohol sales. A bar serving alcohol is consistent with the purpose of this commercial zone and is compatible with other existing hotel, retail and restaurant uses in the area, some of which also sell alcohol.

G. The South Hotel with alcohol service will not be operated or maintained in a way detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity. As discussed in Finding No. 5.B above, the Project was reviewed by the City's Police and Fire Departments, the Project was conditioned to avoid impacts and the Project is required to meet ESMC and Building Code requirements regarding noise and safety.

SECTION 6: *Off-Site Parking Approval Findings (ESMC § 15-15-3(H)(4).).* After considering the factual findings of this Resolution, the Commission continues to find that off-site parking is appropriate for the South Hotel use based on the following:

A. The South Hotel is in close proximity to the current off-site parking facilities. The off-site surface parking lot is within reasonable walking distance of the South Hotel site. The south end of the surface parking lot is within 700 feet from the South Hotel lobby entrance. Vehicle access to the off-site parking from the South Hotel site can occur by travelling northbound on either Illinois Street or Indiana Street.

B. The Project has good pedestrian access to the off-site parking facilities. Pedestrians can easily access the off-site parking from the South Hotel on the Illinois Street or Pacific Coast Highway sidewalk. The intersection of Pacific Coast Highway and Mariposa Avenue has a controlled crosswalk and the off-site parking area is located less than 100 feet from the north end of this crosswalk. The parking lot can be accessed from both Mariposa Avenue and Pacific Coast Highway.

C. There is no need for transportation to and from this off-site parking facilities because of the close proximity of the parking lot to the hotel. After construction of the PCC South Site residential and commercial mixed-use development, the off-site parking will be primarily located in the new parking structure on the lot immediately adjacent to the hotel (PCC South Site/Lot 1 of Vesting Map No. 82806). The entrance to the parking structure will be immediately adjacent to the south of the hotel lobby. Additionally, overflow parking will be accommodated in the existing off-site parking located in the new Fairfield Parking structure and the current off-site parking location north of the Fairfield Hotel (currently a paved parking lot which will be replaced with a residential and commercial mixed-use development and new parking structure).

D. Hotel parking is an appropriate use type for off-site parking. Hotel parking is typically low turnover with guests leaving cars parked overnight and leaving the site for extended periods with infrequent travel to and from the site.

SECTION 7: *Action.* Based on the information and findings set forth above, the Planning Commission hereby recommends that the City Council approve the modification of Conditional Use Permit No. CUP 14-02 which authorized the service of alcohol at the South Hotel to also allow the continued operation of a 246-room hotel. The Planning Commission further recommends that the City Council approve the use of off-site parking for the South Hotel in accordance with a Shared Use Parking Agreement. The Planning Commission recommends that these approvals be made subject to the conditions set forth in Exhibit "A".

SECTION 8: *Reliance on Record*. Each and every one of the findings and determinations in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the Planning Commission in all respects and are fully and completely supported by substantial evidence in the record as a whole. The absence of any particular fact from any such summary is not an indication that a particular finding is not based in part on that fact.

SECTION 9: *Limitations*. The Planning Commission's analysis and evaluation of the project is based on the best information currently available. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. One of the major limitations on analysis of the project is the Planning Commission's lack of knowledge of future events. In all instances, best efforts have been made to form accurate assumptions.

SECTION 10: *Operative Date.* This Resolution shall take effect immediately upon its passage and adoption.

SECTION 11: The Commission Secretary is directed to mail a copy of this Resolution to BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC and to any other person requesting a copy.

SECTION 12: This Resolution may be appealed within ten (10) calendar days after its adoption. All appeals must be in writing and filed with the City Clerk within this time period. Failure to file a timely written appeal will constitute a waiver of any right of appeal.

PASSED, APPROVED AND ADOPTED this ____ day of February 2022.

_____
Ryan Baldino, Chair
City of El Segundo Planning Commission

ATTEST:

_____
Michael Allen, Secretary

Baldino	-
Newman	-
Hoeschler	-
Keldorf	-
Maggay	-

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Gregg Kovacevich, Assistant City Attorney

PLANNING COMMISSION RESOLUTION NO. 2907

Exhibit A

CONDITIONS OF APPROVAL

In addition to all applicable provisions of the El Segundo Municipal Code ("ESMC"), BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC agrees to comply with the following provisions as conditions for the City of El Segundo's approval of an amendment to CUP No. 14-02 and of the approval of Off-Site Parking, ("Project Conditions"):

Planning Division Conditions

1. Any subsequent modification to the South Hotel as approved, including the site plan and landscaping, must be referred to the Director of Development Services to determine if the proposed modification is in compliance with the Pacific Coast Commons Specific Plan.

2. The final irrigation plans must comply with the following:

    a. Efficient irrigation systems must be installed which minimize runoff and evaporation and maximize the water which will reach plant roots (e.g., drip irrigation, automatic sprinklers equipped with moisture sensors).

    b. Automatic sprinkler systems must be set to irrigate landscaping during early morning hours or during the evening to reduce water losses from evaporation. Sprinklers must also be reset to water less often in cooler months and during the rainfall season so that water is not wasted by excessive landscaping irrigation.

3. A Shared Use Parking Agreement shall be prepared and reviewed and approved by the Director of Development Services and the City Attorney. The Shared Use Parking Agreement will grant Lots 1 through 5 of Vesting Map No. 82806 rights to shared use of parking provided on Lots 1, 4 and 5 of Vesting Map No. 82806. The shared parking will be permitted for all commercial uses, including hotel uses, and the guest parking for the multi-family residential uses that is located on Lot 1 and Lot 5 of Vesting Map No. 82806. Guest parking for the townhomes that are located on Lot 6 will be provided on Lot 5 of Vesting Map No. 82806.

    The Shared Use Parking Agreement will rescind "Covenant and Agreement Regarding Maintenance and Use of Off-Site Parking" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway), recorded on July 1, 2015, as Instrument No. 20150792117, of Official Records, Recorder's Office of the County of Los Angeles, California. The Shared Use Parking Agreement will rescind "Covenant and Agreement Regarding

Maintenance of Parking Site" for property commonly known as 629 North Sepulveda Boulevard (now known as 629 North Pacific Coast Highway) recorded on April 1, 2015, as Instrument No. 20150351986, of Official Records, Recorder's Office of the County of Los Angeles, California.

4. A Reciprocal Easement Agreement shall be prepared to provide reciprocal access between Lots 1 and 2 of Vesting Tract Map No. 82806 and reciprocal access to the public rights-of-way of Pacific Coast Highway and Indiana Street. The Reciprocal Easement Agreement shall be reviewed and approved by the Director of Development Services and the City Attorney. The Reciprocal Easement Agreement shall not be recorded until the final map for Vesting Map No. 82806 is recorded.

5. A Reciprocal Easement Agreement shall be prepared to provide reciprocal access between Lot 2 and 3 of Vesting Map No. 82806 and reciprocal access to the Indiana Street public right-of-way. The Reciprocal Easement Agreement shall be reviewed and approved by the Director of Development Services and the City Attorney. The Reciprocal Easement Agreement shall not be recorded until the final map for Vesting Map No. 82806 is recorded.

6. The Director of Development Services, or designee, can impose additional restrictions regarding the South Hotel building façade accent lighting if this lighting is found to have adverse impacts on adjacent residential neighbors. Additional restrictions may include, but are not limited to, time restrictions on when the lighting can be turned on and/or a reduction in the intensity of the lighting.

7. The applicant must obtain and maintain all licenses required by the Alcohol Beverage Control Act (Business & Professions Code §§ 23300, *et seq*.). The applicant must obtain and maintain a Type 47 license.

8. Hours of operations for alcohol service at the South Hotel is limited to the hours between 6 a.m. and 2 a.m. daily.

9. Locations where alcohol service is permitted outdoors, must comply with ESMC §§ 7-2-1, *et seq.,* regulating noise and vibration.

10. Taxicab phone numbers must be posted in a conspicuous location at all times in the area(s) where alcohol is served to customers.

11. The premises must be maintained in a litter and graffiti-free manner. Any graffiti that appears on the premises must be removed within 48 hours.

12. The applicant must comply with all regulations of the Alcoholic Beverage Control Act and the regulations promulgated by the Alcoholic Beverage Control Board including, without limitation, the regulations set forth in 4 Cal. Code of Regs. §§ 55, *et seq.*

13. The applicant must post a sign in a clear and conspicuous location listing a phone number at which a responsible party may be contacted during all open hours of the establishment to address any concerns of the community regarding noise at the

South Hotel. Said contact's name and phone number must also be available through hotel staff at all times.

14. The applicant must, at all times, display a *Designated Driver* sign of at least ten inches by ten inches (10" X 10") in the bar at eye level. The sign must be worded in a way that reminds patrons who are consuming alcohol to designate a *non*-drinking driver.

15. There shall not be exterior advertising of any kind or type, including advertising directed to the exterior from within, promoting or indicating the availability of alcoholic beverages. Interior displays of alcoholic beverages which are clearly visible to the exterior also violate this condition.

16. All employees serving alcoholic beverages to patrons must enroll in and complete a certified training program approved by the State Department of Alcoholic Beverages Control (ABC) for the responsible sales of alcohol. The training must be offered to new employees on not less than a quarterly basis.

17. Any and all employees hired to sell alcoholic beverages must provide evidence that they have either:

    a. Completed training from the State of California Department of Alcoholic Beverage Control (ABC), Long Beach/Lakewood District Office administered *Leadership and Education in Alcohol and Drugs* (LEAD) Program in the form of an ABC-issued certificate; or

    b. Completed an accepted equivalent by the ABC, Long Beach/Lakewood District Office to ensure proper distribution of beer, wine and distilled spirits to adults of legal age;

    c. If any prospective employee designated to sell alcoholic beverages does not currently have such training, then the ABC-licensed proprietors must have confirmed with the Development Services Department within fifteen (15) days of the Director's decision, or by final project approval, that a date certain has been scheduled within the local ABC Office to complete the LEAD course.

    d. Within thirty (30) days of taking said course, the employees, or responsible employer must deliver each required certificate showing completion to the Police Department.

18. If complaints are received regarding excessive noise, lighting, building access, or other disturbances associated with alcohol service or the operations of the South Hotel, the Director of Development Services, or Police Chief, may take action to review the Conditional Use Permit, including without limitation, adding conditions or revoking the permit pursuant to ESMC Title 7 (Nuisances and Offenses) and ESMC §15-23-12.

Building Safety Division Conditions

19. The project is required to comply with storm water requirements per NPDES Permit No. CAS0040001 Order Number R4-2021-0105.

Public Works Department Conditions

20. The applicant must provide a water service connection and water meter for each parcel.

21. The project must comply with ESMC Chapter 5-4 regarding MS4 permit requirements.

Police Department Conditions

22. Street addressing must be a minimum of 6 inches tall, visible from the street or driving surface, of contrasting color to the background and directly illuminated during hours of darkness.

23. A safe for use by the hotel operator must be installed in a secured location and must be anchored. The location and anchoring is subject to review and approval by the Police Chief, or designee.

24. A sign that identifies the location is private property and that no trespassing is allowed must be installed at the entrance of the pool.

25. A minimum security camera plan must be prepared for the hotel building. The number of cameras and the locations of cameras are subject to Police Chief, or designee, review and approval. Monitoring and recording equipment must be stored in a secured area.

26. Cameras recording driveways and driving surfaces must monitor and record vehicle occupants and vehicle license plate number as they enter/exit.

27. Any security cameras must meet the City's minimum camera specifications and requirements as determined by the Police Chief, or designee.

28. The location and number of exterior mounted ladders are subject to Police Chief, or designee's review and approval.

Fire Department Conditions

29. The applicant must provide the following conditions for any fire features:

    a. A barrier must be provided around the fire feature to prevent accidental access into the fire feature.

    b. The distance between the fire feature and combustible material and

furnishings must meet the fire feature's listing and manufacturer's requirements.

c. If the fire feature's protective barrier exceeds ambient temperatures, all exit paths and occupant seating must be a minimum 36 inches from the fire feature.

30. The applicant must provide for a central control station for Fire Department operations in the South Hotel. The rooms must comply with California Fire Code 915.4, as adopted by the ESMC.

Miscellaneous Conditions

31. BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC agrees to indemnify and hold the City harmless from and against any claim, action, damages, costs (including, without limitation, attorney's fees), injuries, or liability, arising from the City's approval of modification of Conditional Use Permit No. CUP 14-02 and re-approval of Off-Site Parking. Should the City be named in any suit, or should any claim be brought against it by suit or otherwise, whether the same be groundless or not, arising out of the City approval of modification of Conditional Use Permit No. CUP 14-02 and re-approval of Off-Site Parking, the Applicant agrees to defend the City (at the City's request and with counsel satisfactory to the City) and will indemnify the City for any judgment rendered against it or any sums paid out in settlement or otherwise. For purposes of this section "the City" includes the City of El Segundo's elected officials, appointed officials, officers, and employees.

32. The Planning Commission is authorized to hear and act upon future applications for amendments to Conditional Use Permit No. 14-02 and the off-site parking approval.

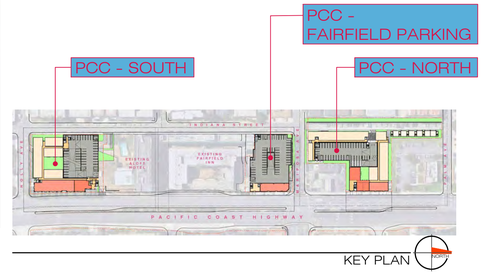
By signing this document, Patrick Volz, Vice President, BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC and BRE El Segundo Parking LLC, certifies that he has read, understood, and agree to the Project Conditions listed in this document.

_____

Patrick Volz, Vice President
BRE El Segundo Property Owner A LLC, BRE El Segundo Property Owner B LLC, and BRE El Segundo Parking LLC



VIEW AT CORNER OF PACIFIC COAST HIGHWAY AND HOLLY AVENUE



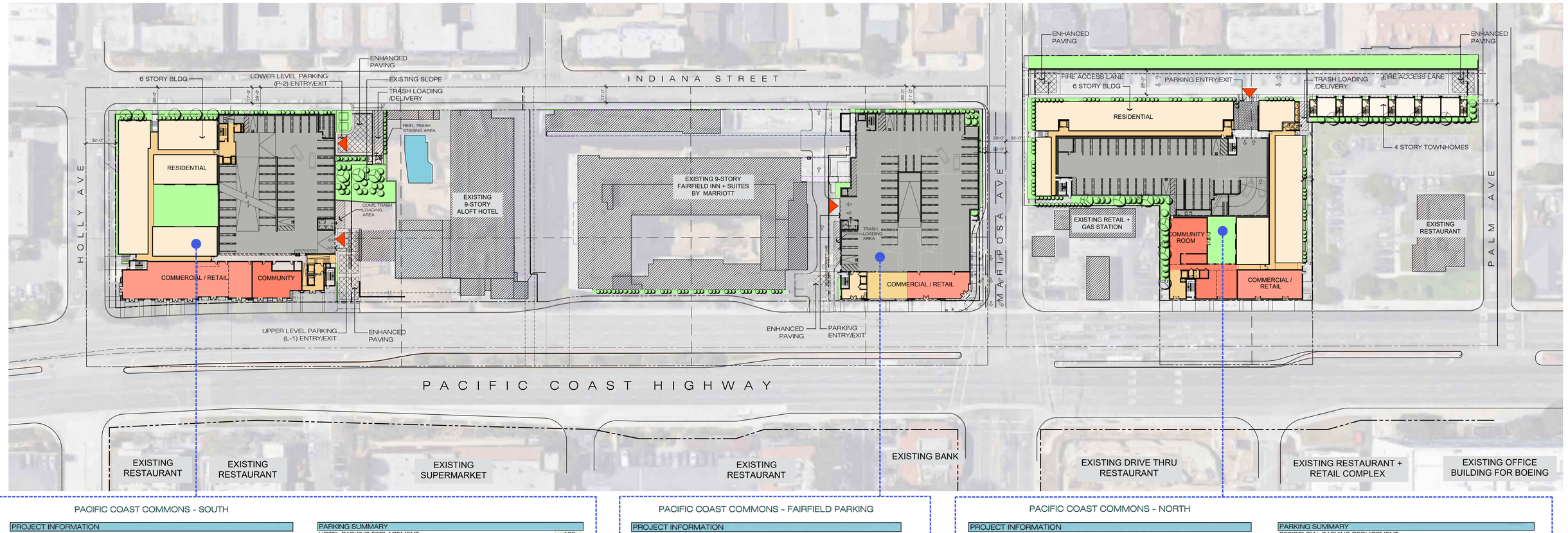
SHEET INDEX

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.

Pacific Coast Commons

WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

Job No. B7093 SD-MP-00
Revised Date.10.07.2021



PACIFIC COAST COMMONS - SOUTH

PROJECT INFORMATION

DESCRIPTION		5 STORIES TYPE III-A (SPRINKLERED) RESIDENTIAL (R-2) OVER 1 STORY TYPE I-A COMMERCIAL (M) WRAP AROUND 6-STORIES TYPE I-A PARKING STRUCTURE (S-2)
ADDRESS		475 NORTH PACIFIC COAST HIGHWAY EL SEGUNDO, CA
ZONING		PACIFIC COAST COMMONS SPECIFIC PLAN (PCCS

SITE SUMMARY

LAND AREA	1.242 AC	54,072 SF
DENSITY		120 UNITS
FAR		2.63
GROSS BUILDING AREA	(Garage area not included)	146,550 SF
NET BUILDING AREA		142,154 SF
BUILDING FOOTPRINT		46,326 SF
BUILDING HEIGHT	(From lowest grade to top of building)	85 FT
NUMBER OF FLOORS		6 FL
GROSS COMMERCIAL AREA		5,756 SF
NET COMMERCIAL AREA		5,583 SF
LOBBY AREA	(Includes stairs/elevators)	1,182 SF
COMMUNITY ROOM (GROUND FLOOR)		2,220 SF

RESIDENTIAL UNIT SUMMARY

PLAN	DESCRIPTION	QNTY.	UNIT MIX	UNIT FLR AREA	AVG AREA
S-1	STUDIO	24	37%	479	529
S-2	STUDIO	20		588	
A-1	1 BEDROOM	40	43%	668	701
A-2	1 BEDROOM	12		809	
B-1	2 BEDROOM	10	20%	1,058	977
B-2	2 BEDROOM	10		984	
B-3	2 BEDROOM	4		754	
		120			

PARKING SUMMARY

HOTEL PARKING REPLACEMENT				126
RESIDENTIAL PARKING REQUIREMENT				
STUDIO	44	1.0/Unit		44
1 BEDROOM	52	1.5/Unit		78
2 BEDROOM	24	2.0/Unit		48
	120			170
GUEST PARKING	1.0/ 3 Unit			40
RETAIL PARKING REQUIREMENT				
(WILL BE SHARED WITH HOTEL GUEST PARKING)				SHARED
TOTAL PARKING REQUIREMENT				336

TOTAL PARKING PROVIDED INSIDE PARKING STRUCTURE

	STAND	COMPT	TANDEM	ACCESSIBLE	
LEVEL L-5	31	0	0	3	34
LEVEL L-4	41	0	0	2	43
LEVEL L-3	41	0	0	2	43
LEVEL L-2	41	0	0	2	43
LEVEL L-1	39	0	0	3	42
PARKING LEVEL P-1	41	0	0	3	44
PARKING LEVEL P-2	39	0	0	3	42
BASEMENT	43	0	0	2	45
	316			20	336

LEVEL-II EV CHARGERS	MIN. SPACES	MAX. SPACES
EV CAPABLE SPACES	50	80
EV CHARGERS	20	22

BIKE PARKING PROVIDED		
COMMERCIAL/RETAIL	(4 STALLS PER 15,000 SF)	4
RESIDENTIAL	(10 % REQUIRED PARKING STALLS)	34

OPEN SPACE

COMMON OPEN SPACE PROVIDED (SF)

COMMUNITY ROOM (LEVEL L-1)	2,220
COURTYARD	3,298
ROOF DECK (POOL AREA)	6,334
	11,852

PRIVATE OPEN SPACE PROVIDED (SF)

STUDIO	44	25 SF/UNIT	1,100
1 BEDROOM	52	60 SF/UNIT	3,120
2 BEDROOM	24	60 SF/UNIT	1,440
	120		5,660

TOTAL OPEN SPACE PROVIDED (SF)	
	17,512

PACIFIC COAST COMMONS - FAIRFIELD PARKING

PROJECT INFORMATION

DESCRIPTION		5 STORIES TYPE I-A PARKING STRUCTURE (S-2) WITH COMMERCIAL (M) ON GROUND FLOOR
ADDRESS		525 + 545 NORTH PACIFIC COAST HIGHWAY EL SEGUNDO, CA
ZONING		PACIFIC COAST COMMONS SPECIFIC PLAN (PCCSP)

SITE SUMMARY

LAND AREA	0.728 AC	31,693 SF
FAR		0.14
GROSS BUILDING AREA	(Garage area not included)	4,479 SF
NET BUILDING AREA		4,345 SF
BUILDING FOOTPRINT		28,348 SF
BUILDING HEIGHT	(From lowest grade to top of building)	65 FT
NUMBER OF FLOORS		5 FL
GROSS COMMERCIAL AREA		3,273 SF
NET COMMERCIAL AREA		3,175 SF
GROSS LOBBY AREA	(Includes stairs/elevators)	1,206 SF
NET LOBBY AREA	(Includes stairs/elevators)	1,170 SF

PARKING SUMMARY

HOTEL PARKING REPLACEMENT	180
EXISTING ON-SITE SPACES	33
RETAIL PARKING REQUIREMENT	SHARED
TOTAL PARKING REQUIREMENT	213

TOTAL PARKING PROVIDED INSIDE PARKING STRUCTURE

	STAND	COMPT	TANDEM	ACCESSIBLE	
LEVEL L-5	41	0	0	2	43
LEVEL L-4	41	0	0	2	43
LEVEL L-3	41	0	0	2	43
LEVEL L-2	41	0	0	2	43
LEVEL L-1	41	0	0	2	43
	205			10	215

LEVEL-II EV CHARGERS	MIN. SPACES	MAX. SPACES
EV CAPABLE SPACES	20	50
EV CHARGERS	8	10

BIKE PARKING PROVIDED		
COMMERCIAL/RETAIL	(4 STALLS PER 15,000 SF)	4

PACIFIC COAST COMMONS - NORTH

PROJECT INFORMATION

DESCRIPTION		5 STORIES TYPE III-A (SPRINKLERED) RESIDENTIAL (R-2) OVER 1 STORY TYPE I-A COMMERCIAL (M) WRAP AROUND 6-STORIES TYPE I-A PARKING STRUCTURE (S-2)
ADDRESS		629 NORTH PACIFIC COAST HIGHWAY EL SEGUNDO, CA
ZONING		PACIFIC COAST COMMONS SPECIFIC PLAN (PCCSP)

SITE SUMMARY

LAND AREA	1.806 AC	78,686 SF
DENSITY		143 UNITS
FAR		2.24
GROSS BUILDING AREA	(Garage area not included)	175,766 SF
NET BUILDING AREA		170,493 SF
BUILDING FOOTPRINT		43,586 SF
BUILDING HEIGHT	(From lowest grade to top of building)	83 FT
NUMBER OF FLOORS		6 FL
GROSS COMMERCIAL AREA		2,223 SF
NET COMMERCIAL AREA		2,156 SF
LOBBY AREA	(Includes stairs/elevators)	1,006 SF
COMMUNITY ROOM (GROUND FLOOR)		3,687 SF

RESIDENTIAL UNIT SUMMARY

PLAN	DESCRIPTION	QNTY.	UNIT MIX	UNIT FLR AREA	AVG AREA
S-1	STUDIO	10	34%	479	543
S-2	STUDIO	10		500	
S-3	STUDIO	27		582	
A-1	1 BEDROOM	28	49%	668	671
A-2	1 BEDROOM	4		809	
A-3	1 BEDROOM	5		656	
A-4	1 BEDROOM	30		658	
B-1	2 BEDROOM	13	17%	1,058	1,001
B-2	2 BEDROOM	10		982	
		137			
TH-1	TOWNHOUSE	6		1,724	
		6			
	TOWNHOME GROSS AREA			10,344 SF	
	TOWNHOME NET AREA			9,540 SF	
	TOTAL UNITS	143			

PARKING SUMMARY

RESIDENTIAL PARKING REQUIREMENT

STUDIO	47	1.0/Unit	47
1 BEDROOM	67	1.5/Unit	101
2 BEDROOM	23	2.0/Unit	46
	137		194
GUEST PARKING		1.0/ 3 Unit	47
RETAIL PARKING REQUIREMENT			
(WILL BE SHARED WITH RESIDENTIAL PARKING)			SHARED
TOTAL PARKING REQUIREMENT			241

TOTAL PARKING PROVIDED INSIDE PARKING STRUCTURE

	STAND	COMPT	TANDEM	ACCESSIBLE	
LEVEL L-6	30	7	6	1	44
LEVEL L-5	29	7	2	1	39
LEVEL L-4	29	7	2	1	39
LEVEL L-3	29	7	2	1	39
LEVEL L-2	28	7	2	2	39
LEVEL L-1	25	6	8	2	41
	170	41	22	8	241

LEVEL-II EV CHARGERS	MIN. SPACES	MAX. SPACES
EV CAPABLE SPACES	50	80
EV CHARGERS	20	22

BIKE PARKING PROVIDED		
COMMERCIAL/RETAIL	(4 STALLS PER 15,000 SF)	4
RESIDENTIAL	(10 % REQUIRED PARKING STALLS)	24

OPEN SPACE

COMMON OPEN SPACE PROVIDED (SF)

COMMUNITY ROOM (LEVEL L-1)	3,687
COURTYARD	1,429
ROOF DECK (POOL AREA)	6,241
	11,357

PRIVATE OPEN SPACE PROVIDED (SF)

STUDIO	47	25 SF/UNIT	1,175
1 BEDROOM	67	60 SF/UNIT	4,020
2 BEDROOM	23	60 SF/UNIT	1,380
	137		6,575

TOTAL OPEN SPACE PROVIDED (SF)	
	17,932

MASTER SITE PLAN

BRE HOTELS & RESORTS | CONTINENTAL DEVELOPMENT CORPORATION | Mar Ventures, Inc.

Pacific Coast Commons

1" = 50'-0"
0 50 100 150

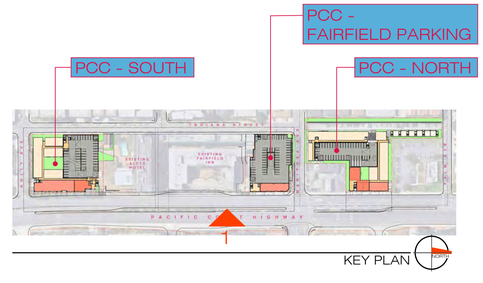
WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

Job No. B7093 SD-MP-01
Revised Date.10.28.2021

CONCEPTUAL TO ILLUSTRATIVE OVERALL PROJECT AS SEEN FROM RIGHT OF WAY



1. OVERALL ELEVATION ON PACIFIC COAST HIGHWAY (MEASURED FROM AVERAGE GRADE FOR EACH BUILDING ON PCH)



OVERALL ELEVATION

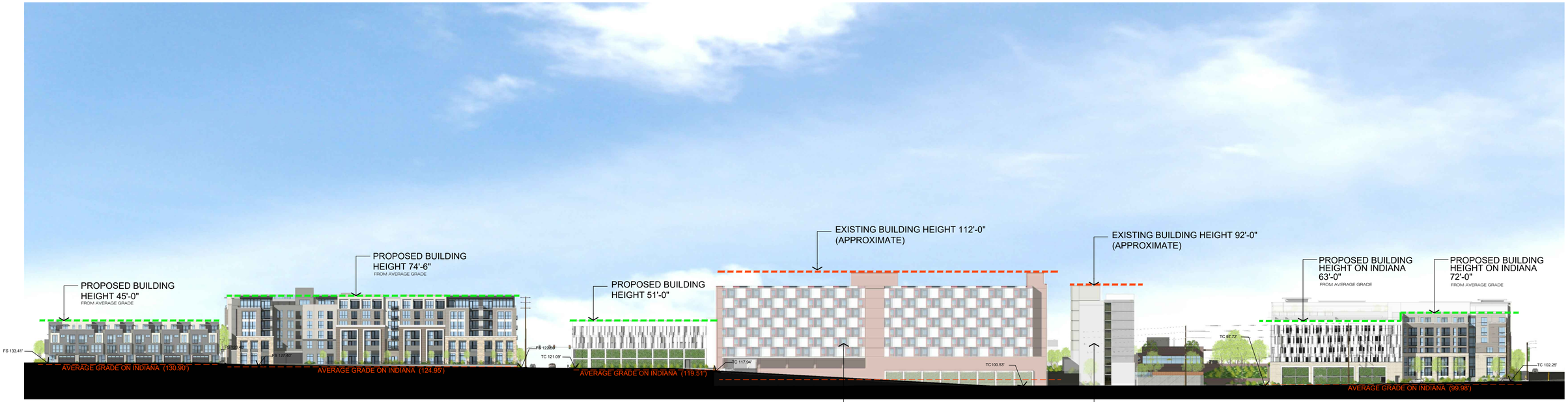
BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons

scale: 1" = 50'-0"
0 50 100 150 200

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Job No. B7093 SD-MP-02
Revised Date.10.28.2021

CONCEPTUAL TO ILLUSTRATIVE OVERALL PROJECT AS SEEN FROM RIGHT OF WAY



PROPOSED
PACIFIC COAST COMMONS - NORTH

PROPOSED
FAIRFIELD PARKING

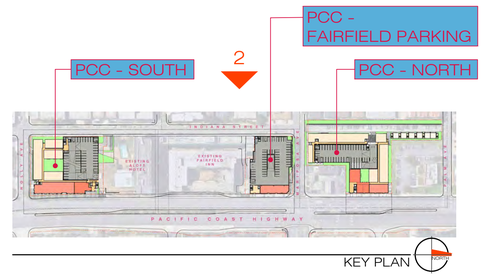
EXISTING 9-STORY
FAIRFIELD INN +
SUITES BY MARRIOTT

EXISTING 9-STORY
ALOFT HOTEL

PROPOSED
PACIFIC COAST COMMONS - SOUTH

2. OVERALL ELEVATION ON INDIANA STREET

(MEASURED FROM AVERAGE GRADE FOR EACH BUILDING ON INDIANA STREET)



OVERALL ELEVATION

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Pacific Coast Commons

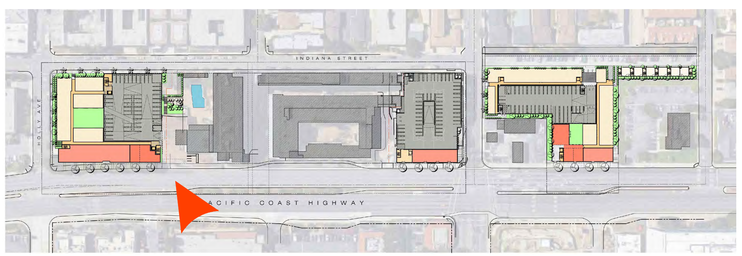
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PCC SOUTH - NORTH EAST AERIAL VIEW



KEY PLAN
NOT TO SCALE

CONCEPT VIEW

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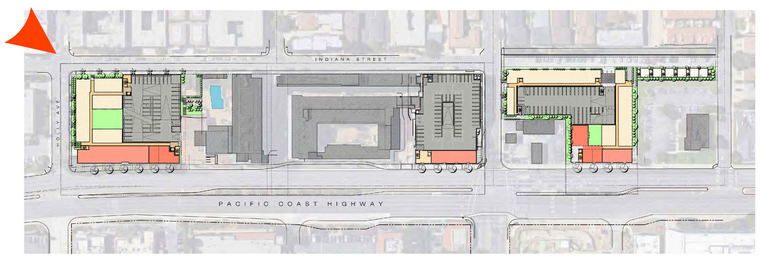
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AERIAL VIEW AT CORNER OF INDIANA ST AND HOLLY AVE LOOKING NORTH



KEY PLAN
NOT TO SCALE

CONCEPT VIEW

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CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.

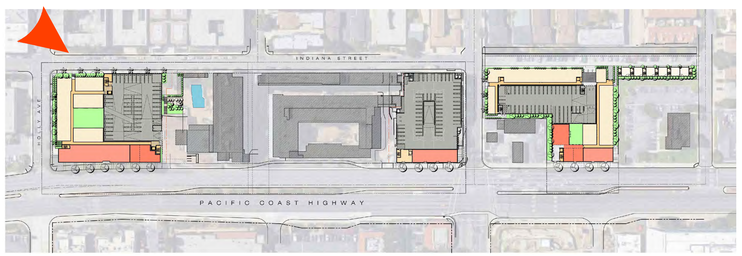
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Job No. B7093 SD-MP-04
Revised Date.10.28.2021



VIEW AT CORNER OF INDIANA ST AND HOLLY AVE LOOKING NORTH



KEY PLAN
NOT TO SCALE

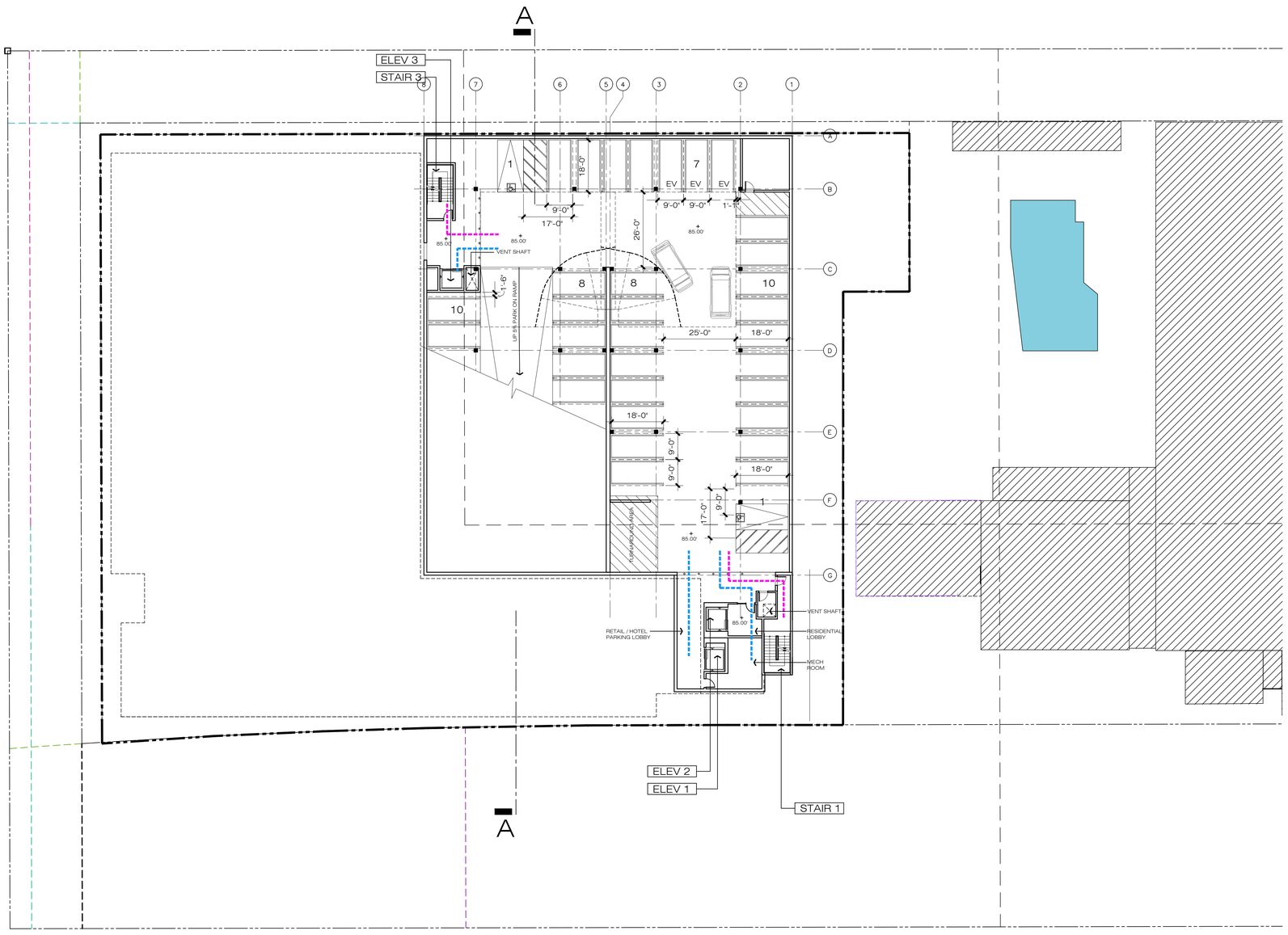
CONCEPT VIEW

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LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

BASEMENT

STANDARD	43 SPACES
ACCESSIBLE	2 SPACES
	45 SPACES

PCC - SOUTH



KEY PLAN

BASEMENT
85.00'

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

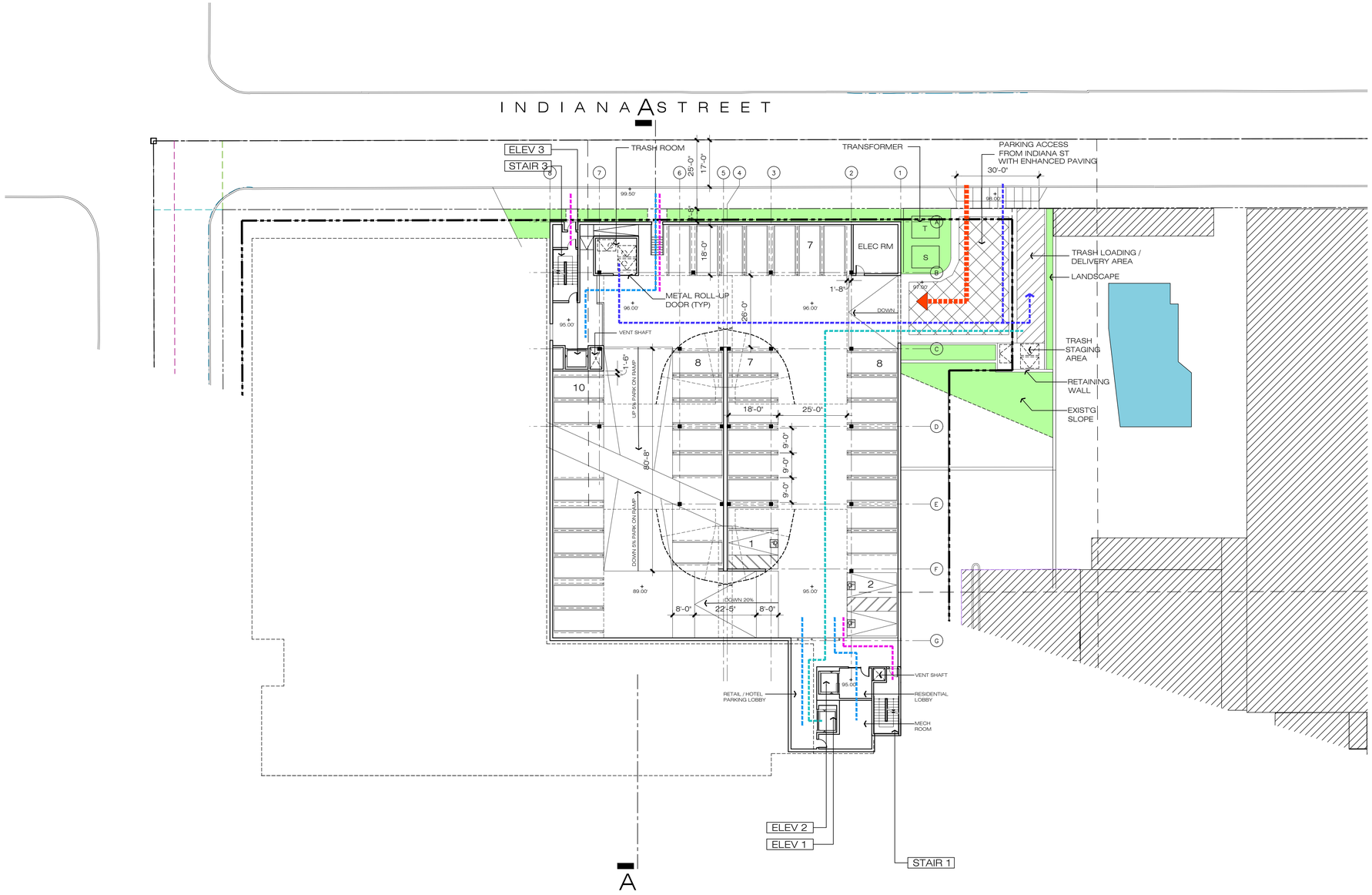
Mar Ventures, Inc.

Pacific Coast Commons SOUTH

1" = 20'-0"
0 20 40 60

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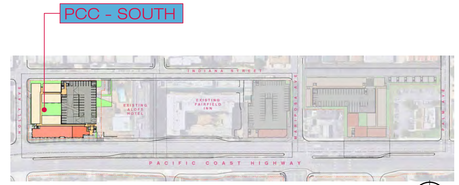
LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE
- COMMERCIAL DELIVERY ROUTE
- TRASH PICK UP ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

PARKING LEVEL P-2

STANDARD	39 SPACES
ACCESSIBLE	3 SPACES
	42 SPACES



KEY PLAN

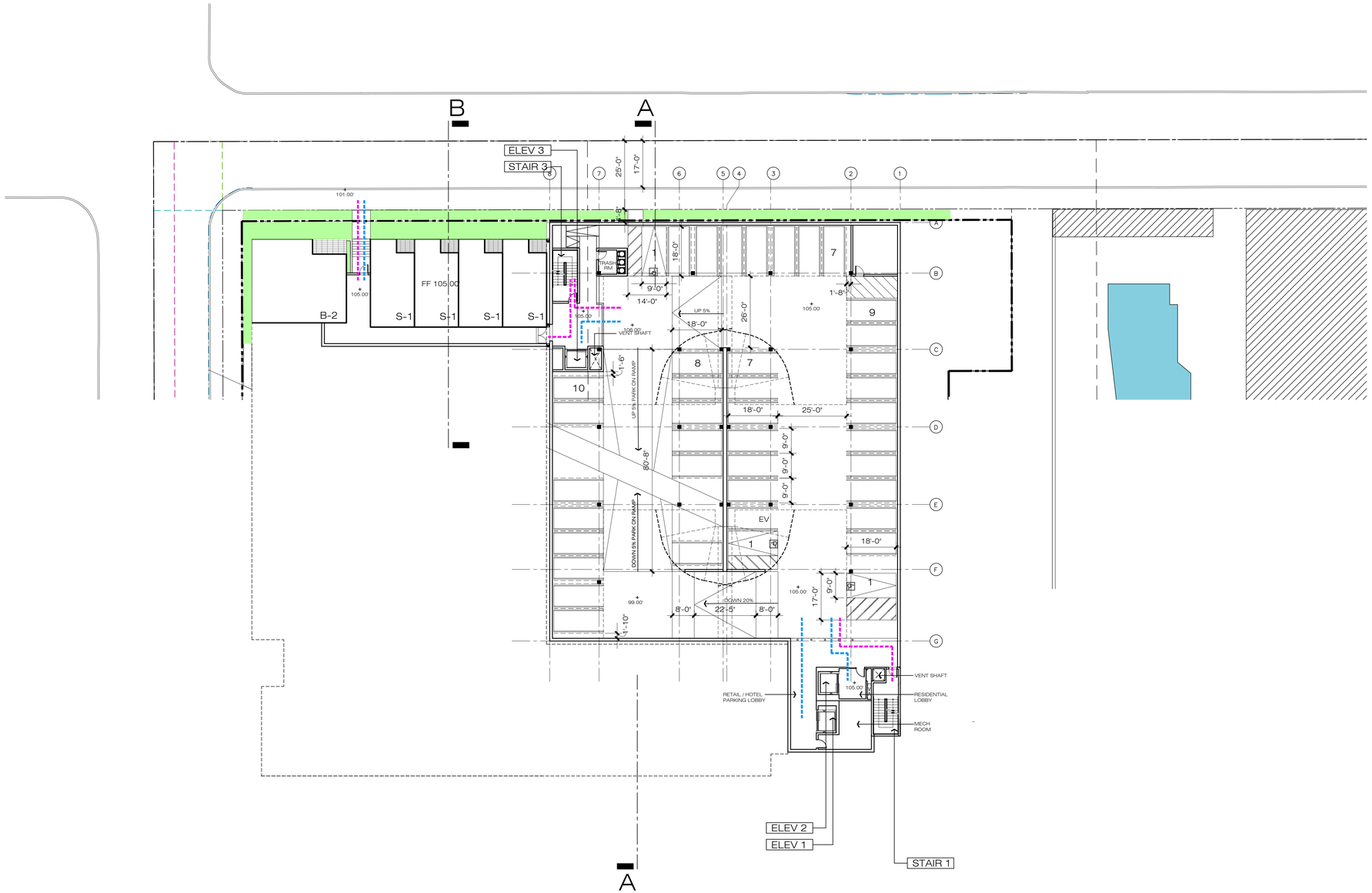
PARKING LEVEL P-2
95.00'

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
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Pacific Coast Commons SOUTH

1" = 20'-0"
0 20 40 60

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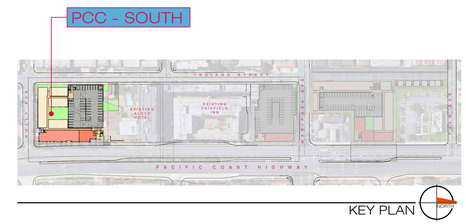
LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE
- COMMERCIAL TRASH ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

PARKING LEVEL P-1

STANDARD	41 SPACES
ACCESSIBLE	3 SPACES
	44 SPACES



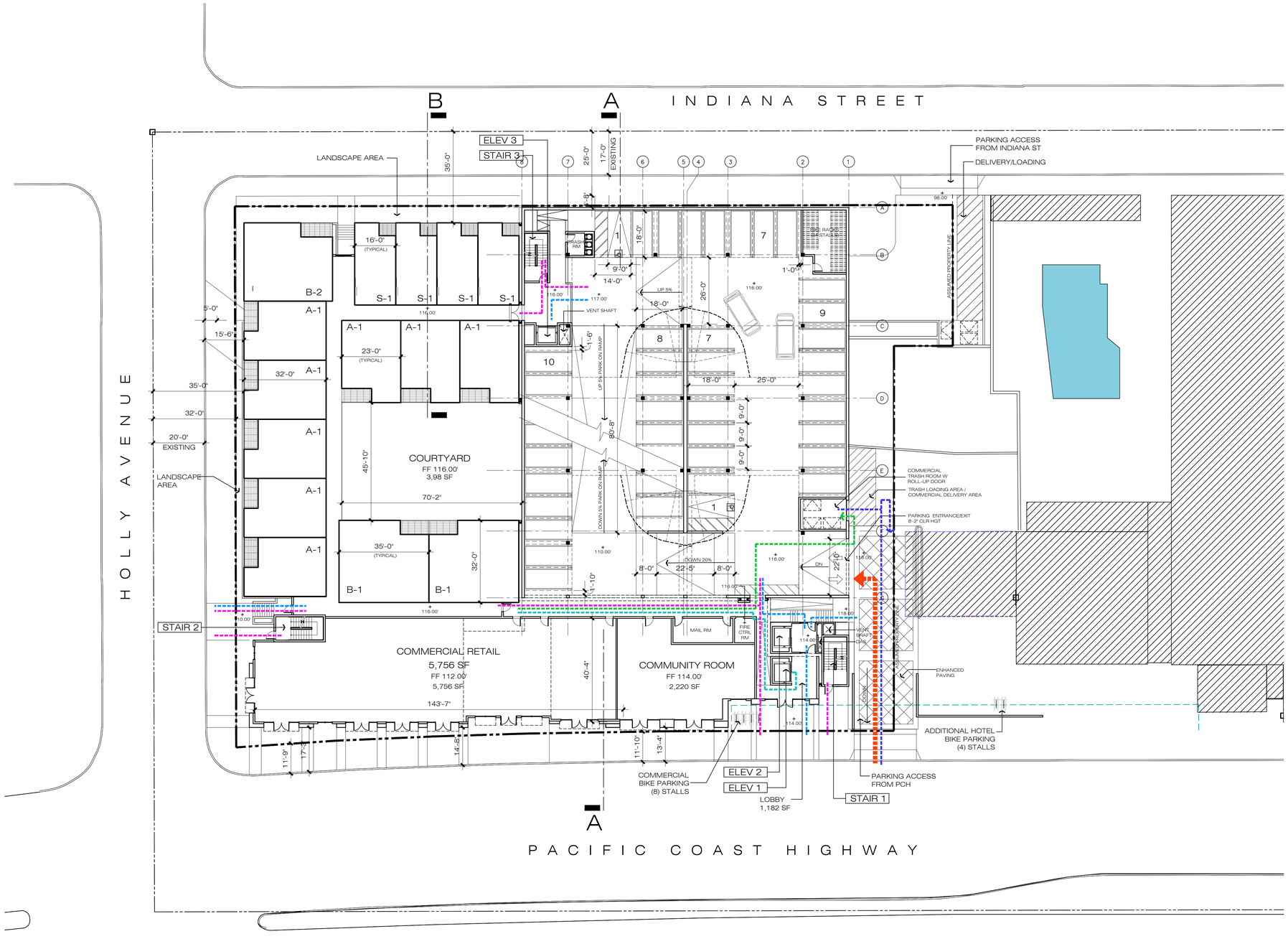
PARKING LEVEL P-1
105.00'

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Pacific Coast Commons SOUTH

1" = 20'-0"
0 20 40 60

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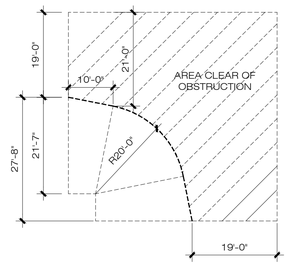


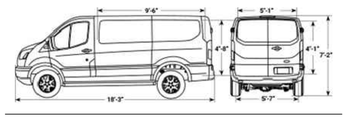
LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE
- COMMERCIAL DELIVERY ROUTE
- COMMERCIAL TRASH ACCESS
- TRASH PICK UP ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

STANDARD 90° TURN RADIUS INSIDE PARKING GARAGE



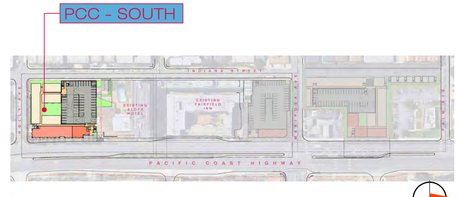


PARKING GARAGE WILL BE DESIGNED FOR A LOW ROOF (RWB) VAN VEHICLE AND WITH MINIMUM 8'-2" CLR HEIGHT

TYPICAL VAN DIMENSIONS:
6'-9" W, 18'-3" L, 7'-2" H

LEVEL L-1

STANDARD	39 SPACES
ACCESSIBLE	3 SPACES
	42 SPACES



KEY PLAN

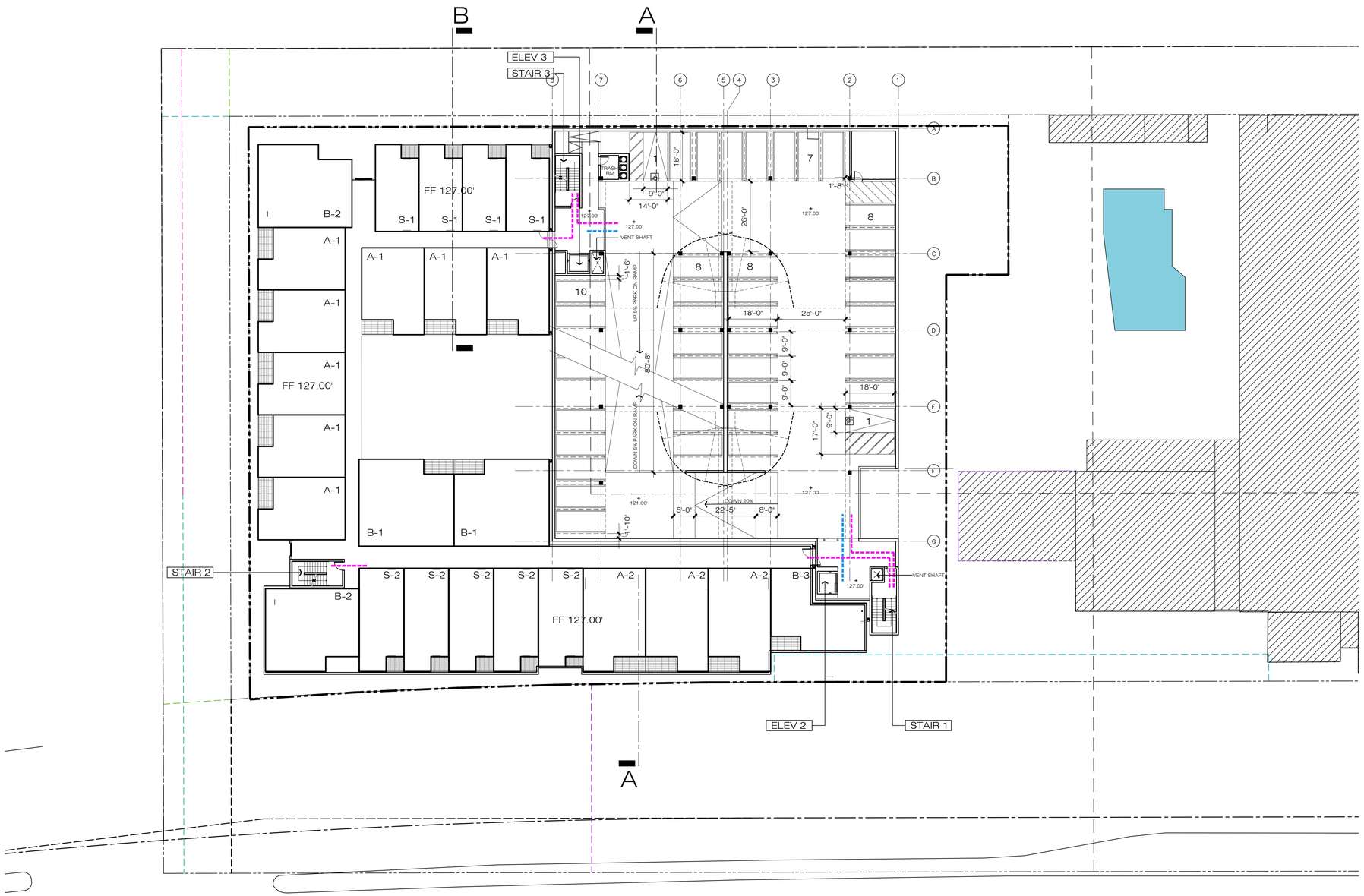
LEVEL L-1
116.00'

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1" = 20'-0"
0 20 40 60

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LEGEND

PEDESTRIAN PATH OF TRAVEL

EXIT ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

LEVEL L-4

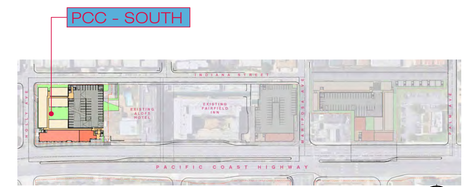
STANDARD	41 SPACES
ACCESSIBLE	2 SPACES
	43 SPACES

LEVEL L-3

STANDARD	41 SPACES
ACCESSIBLE	2 SPACES
	43 SPACES

LEVEL L-2

STANDARD	41 SPACES
ACCESSIBLE	2 SPACES
	43 SPACES



LEVEL L-2 TO LEVEL L-4
127.00', 137.00', 147.00'

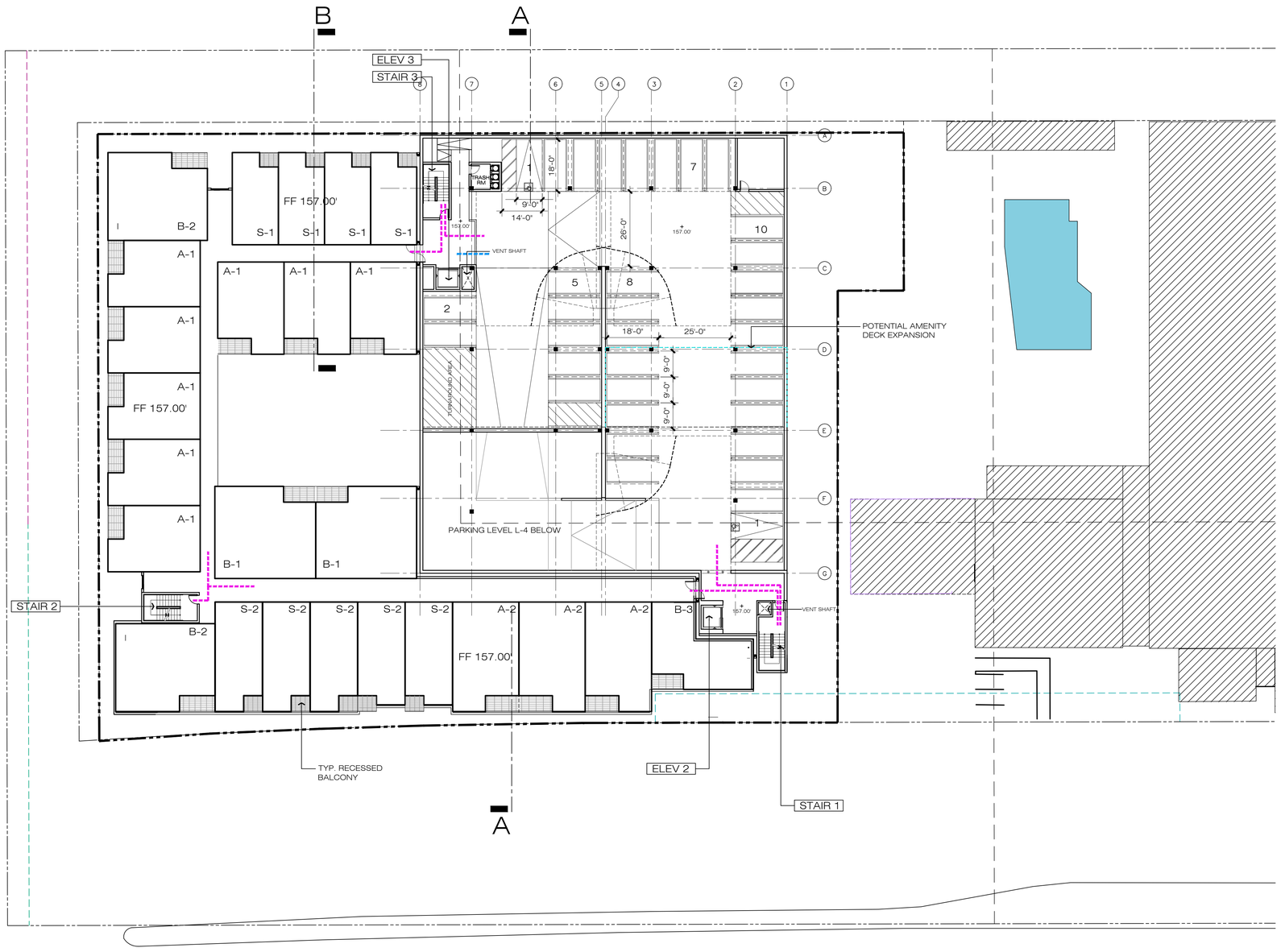
BRE HOTELS & RESORTS | CONTINENTAL DEVELOPMENT CORPORATION | Mar Ventures, Inc.

Pacific Coast Commons SOUTH

1" = 20'-0"
0 20 40 60

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LEGEND

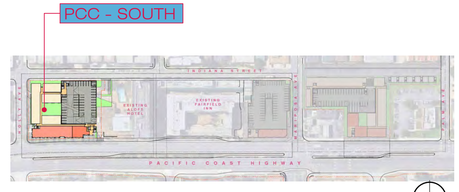
PEDESTRIAN PATH OF TRAVEL

EXIT ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6

LEVEL L-5

STANDARD	31 SPACES
ACCESSIBLE	3 SPACES
	34 SPACES



KEY PLAN

LEVEL L-5
157.00'

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

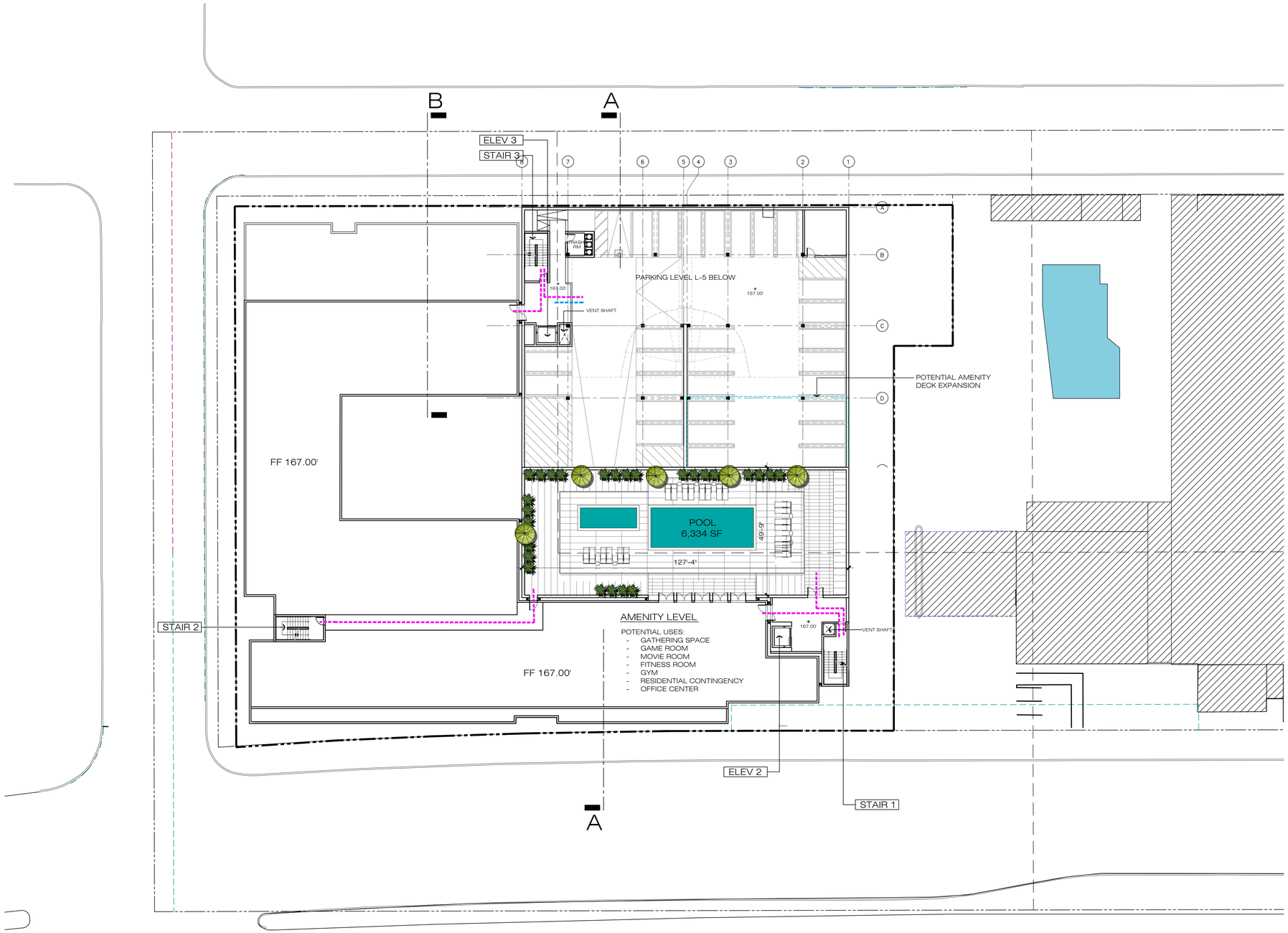
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1" = 20'-0"
0 20 40 60

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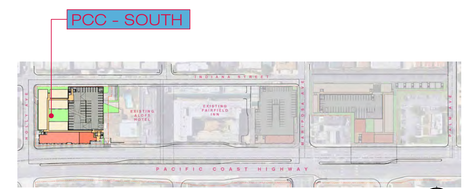
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LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6



LEVEL L-6
167.00'

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Pacific Coast Commons SOUTH

1" = 20'-0"
0 20 40 60

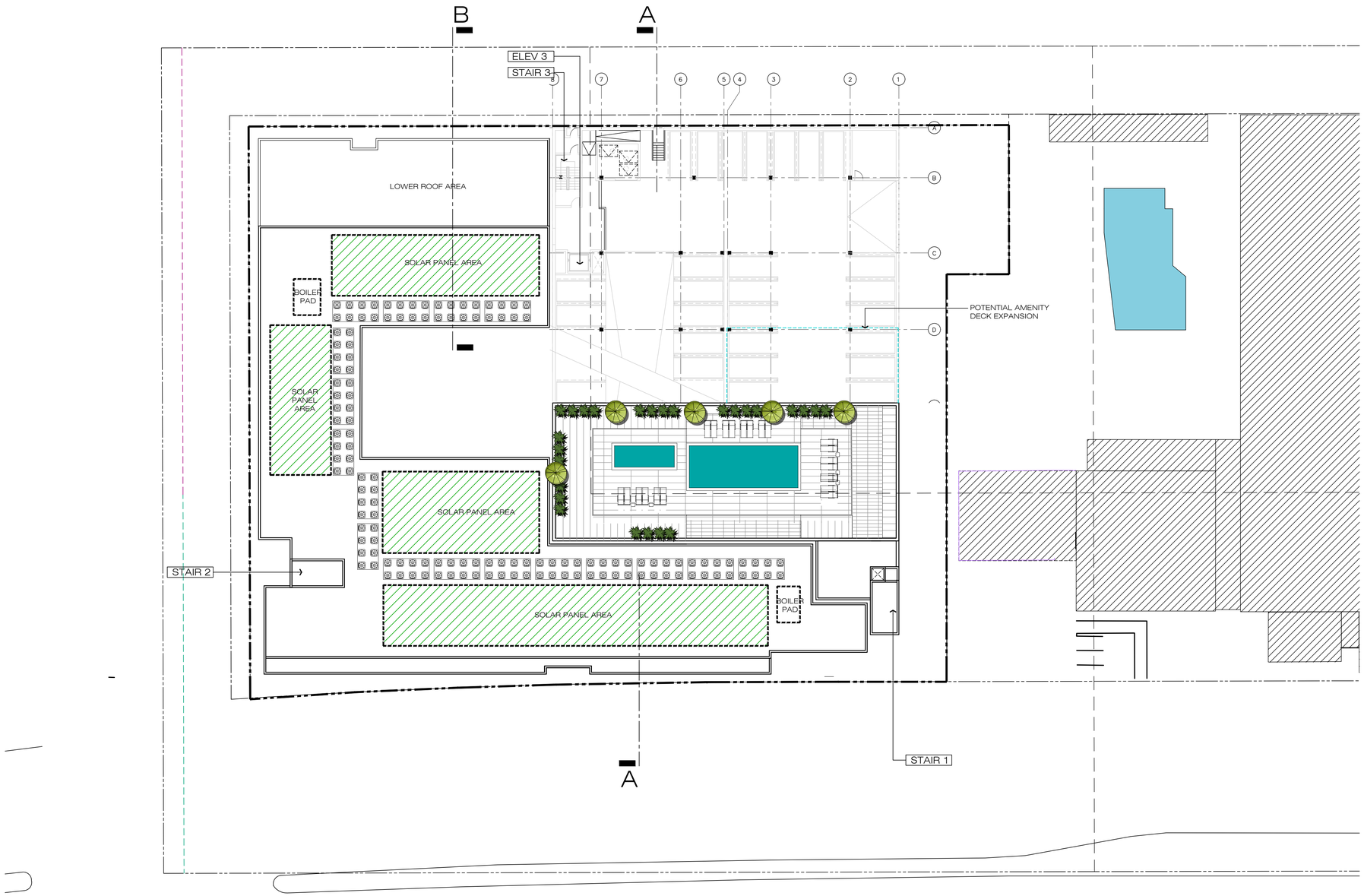
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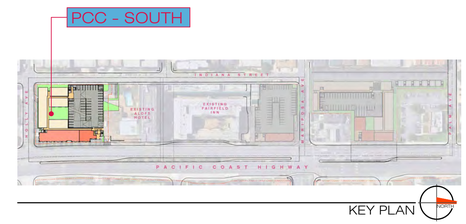
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LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL B-1 TO L-1)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL B-1 TO LEVEL L-6)
STAIR 1	LEVEL B-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL B-1 TO LEVEL L-6





ROOF PLAN

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

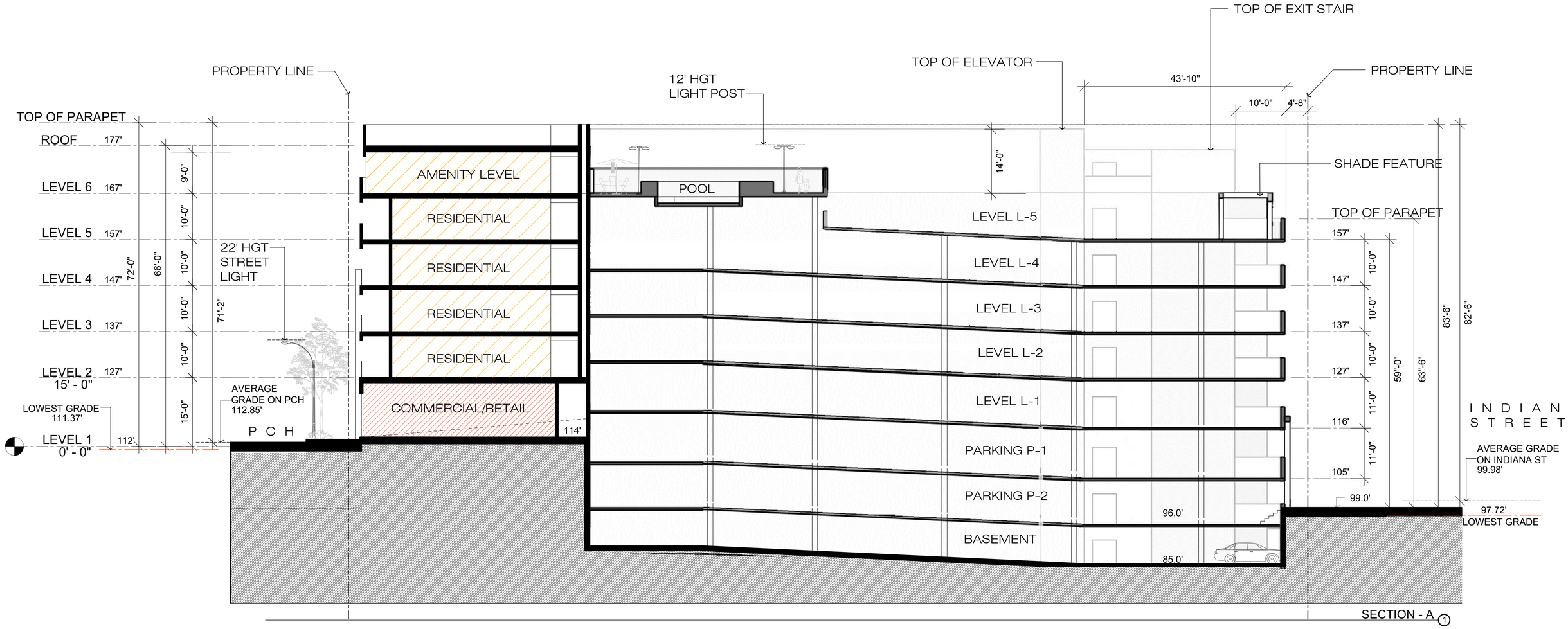
Mar Ventures, Inc.

Pacific Coast Commons SOUTH

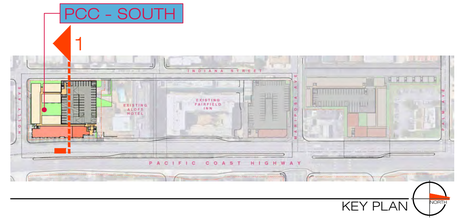
1" = 20'-0"
0 20 40 60

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SECTION - A 1



SECTION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

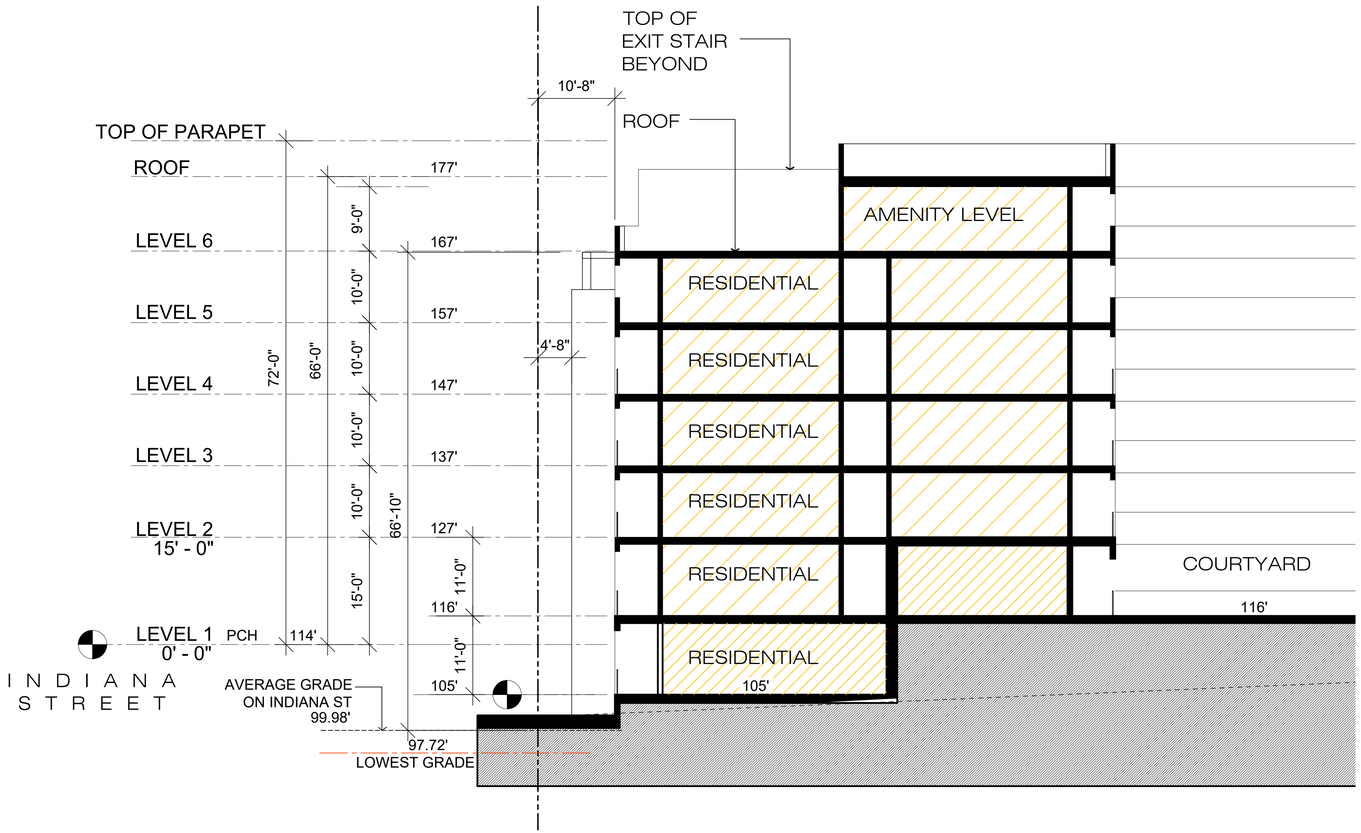
Mar Ventures, Inc.

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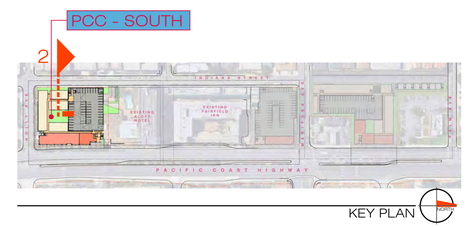
1" = 10'-0"
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SECTION - B ②



SECTION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons SOUTH

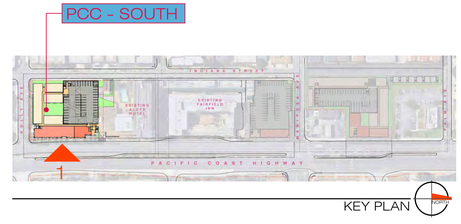
1" = 10'-0"
0 10 20 30

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EAST ELEVATION ①



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons SOUTH

scale: 1" = 10'-0"

0 10 20 30 40

WM WITHEE MALCOLM ARCHITECTS

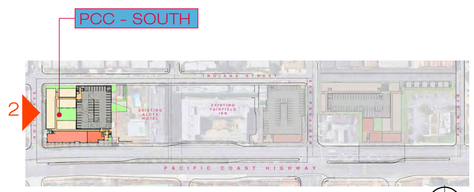
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SOUTH ELEVATION ②



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons SOUTH

scale: 1" = 10'-0"

0 10 20 30 40

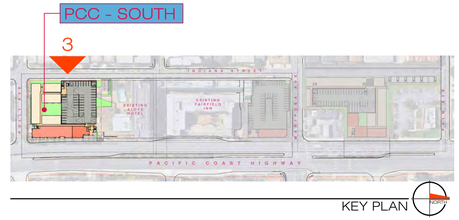
WM WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

Job No. B7093 SD-SO-13

Revised Date.10.28.2021



WEST ELEVATION ③



KEY PLAN

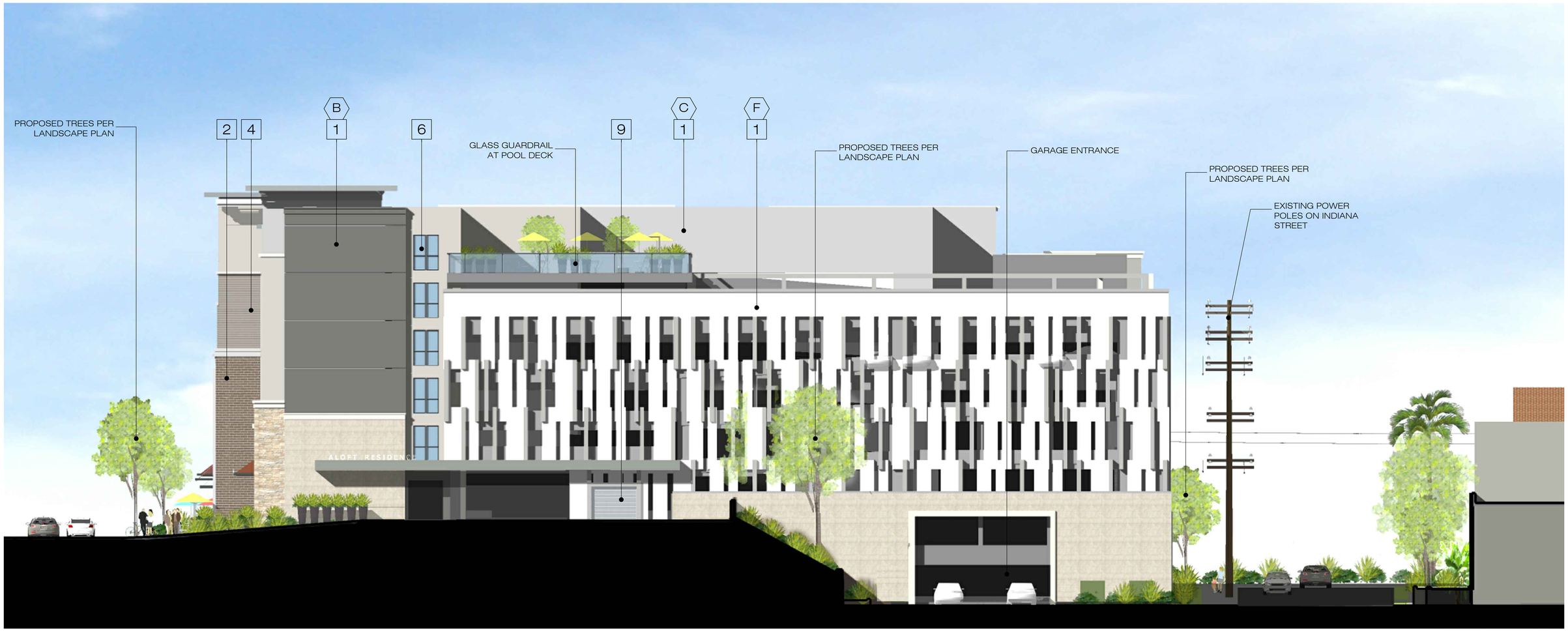
ELEVATION

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons SOUTH

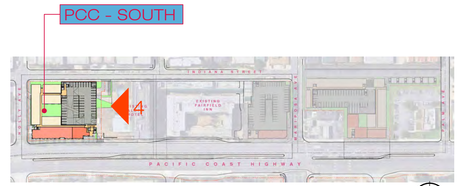
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Job No. B7093 SD-SO-14
Revised Date.10.28.2021



NORTH ELEVATION 4



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons SOUTH

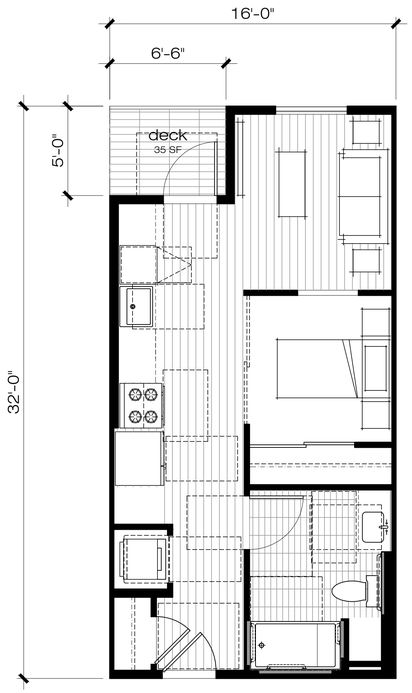
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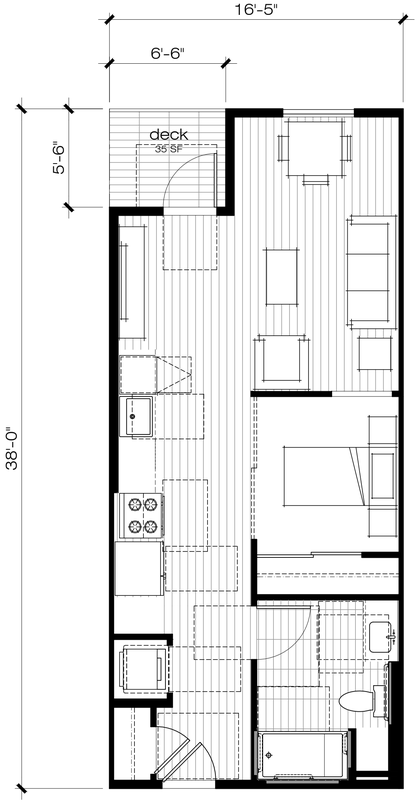
WITHEE MALCOLM ARCHITECTS
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Job No. B7093 SD-SO-15

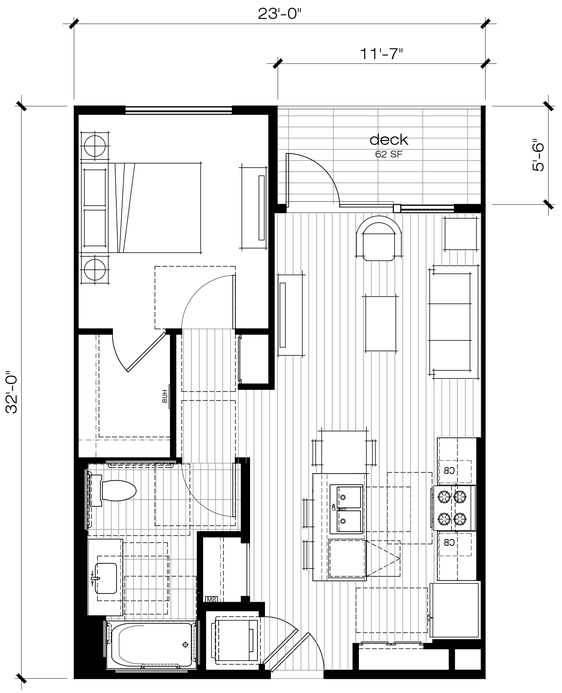
Revised Date.10.28.2021



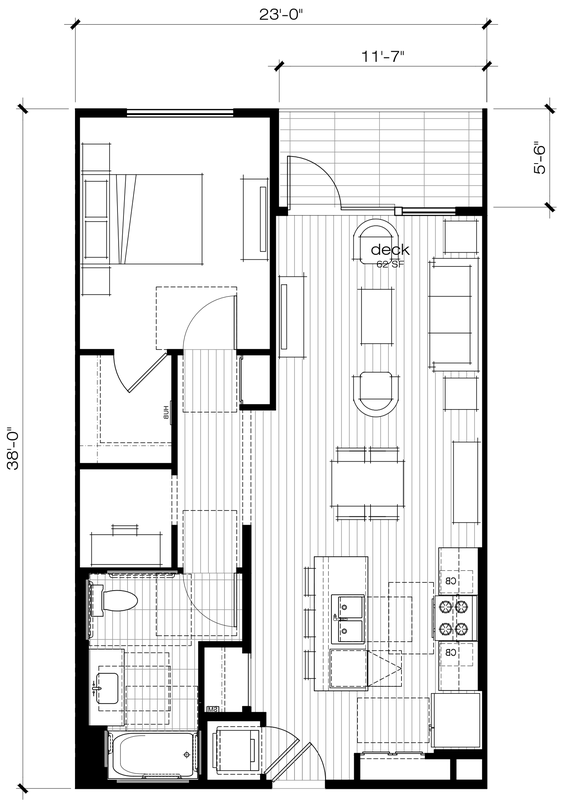
UNIT - S1
Studio
Gross Area: 476 SF



UNIT - S2
Studio
Gross Area: 588 SF



UNIT - A1
One Bedroom
Gross Area: 668 SF



UNIT - A2
One Bedroom
Gross Area: 809 SF

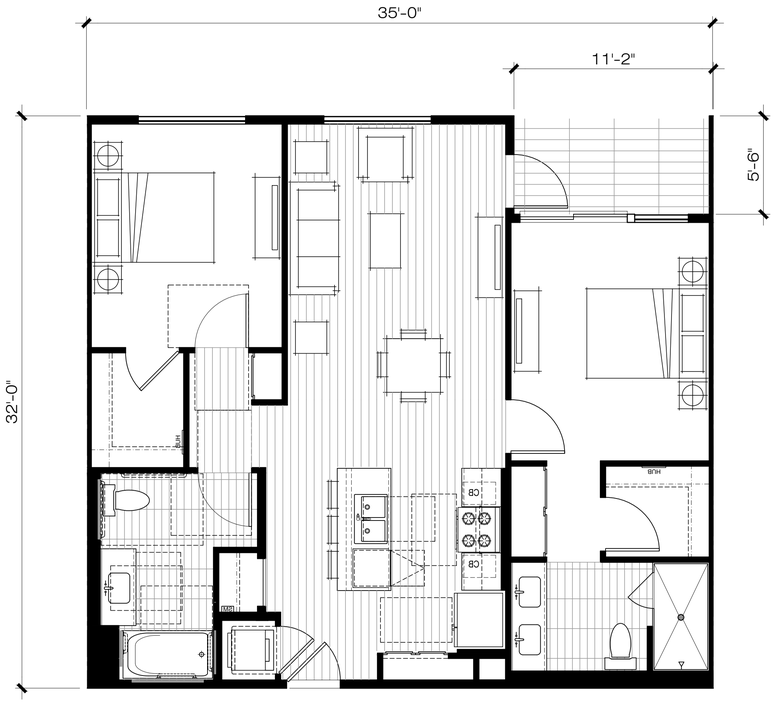
UNIT PLANS

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons SOUTH

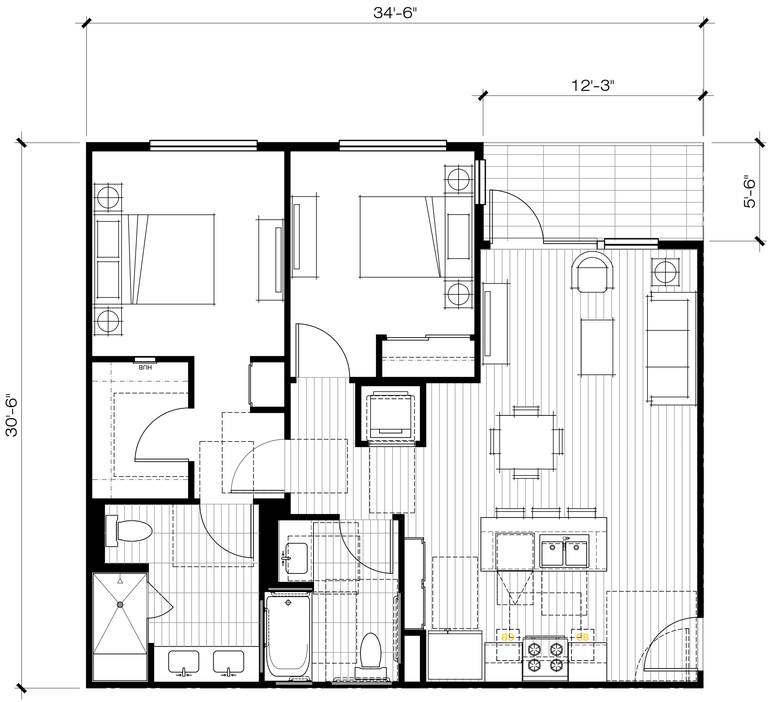
1/4" = 1'-0"
0 4 8 12

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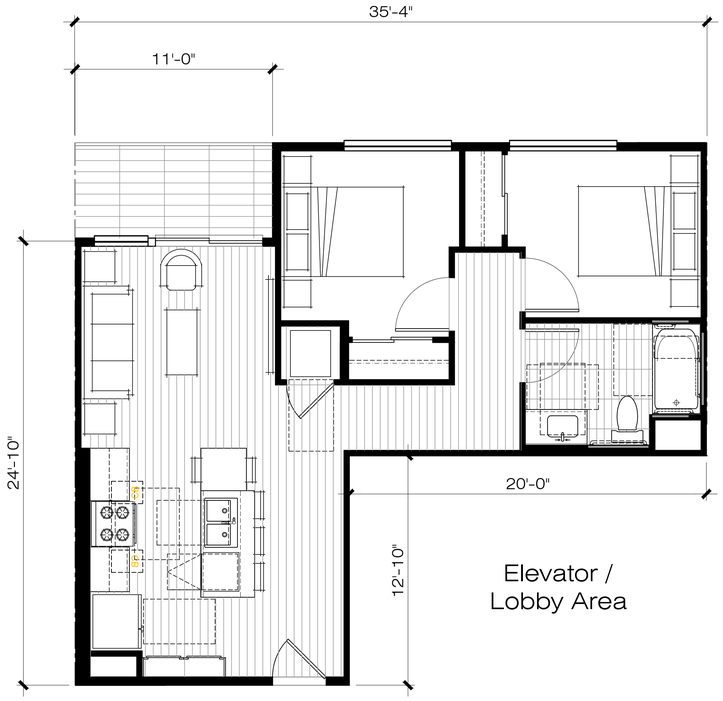
Job No. B7093 SD-SO-16
Revised Date.10.28.2021



UNIT - B1
Two Bedroom
Gross Area: 1058 SF



UNIT - B2
Two Bedroom
Gross Area: 984 SF



UNIT - B3
Two Bedroom
Gross Area: 754 SF

UNIT PLANS

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons SOUTH

1/4" = 1'-0"
0 4 8 12

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PCC SOUTH - PACIFIC COAST HWY ELEVATION

TRIM COLORS

F HIGH REFLECTIVE WHITE
SW7757

G TRICORN BLACK
SW6258

MAIN COLORS

A PEPPERCORN
SW7674

B CITYSCAPE
SW7067

C CRUSHED ICE
SW7647

D REPOSE GRAY
SW7015

E WINDFRESH WHITE
SW7628



1 STUCCO
20 / 30 Sand Finish



2 BRICK VENEER
Dark Brown Smooth



3 MANUFACTURED
Mountain Ledge



4 LAP SIDING
Smooth Finish -Gray Slate



9 TYPICAL METAL ROLL-UP TRASH ROOM DOOR



5 METAL GUARDRAIL



6 VINYL WINDOW
Bronze



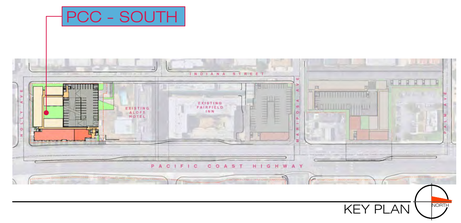
7 FABRIC AWNING



8 GENERAL STOREFRONT



10 SCREENING
"Creeping Fig"

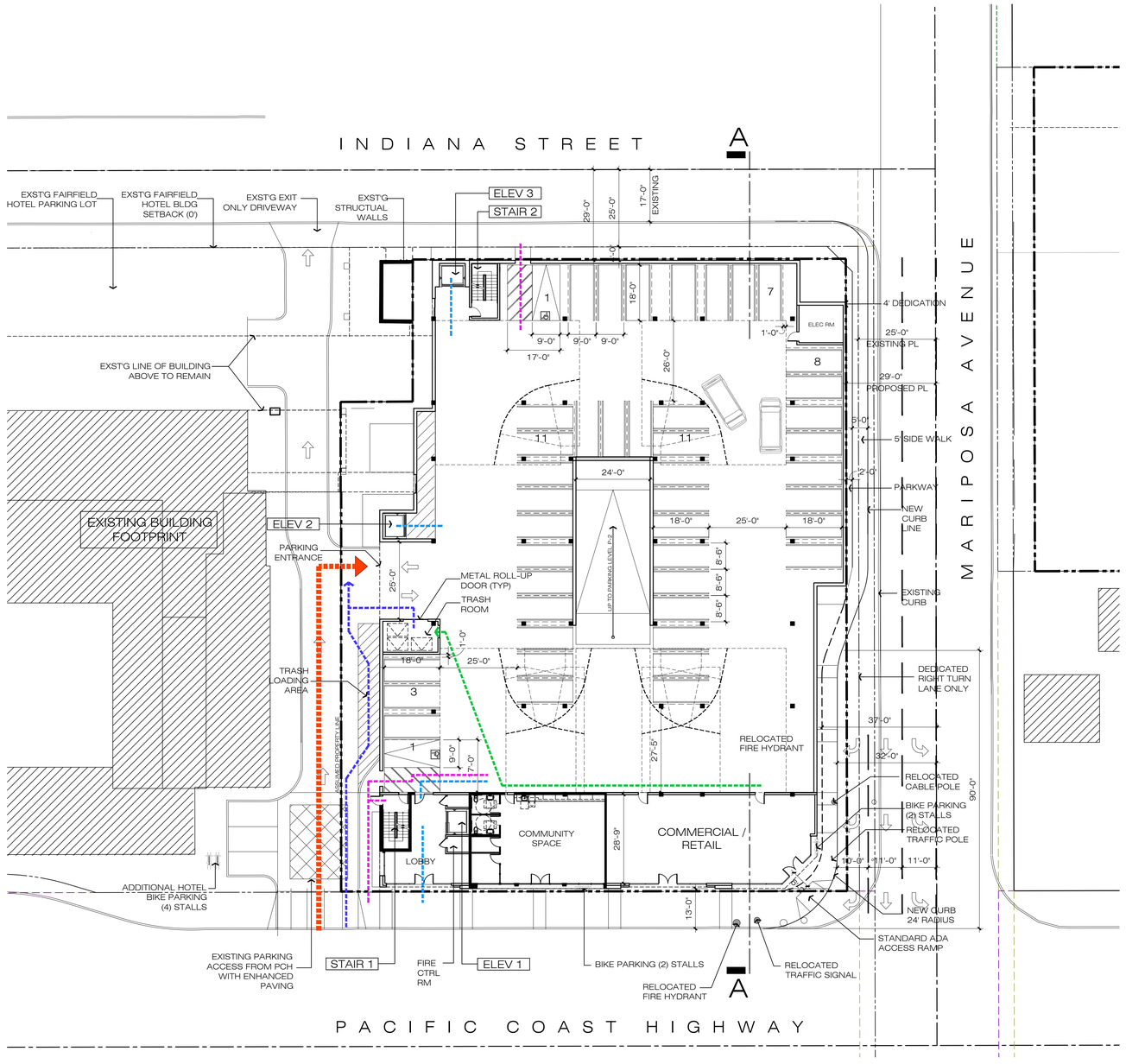


MATERIAL BOARD

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons SOUTH

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Job No. B7093 SD-SO-18
Revised Date.10.28.2021

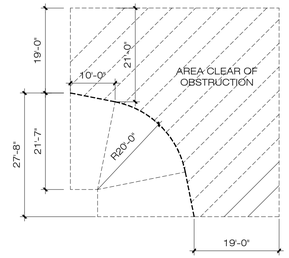


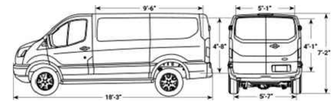
LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE
- COMMERCIAL DELIVERY ROUTE
- COMMERCIAL TRASH ACCESS
- TRASH PICK UP ROUTE

ELEV 1	COMMERCIAL / HOTEL PARKING (LEVEL L-1 TO L-5)
ELEV 2	COMMERCIAL / HOTEL PARKING (LEVEL L-1 TO L-5)
ELEV 3	HOTEL ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-5)
STAIR 1	LEVEL L-1 TO LEVEL L-5
STAIR 2	LEVEL L-1 TO LEVEL L-5

STANDARD 90° TURN RADIUS INSIDE PARKING GARAGE



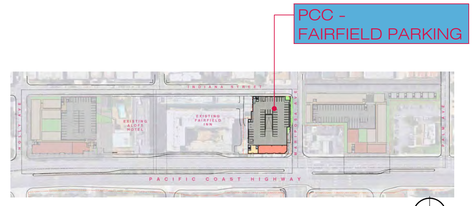


PARKING GARAGE WILL BE DESIGNED FOR A LOW ROOF (RWB) VAN VEHICLE AND WITH MINIMUM 8'-2" CLR HEIGHT

TYPICAL VAN DIMENSIONS:
6'-9" W, 18'-3" L, 7'-2" H

LEVEL L-1

STANDARD	41 SPACES
ACCESSIBLE	2 SPACES
	43 SPACES



KEY PLAN

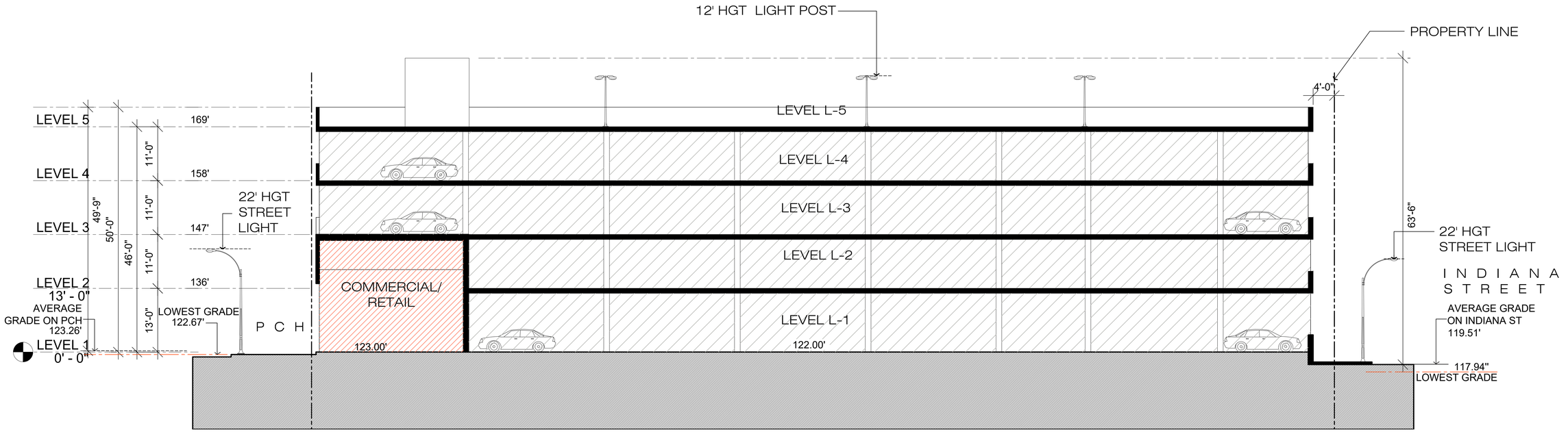
LEVEL L-1

CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons FAIRFIELD PARKING

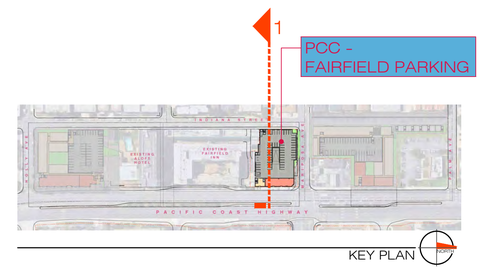
1" = 20'-0"
0 20 40 60

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Job No. B7093 SD-FF-01
Revised Date.10.28.2021



SECTION - A 1



SECTION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons FAIRFIELD PARKING

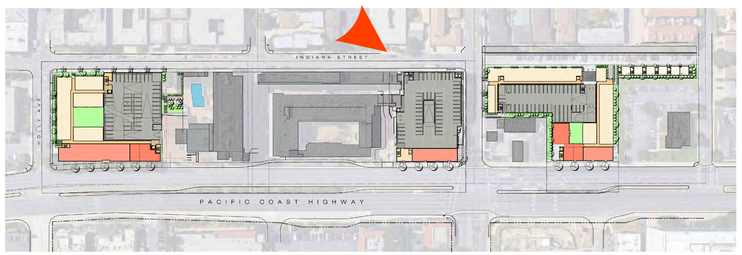
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Job No. B7093 SD-FF-04
Revised Date.10.28.2021



VIEW ON INDIANA ST AT FAIRFIELD PARKING



KEY PLAN
NOT TO SCALE

CONCEPT VIEW

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.

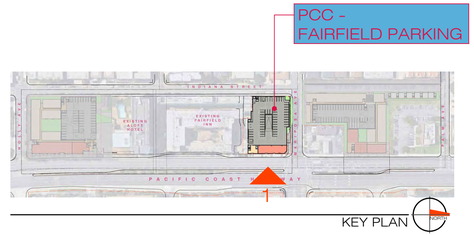
Pacific Coast Commons

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Job No. B7093 SD-MP-05
Revised Date.10.28.2021



EAST ELEVATION 1



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons FAIRFIELD PARKING

scale: 1" = 10'-0"

0 10 20 30 40

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Job No. B7093 SD-FF-05

Revised Date.10.28.2021



NORTH ELEVATION (2)



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons FAIRFIELD PARKING

scale: 1" = 10'-0"

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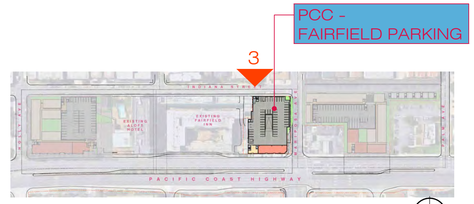
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Job No. B7093 SD-FF-06

Revised Date.10.28.2021



WEST ELEVATION ③



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons FAIRFIELD PARKING

scale: 1" = 10'-0"

0 10 20 30 40

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Job No. B7093 SD-FF-07

Revised Date.10.28.2021



FAIRFIELD PARKING - PACIFIC COAST HWY ELEVATION

MAIN COLORS

A HIGH REFLECTIVE WHITE
SW7757

B CITYSCAPE
SW7067

C SAMOVAR SILVER
SW6233



1 STUCCO
20 / 30 Sand Finish



2 BRICK VENEER
Tundra Brick - Ashland
By El Dorado or Appr. equal



3 STONE VENEER
Rough Cut - Casa Blanca
By El Dorado or Appr. equal



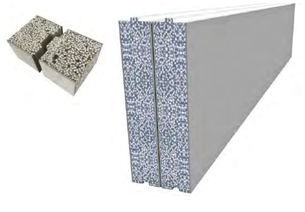
4 LAP SIDING
Smooth Finish -Gray Slate



9 IRON FENCE



5 CURROGATED METAL



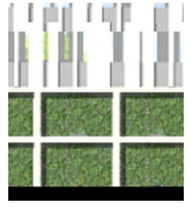
6 PRECAST PANELS
light weight precast plaster panels



7 FABRIC AWNING



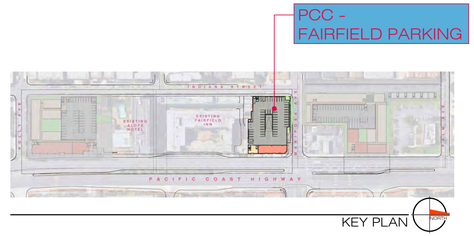
8 GENERAL STOREFRONT



10 SCREENING
"Creeping Fig"



11 TYPICAL METAL ROLL-UP TRASH ROOM DOOR

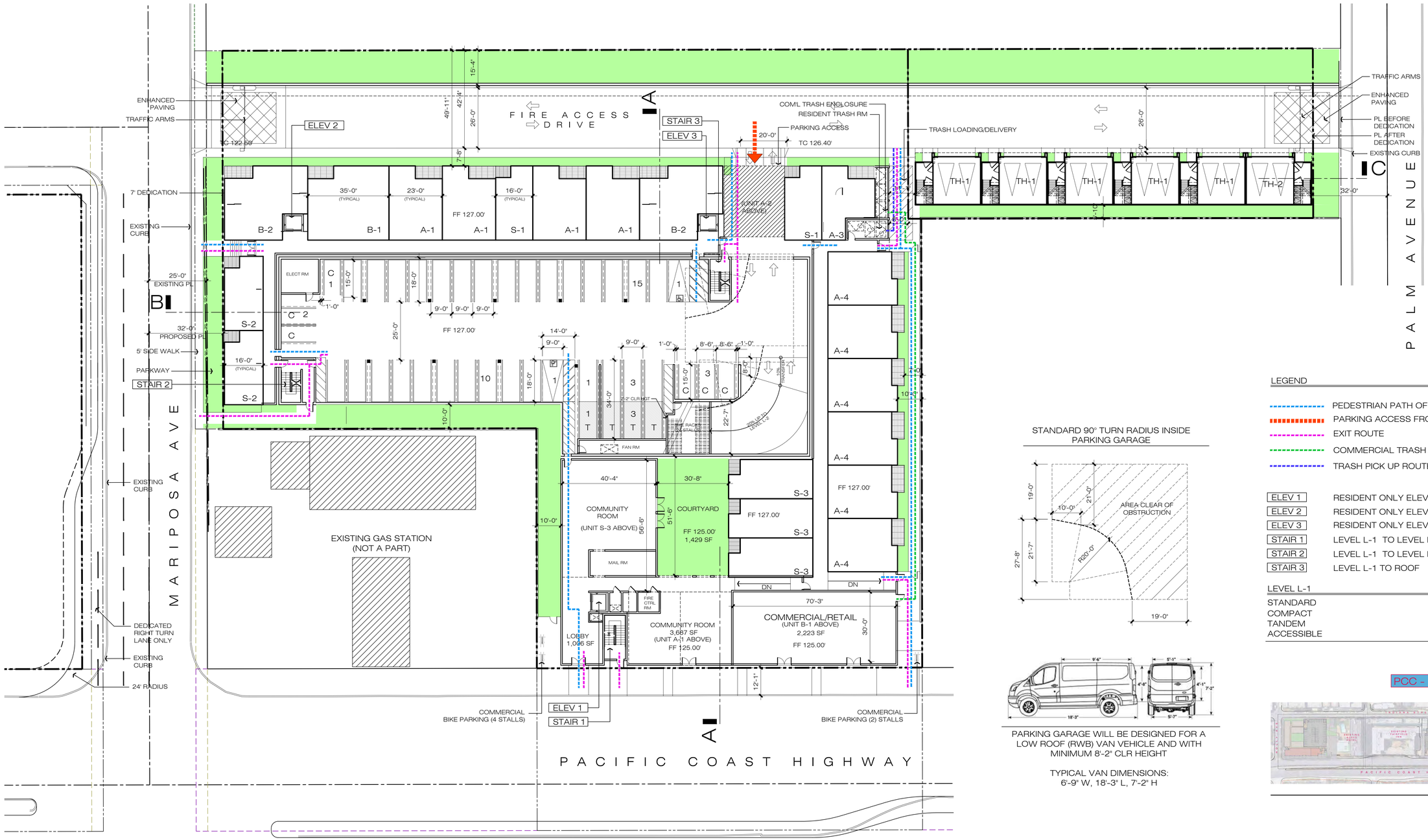


MATERIAL BOARD

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons FAIRFIELD PARKING

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LEGEND

- PEDESTRIAN PATH OF TRAVEL
- PARKING ACCESS FROM PUBLIC STREETS
- EXIT ROUTE
- COMMERCIAL TRASH / DELIVERY ROUTE
- TRASH PICK UP ROUTE

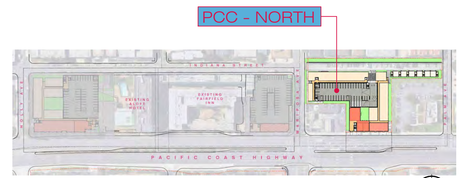
ELEV 1	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO ROOF DECK)
STAIR 1	LEVEL L-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL L-1 TO ROOF

STANDARD 90° TURN RADIUS INSIDE PARKING GARAGE

PARKING GARAGE WILL BE DESIGNED FOR A LOW ROOF (RWB) VAN VEHICLE AND WITH MINIMUM 8'-2" CLR HEIGHT

TYPICAL VAN DIMENSIONS:
6'-9" W, 18'-3" L, 7'-2" H

LEVEL L-1	
STANDARD	25 SPACES
COMPACT	6 SPACES
TANDEM	8 SPACES
ACCESSIBLE	2 SPACES
	41 SPACES



KEY PLAN

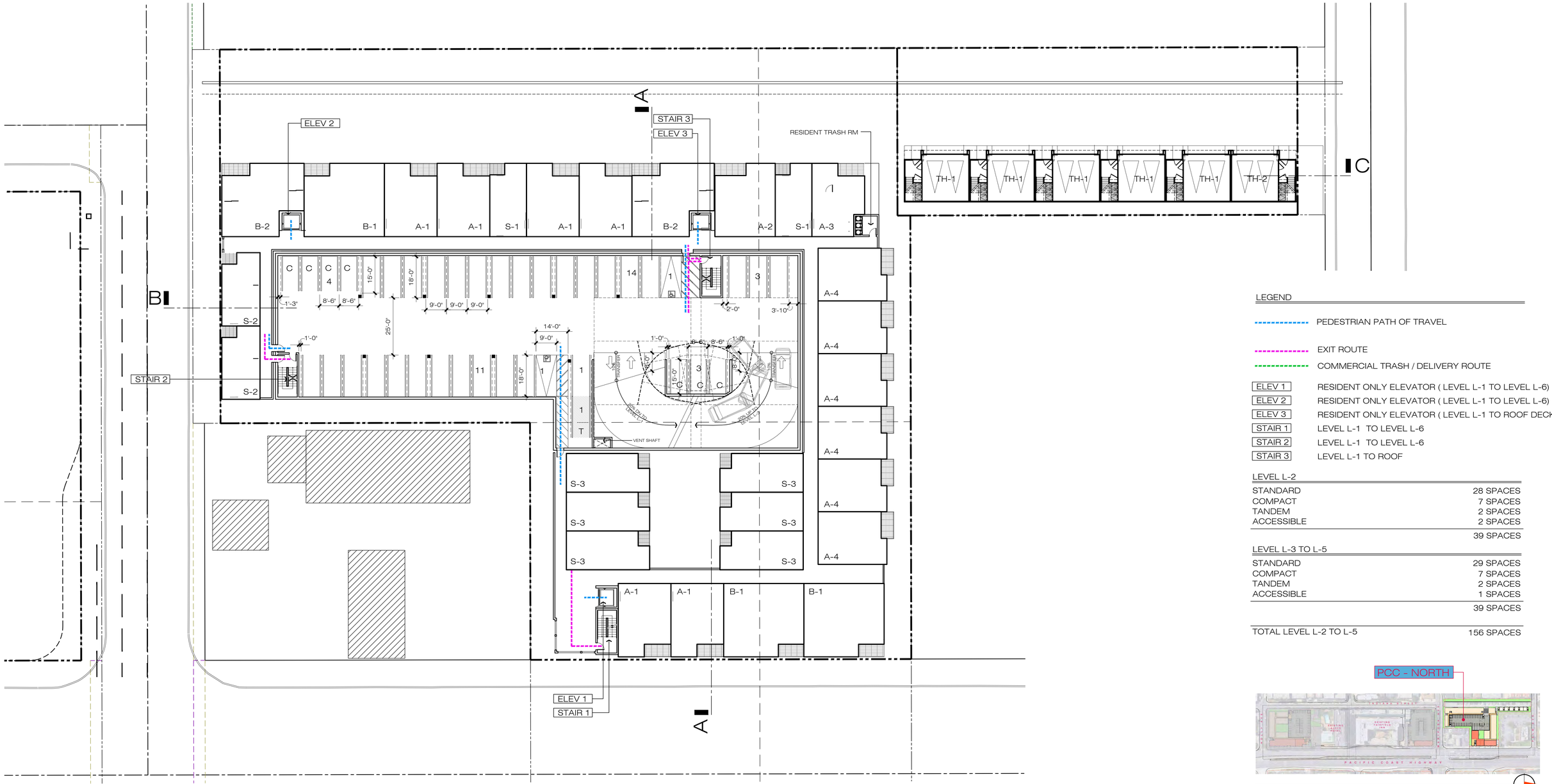
LEVEL L- 1

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

1" = 20'-0"
0 20 40 60

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LEGEND

- PEDESTRIAN PATH OF TRAVEL
- EXIT ROUTE
- COMMERCIAL TRASH / DELIVERY ROUTE

ELEV 1	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO ROOF DECK)
STAIR 1	LEVEL L-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL L-1 TO ROOF

LEVEL L-2

STANDARD	28 SPACES
COMPACT	7 SPACES
TANDEM	2 SPACES
ACCESSIBLE	2 SPACES
	39 SPACES

LEVEL L-3 TO L-5

STANDARD	29 SPACES
COMPACT	7 SPACES
TANDEM	2 SPACES
ACCESSIBLE	1 SPACES
	39 SPACES

TOTAL LEVEL L-2 TO L-5	156 SPACES

KEY PLAN

LEVEL L-2 TO LEVEL L-5

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

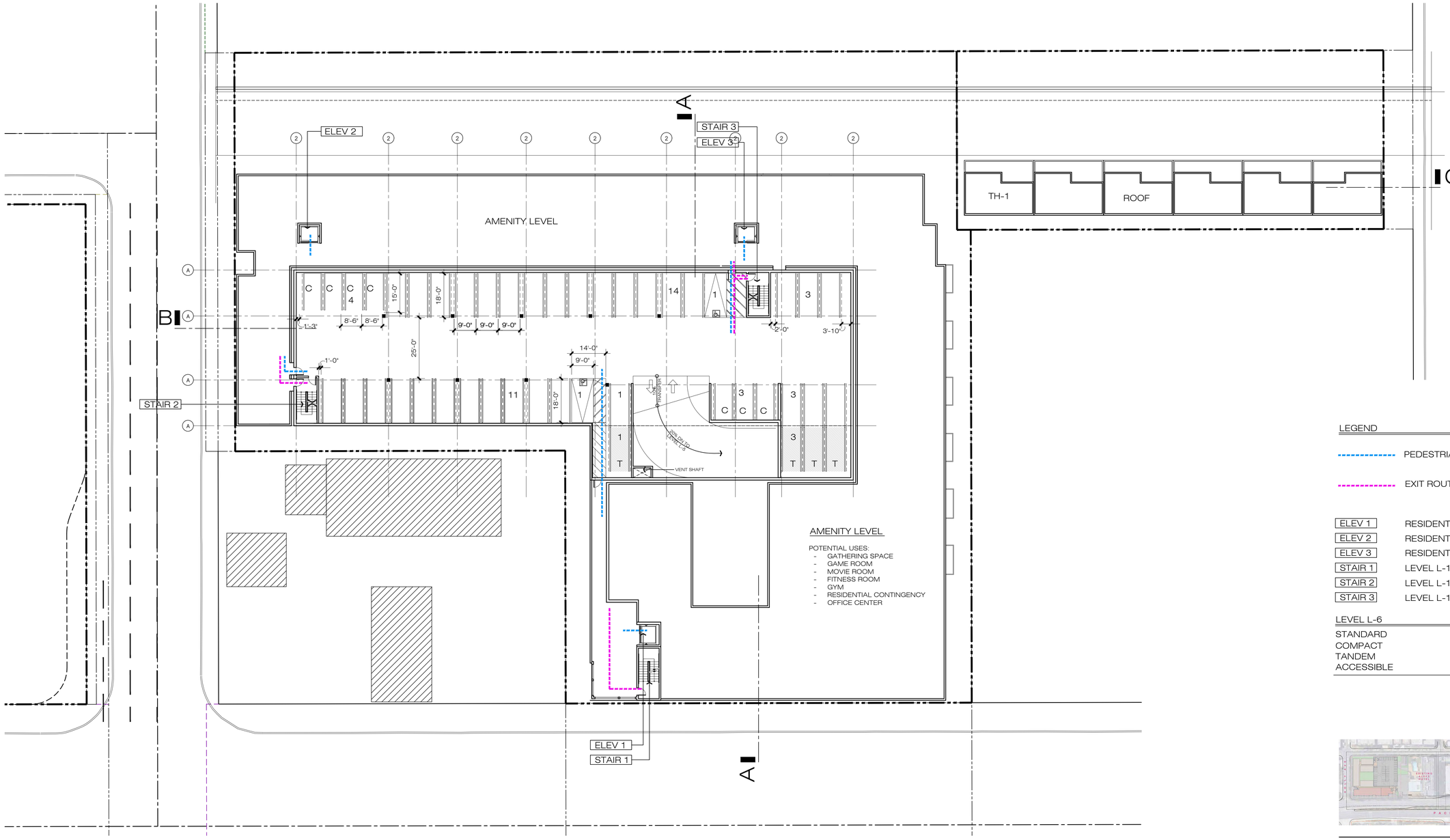
Mar Ventures, Inc.

Pacific Coast Commons NORTH

1" = 20'-0"
0 20 40 60

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Job No. B7093 SD-NO-02
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LEGEND

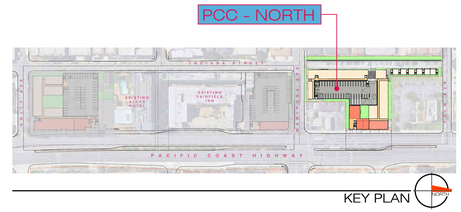
PEDESTRIAN PATH OF TRAVEL

EXIT ROUTE

ELEV 1	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO ROOF DECK)
STAIR 1	LEVEL L-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL L-1 TO ROOF

LEVEL L-6

STANDARD	29 SPACES
COMPACT	7 SPACES
TANDEM	6 SPACES
ACCESSIBLE	1 SPACES
	43 SPACES



LEVEL L-6

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

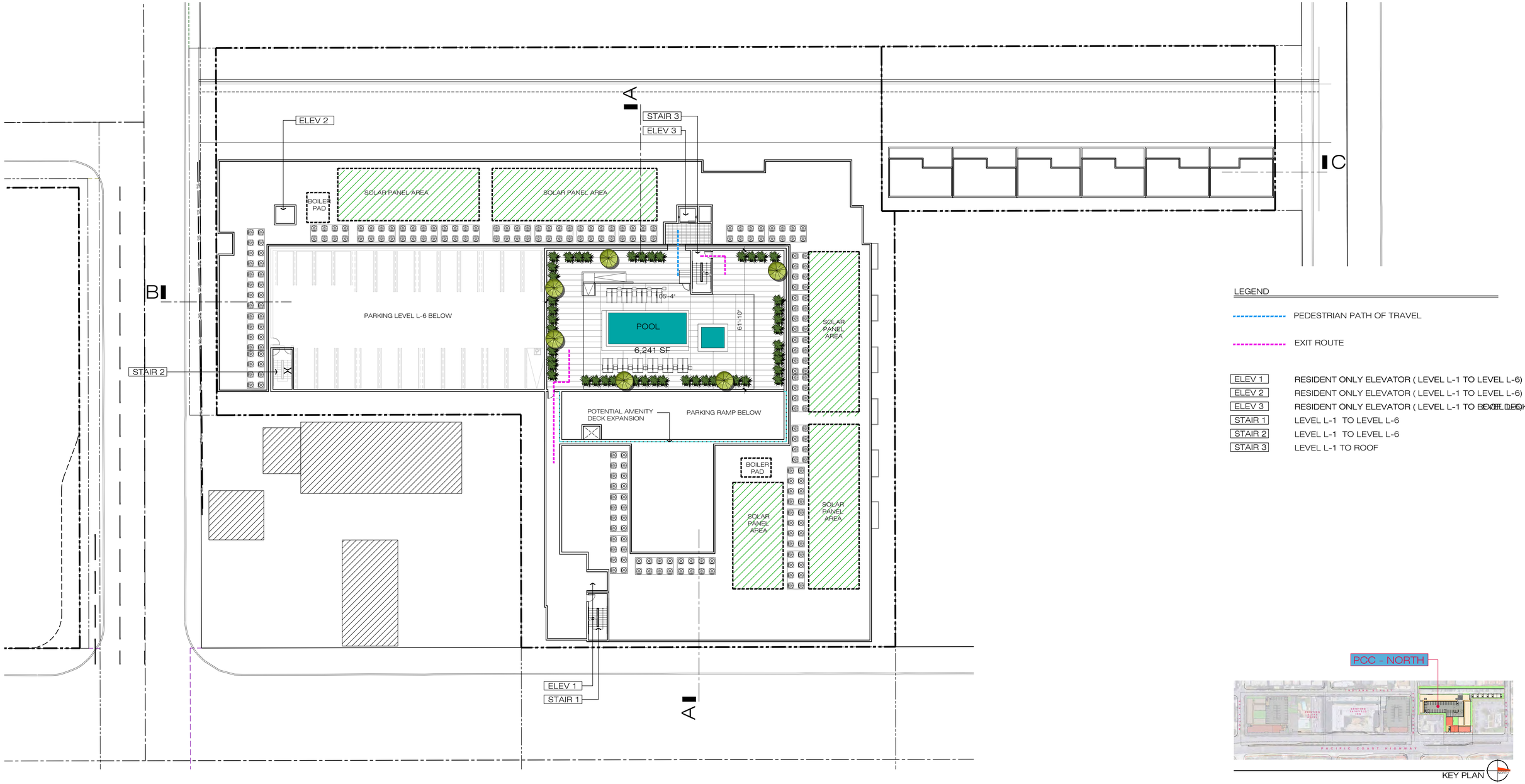
Mar Ventures, Inc.

Pacific Coast Commons NORTH

1" = 20'-0"
0 20 40 60

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Job No. B7093 SD-NO-03
Revised Date.10.28.2021



LEGEND

PEDESTRIAN PATH OF TRAVEL

EXIT ROUTE

ELEV 1	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 2	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO LEVEL L-6)
ELEV 3	RESIDENT ONLY ELEVATOR (LEVEL L-1 TO ROOF DECK)
STAIR 1	LEVEL L-1 TO LEVEL L-6
STAIR 2	LEVEL L-1 TO LEVEL L-6
STAIR 3	LEVEL L-1 TO ROOF

ROOF PLAN

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

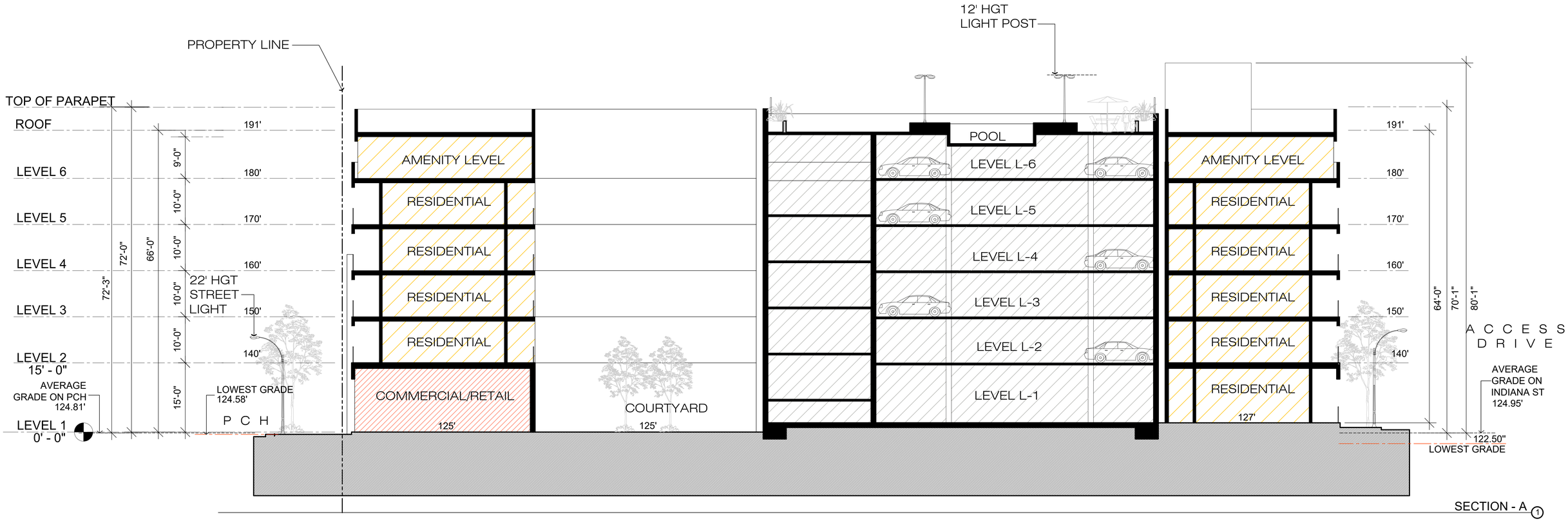
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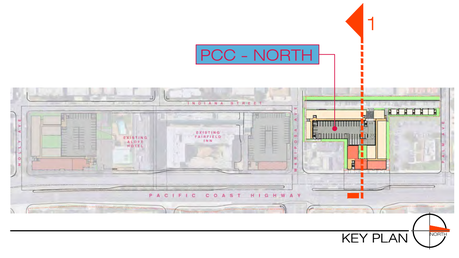
WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

Job No. B7093 SD-NO-04

Revised Date.10.28.2021



SECTION - A 1



KEY PLAN

SECTION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

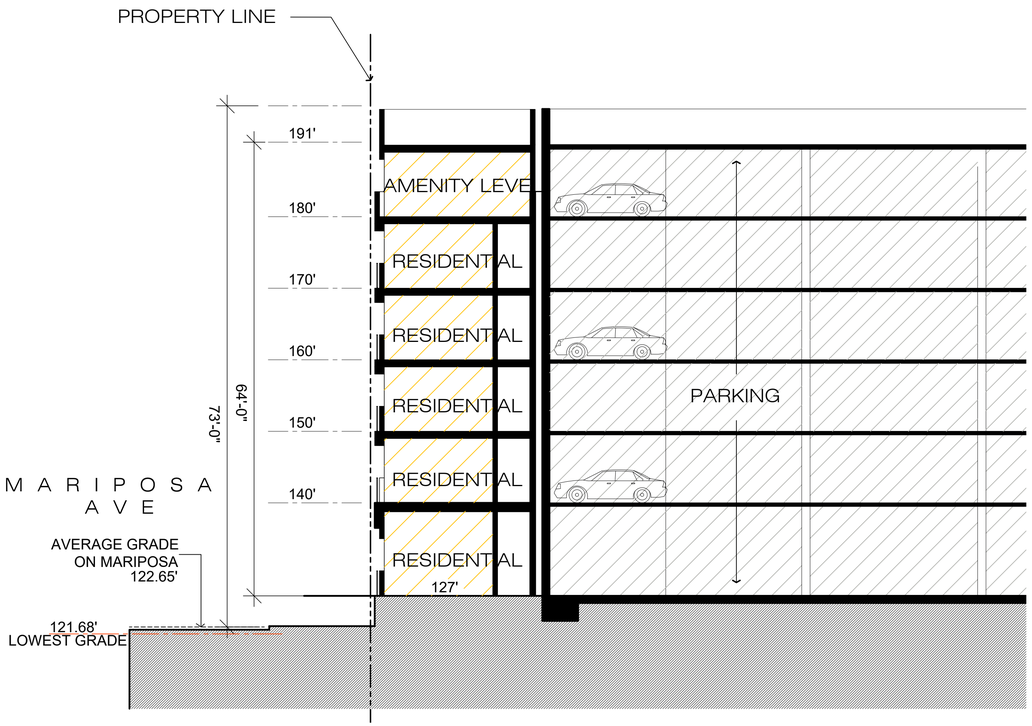
Mar Ventures, Inc.

Pacific Coast Commons NORTH

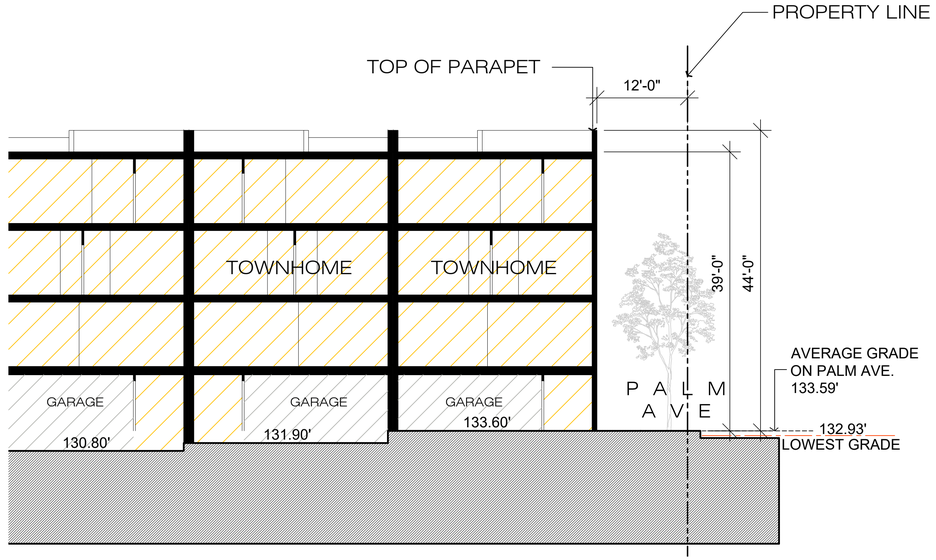
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2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

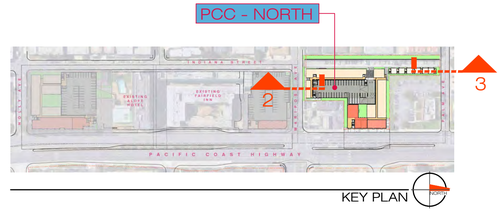
Job No. B7093 SD-NO-05
Revised Date.10.28.2021



SECTION - B ②



SECTION - C ③



SECTION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

1" = 10'-0"
0 10 20 30

WM WITHEE MALCOLM ARCHITECTS
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Revised Date.10.28.2021



PCC NORTH - NORTH EAST AERIAL VIEW



KEY PLAN
NOT TO SCALE

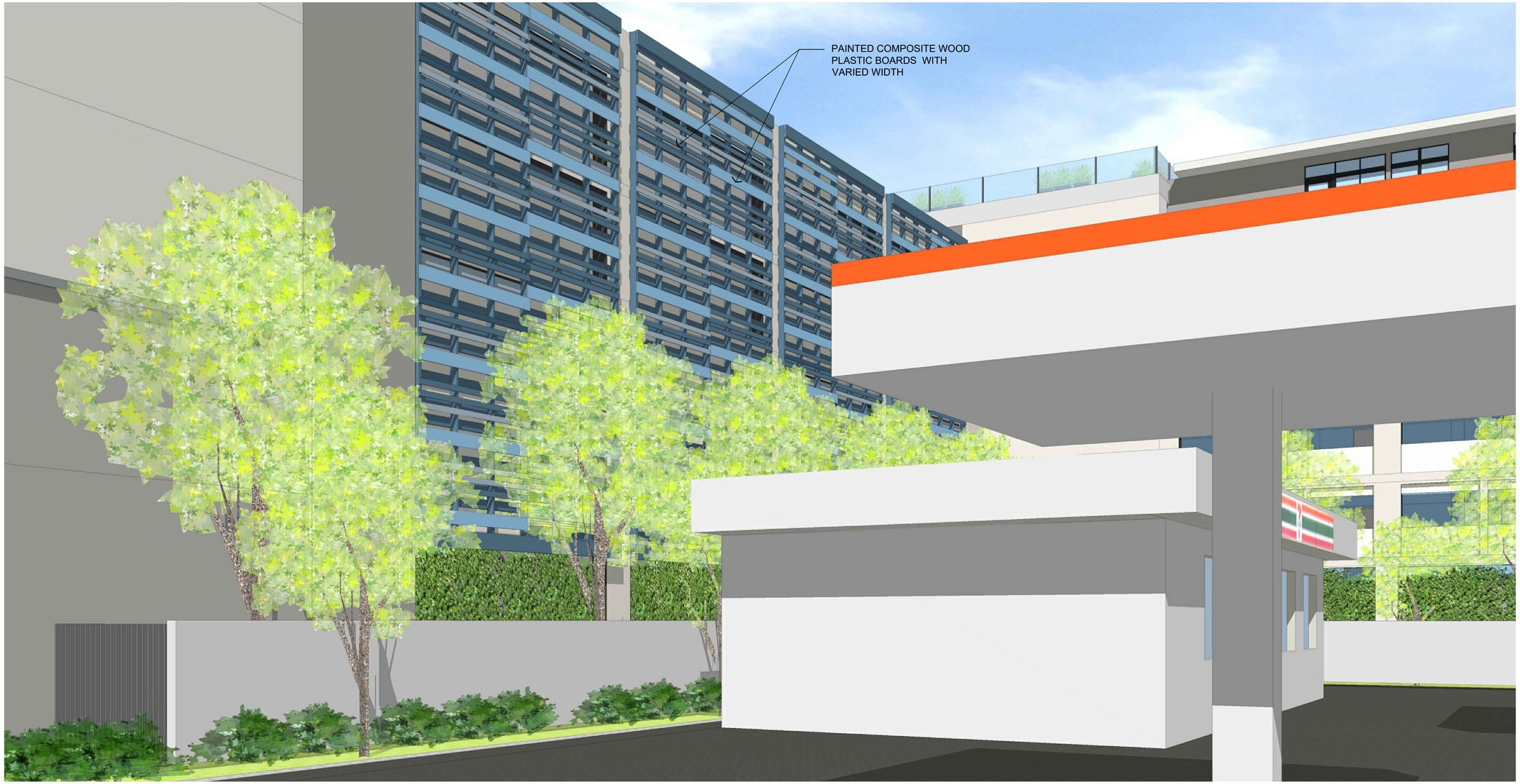
CONCEPT VIEW

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.

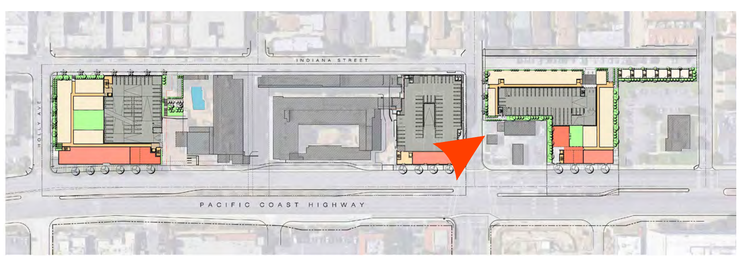
Pacific Coast Commons

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Job No. B7093 SD-MP-06
Revised Date.10.28.2021



VIEW ON MARIPOSA LOOKING AT PCC-NORTH PARKING GARAGE



KEY PLAN
NOT TO SCALE

CONCEPT VIEW

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons

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Revised Date.10.28.2021



PCC NORTH - NORTH EAST AERIAL VIEW AT TOWNHOMES



KEY PLAN
NOT TO SCALE

CONCEPT VIEW

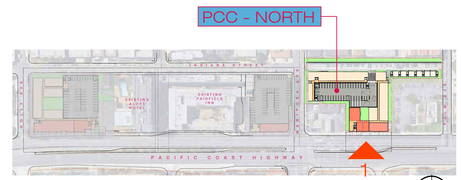
BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons

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Job No. B7093 SD-MP-06
Revised Date.10.28.2021



EAST ELEVATION 1



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

scale: 1" = 10'-0"

0 10 20 30 40

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Job No. B7093 SD-NO-07

Revised Date.10.28.2021



SOUTH ELEVATION ②



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

scale: 1" = 10'-0"

0 10 20 30 40

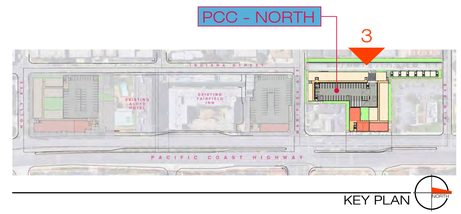
WM WITHEE MALCOLM ARCHITECTS
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Job No. B7093 SD-NO-08

Revised Date.10.28.2021



WEST ELEVATION ③



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

scale: 1" = 10'-0"

0 10 20 30 40

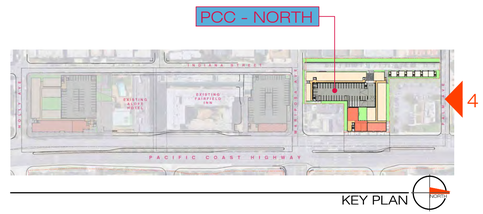
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Job No. B7093 SD-NO-09

Revised Date.10.28.2021



NORTH ELEVATION 4



KEY PLAN

ELEVATION

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

scale: 1" = 10'-0"

0 10 20 30 40

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Job No. B7093 SD-NO-10

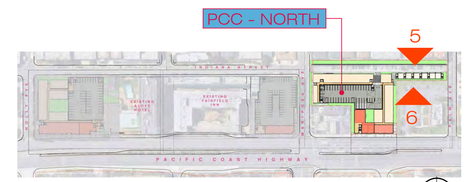
Revised Date.10.28.2021



WEST ELEVATION (5)



EAST ELEVATION (6)



KEY PLAN

ELEVATIONS

BRE HOTELS & RESORTS

CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

scale: 1" = 10'-0"

0 10 20 30 40

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Job No. B7093 SD-NO-11

Revised Date.10.28.2021



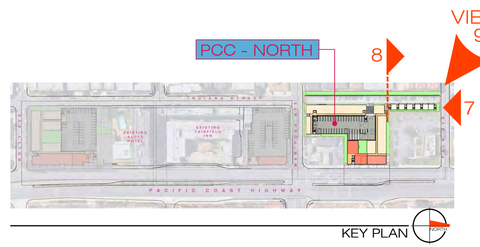
SOUTH ELEVATION 8



NORTH ELEVATION 7



VIEW AT TOWN HOMES 9



KEY PLAN

ELEVATIONS

BRE HOTELS & RESORTS

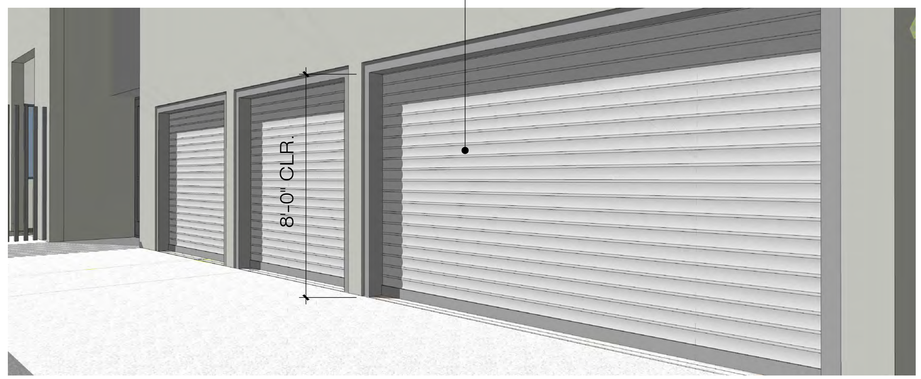
CONTINENTAL DEVELOPMENT CORPORATION

Mar Ventures, Inc.

Pacific Coast Commons NORTH

WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com

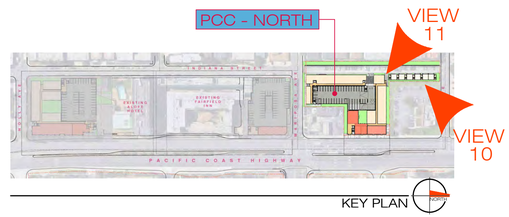
Job No. B7093 SD-NO-12
Revised Date.10.28.2021



VIEW AT TRASH ROOM (11)



DETAIL VIEW AT TOWN HOMES (10)



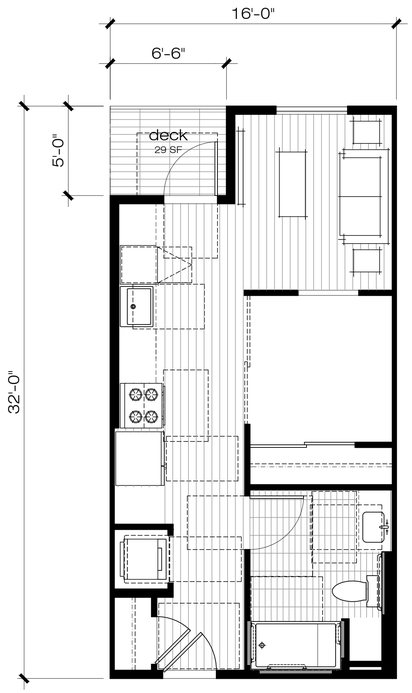
KEY PLAN

ELEVATIONS

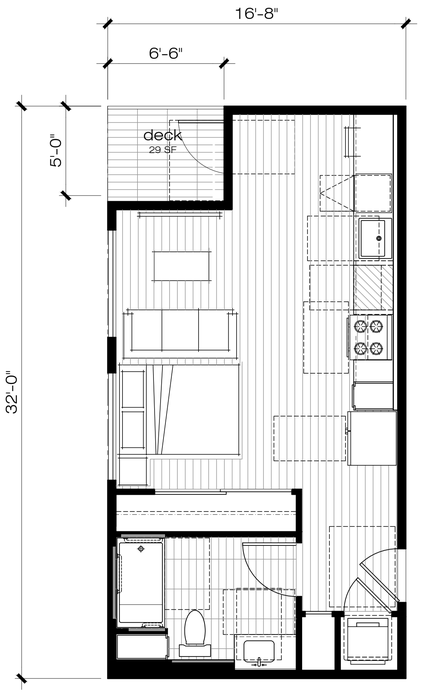
BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

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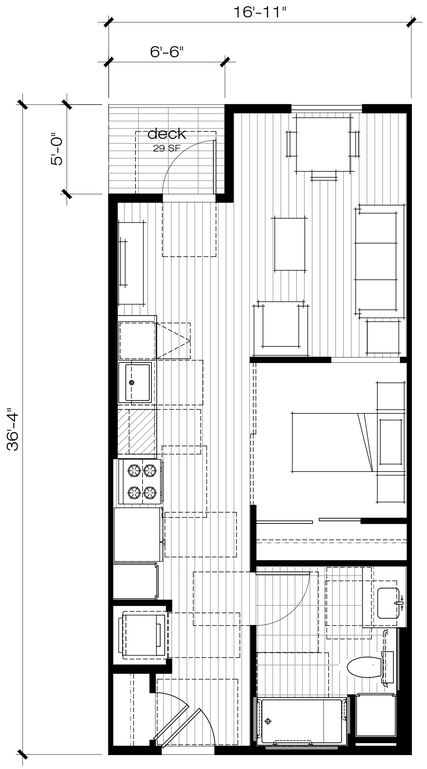
Job No. B7093 SD-NO-13
Revised Date.10.28.2021



UNIT - S1
Studio
Gross Area: 479 SF



UNIT - S2
Studio
Gross Area: 500 SF



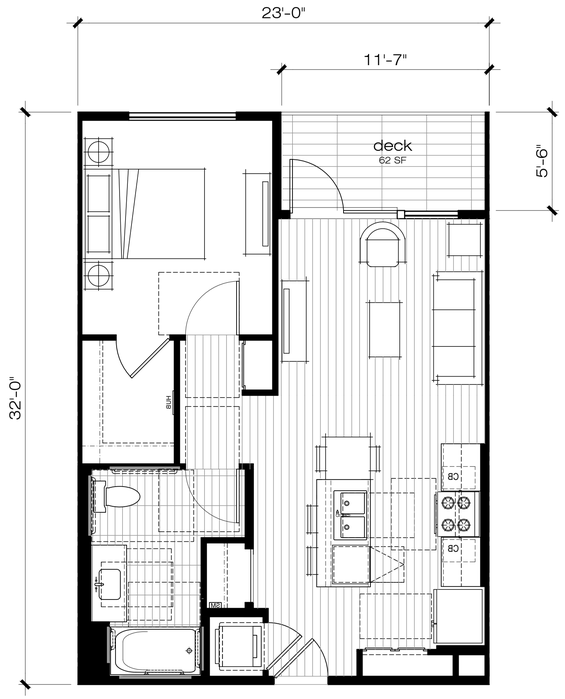
UNIT - S3
Studio
Gross Area: 582 SF

UNIT PLANS

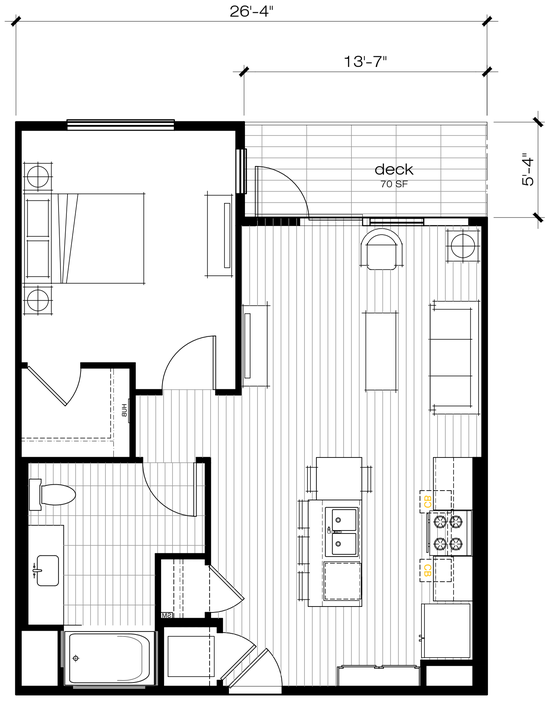
BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

1/4" = 1'-0"
0 4 8 12

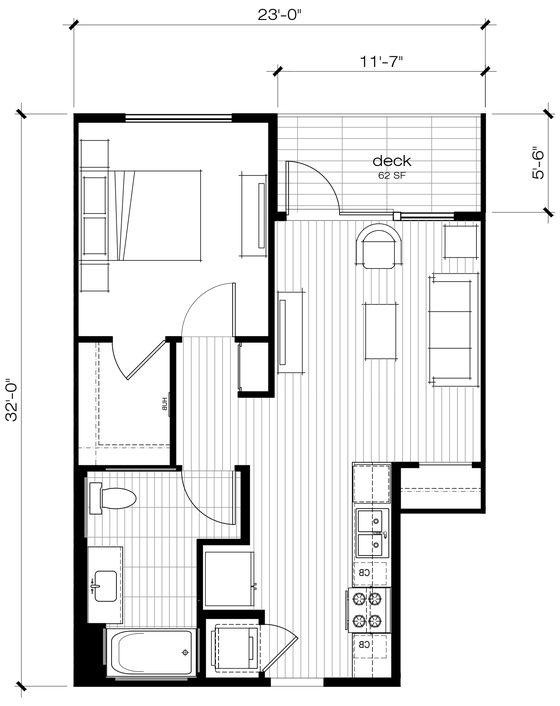
WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com
Job No. B7093 SD-NO-14
Revised Date.10.28.2021



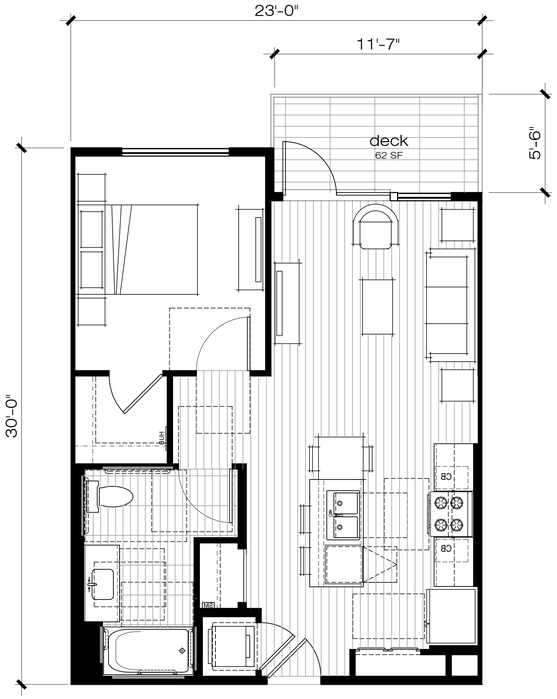
UNIT - A1
One Bedroom
Gross Area: 668 SF



UNIT - A2
One Bedroom
Gross Area: 809 SF



UNIT - A3
One Bedroom
Gross Area: 656 SF



UNIT - A4
One Bedroom
Gross Area: 658 SF

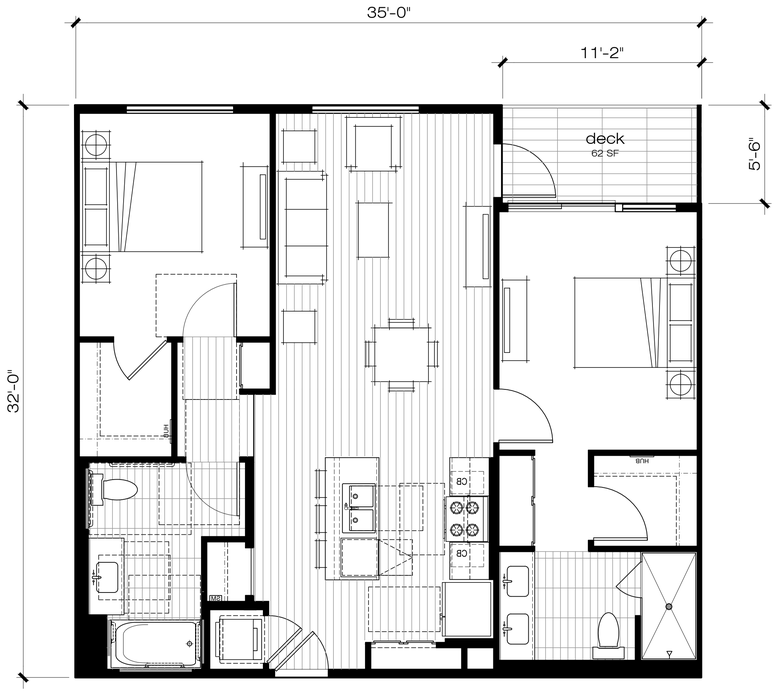
UNIT PLANS

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

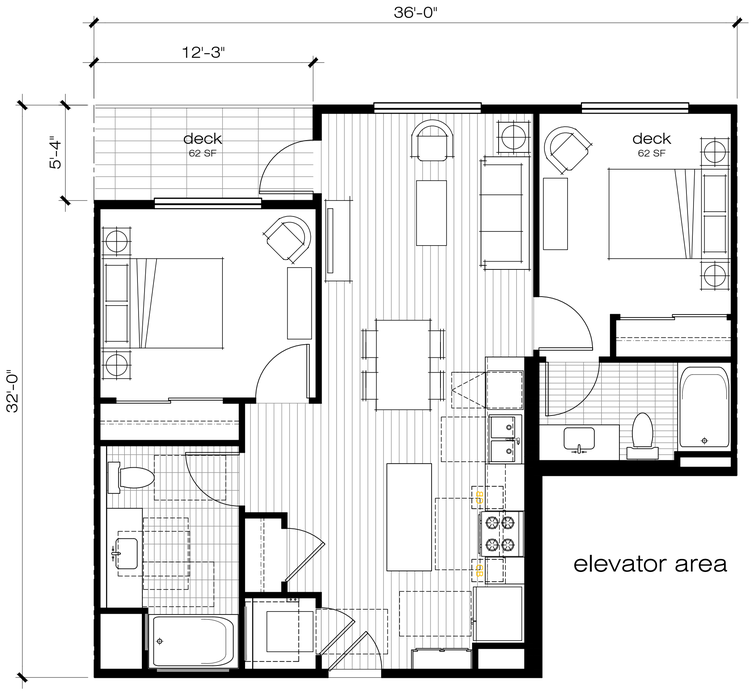
1/4" = 1'-0"
0 4 8 12

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Job No. B7093 SD-NO-15
Revised Date.10.28.2021



UNIT - B1
Two Bedroom
Gross Area: 1058 SF



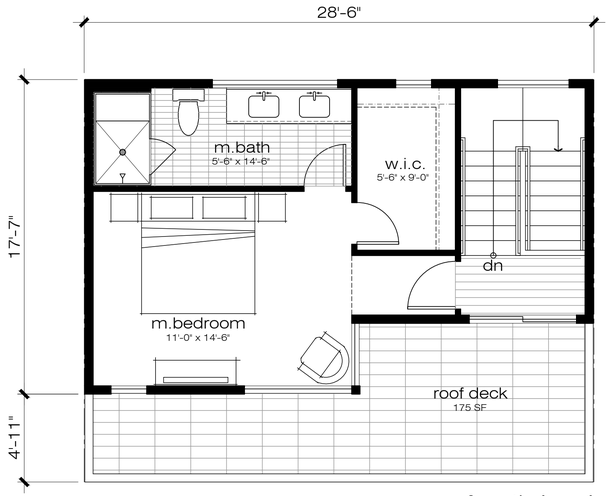
UNIT - B2
Two Bedroom
Gross Area: 982 SF

UNIT PLANS

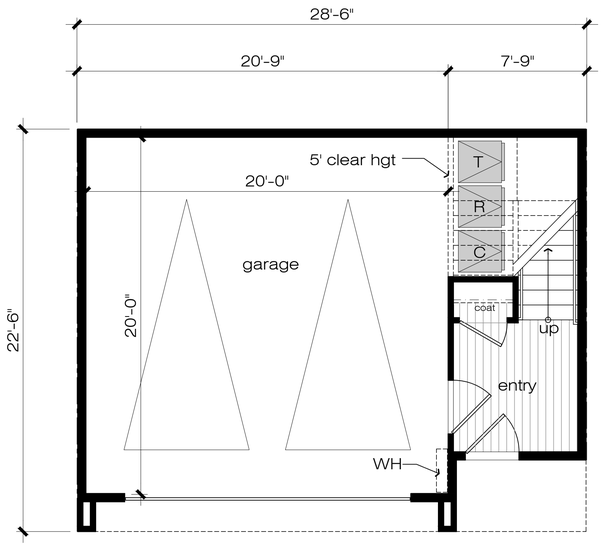
BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

1/4" = 1'-0"
0 4 8 12

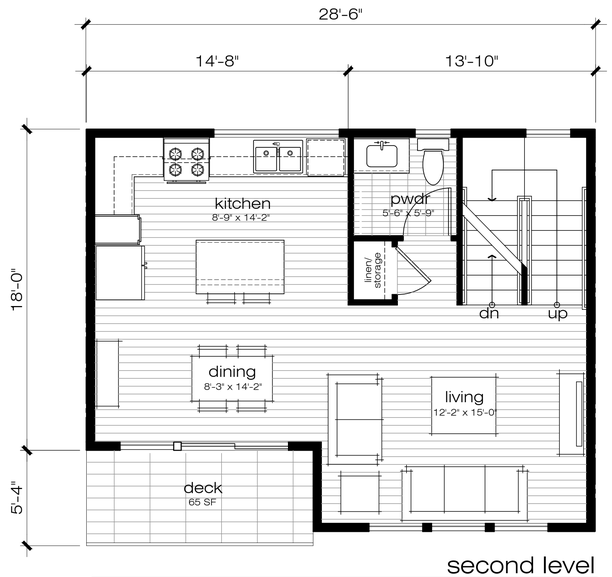
WITHEE MALCOLM ARCHITECTS
2251 west 190th street | torrance | ca 90504 | 310.217.8885 | witheemalcolm.com
Job No. B7093 SD-NO-16
Revised Date.10.28.2021



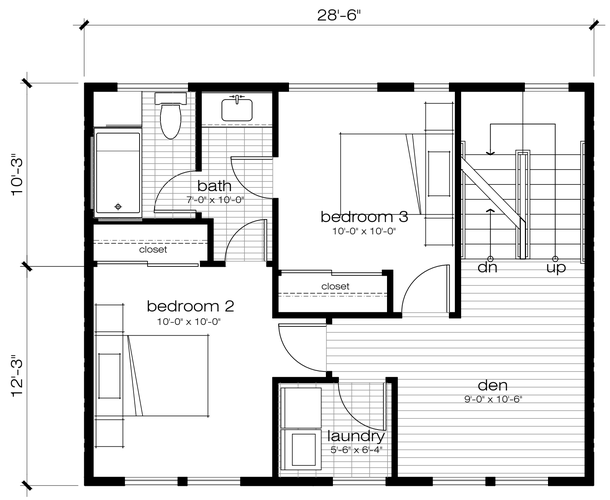
fourth level



first level



second level



third level

TOWNHOME - 1
3 Bedroom + Den
Gross Area: 1,724 SF
Roof Deck : 175 SF

UNIT PLANS

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

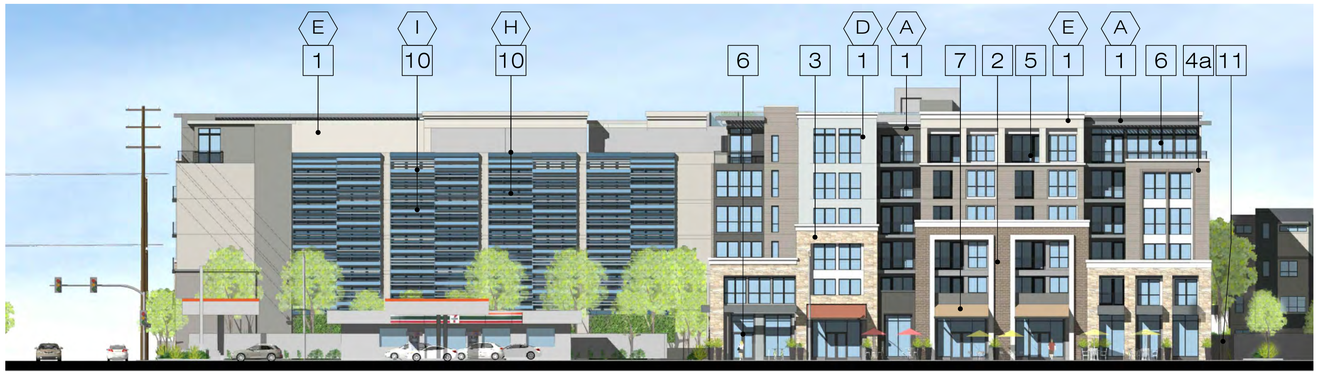
1/4" = 1'-0"
0 4 8 12

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Job No. B7093 SD-NO-17
Revised Date.10.28.2021



PCC NORTH - TOWNHOMES WEST ELEVATION



PCC NORTH - PACIFIC COAST HWY ELEVATION

TRIM COLORS

F HIGH REFLECTIVE WHITE
SW7757

G TRICORN BLACK
SW6258

COMPOSITE WOOD COLORS

H EVENING BLUE
James Hardie or Appr. equal

I BOOTHBAY BLUE
James Hardie or Appr. equal

MAIN COLORS

A PEPPERCORN
SW7674

B CITYSCAPE
SW7067

C CRUSHED ICE
SW7647

D REPOSE GRAY
SW7015

E WINDFRESH WHITE
SW7628

F RHINOCEROS
DUNN EDWARD
6327



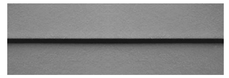
1 STUCCO
20 / 30 Sand Finish



2 BRICK VENEER
Dark Brown Smooth



3 MANUFACTURED
Mountain Ledge



4a LAP SIDING
Smooth Finish -Gray Slate



4b LAP SIDING
Smooth Finish -Night Gray



5 METAL GUARDRAIL



11 METAL FENCE



12 TYPICAL METAL ROLL-UP TRASH ROOM DOOR



6 VINYL WINDOW
Bronze



7 FABRIC AWNING



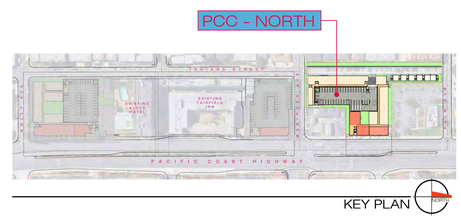
8 GENERAL STOREFRONT



9 GARAGE DOOR



10 COMPOSITE PANELS FOR PARKING GARAGE FACADE



MATERIAL BOARD

BRE HOTELS & RESORTS
CONTINENTAL DEVELOPMENT CORPORATION
Mar Ventures, Inc.
Pacific Coast Commons NORTH

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Job No. B7093 SD-NO-18
Revised Date.10.28.2021

Arbutus ‘Marina’
Strawberry Tree
20’ height

Arbutus ‘Marina’
Strawberry Tree
20’ height

Koelreuteria bipinnata
Chinese Flame Tree
35’ height

Vines on existing building
walls

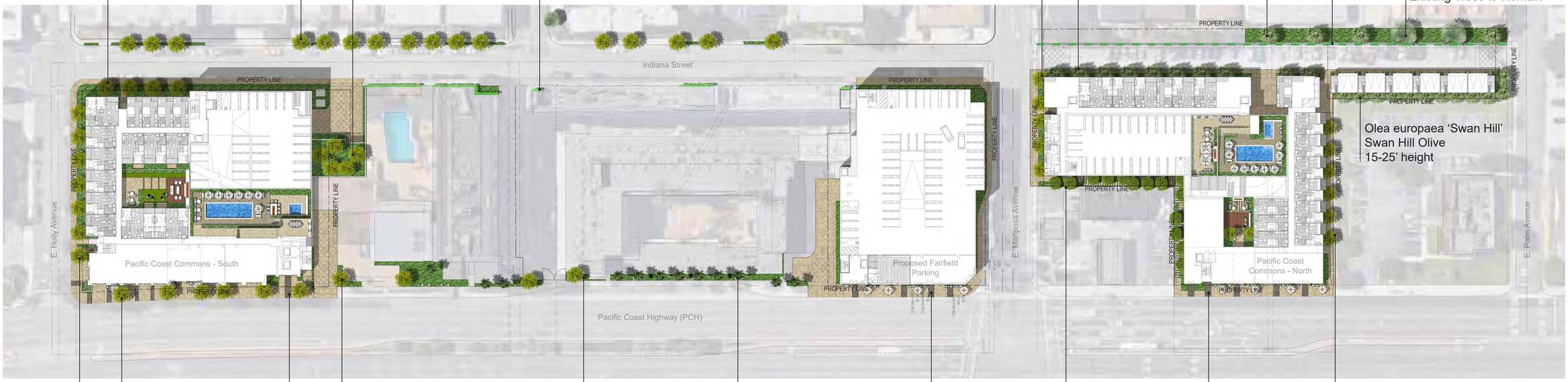
Arbutus ‘Marina’
Strawberry Tree
20-30’ height

Olea europaea ‘Swan Hill’
Swan Hill Olive
15-25’ height

Olea europaea ‘Swan Hill’
Swan Hill Olive
15-25’ height

Ficus pumila
Fig Ivy (on existing block wall)

Existing Trees to Remain



Cercis canadensis
‘Forest Pansy’
Forest Pansy Redbud
20’ height

Lagerstroemia indica
Crape Myrtle
25’ height

enhanced paving

Pistacia chinensis
Chinese pistache
40’ height

single occupancy
seating, typ

existing Washingtonia robusta
(Mexican Fan Palm) to remain
in place

enhanced paving

Lophostemon confertus
Brisbane Box
40-50’ height

enhanced paving

Ulmus parvifolia ‘Drake’
Chinese Elm
40-50’ height

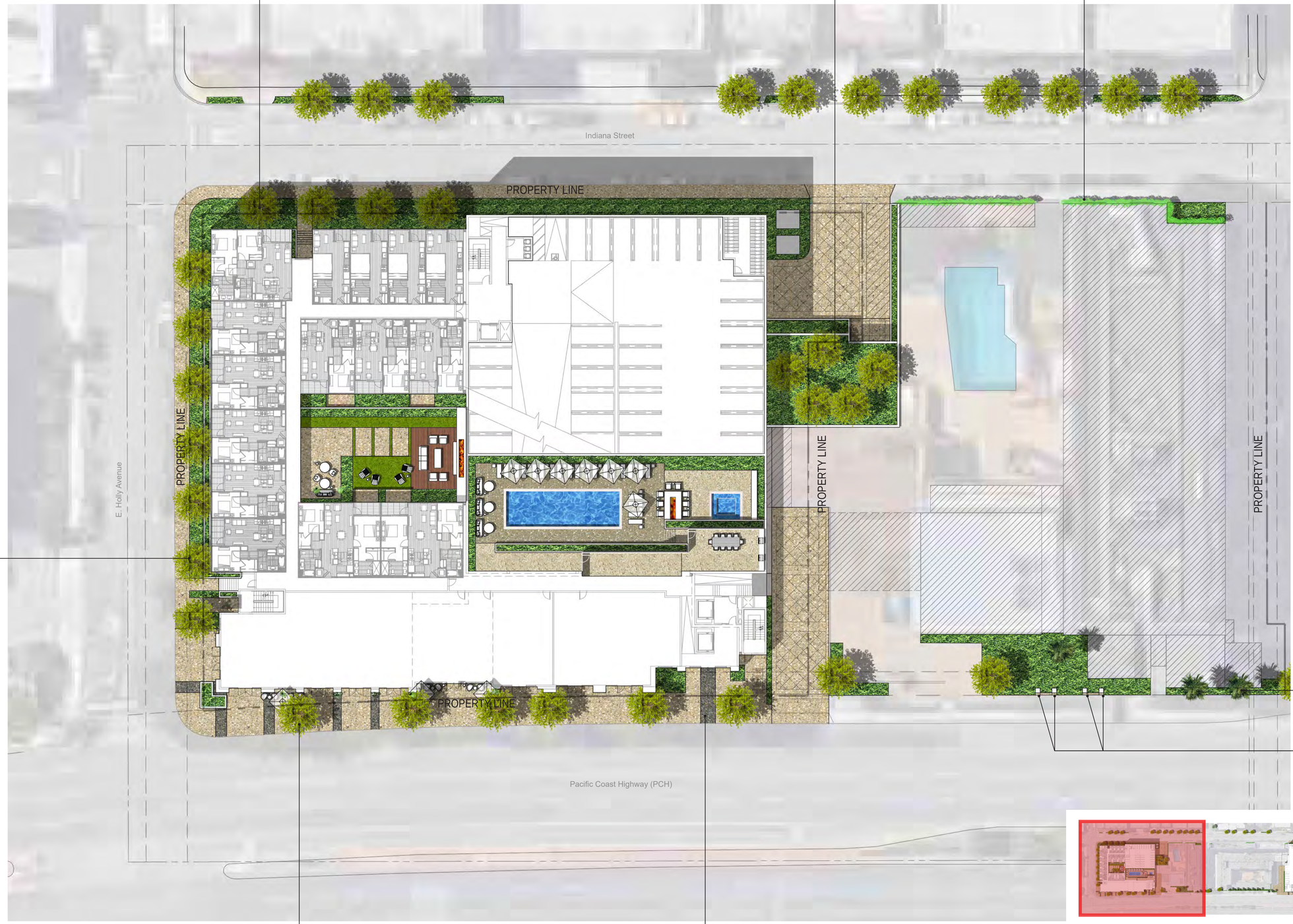
SCALE: 1"=50'-0"

OCTOBER 19, 2021

Arbutus ‘Marina’
Strawberry Tree
20 total along Indiana Street

Koelreuteria bipinnata
Chinese Flame Tree
3 total this location

Vines on existing building walls



Cercis canadensis
‘Forest Pansy’
Forest Pansy Redbud
7 total along E. Holly Avenue

existing Washingtonia robusta (Mexican Fan Palm) to remain in place

single occupancy seating, typ.
4 total (2 seats per seating area)

Lagerstroemia indica
Crape Myrtle
6 total along PCH

enhanced paving



KEY MAP

SCALE: 1"=20'-0"

OCTOBER 19, 2021

existing tree to remain in place

Arbutus ‘Marina’
Strawberry Tree
5 total along Indiana Street

Vines on existing building walls

existing Washingtonia robusta (Mexican Fan Palm) to remain in place

Indiana Street

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

E. Mariposa Avenue

Pacific Coast Highway (PCH)

Pistacia chinensis
Chinese pistache
2 total along PCH

single occupancy seating, typ.
4 total (2 seats per seating area)

single occupancy seating, typ.
4 total (2 seats per seating area)

enhanced paving



KEY MAP

SCALE: 1"=20'-0"

OCTOBER 19, 2021

Olea europaea ‘Swan Hill’
Swan Hill Olive
10 total along Indiana Street

Olea europaea ‘Swan Hill’
Swan Hill Olive
4 total

Ficus pumila
Fig Ivy
(to grow on existing block wall)

Existing Trees to Remain
2 total

Arbutus ‘Marina’
Strawberry Tree
5 total along E. Mariposa Avenue



Lophostemon confertus
Brisbane Box
14 total along parking structure and building edge

Ulmus parvifolia ‘Drake’
Chinese Elm
6 total along north building face



KEY MAP

SCALE: 1"=20'-0"

OCTOBER 19, 2021

4 PLANT PALETTE

STREET TREES

CONCEPT PLANT PALETTE

Street or parkway trees to be selected from El Segundo's Parkway Tree Palette or otherwise approved by El Segundo Recreation & Parks plan check engineer.



CERCIS CANADENSIS
'FOREST PANSY'
Forest Pansy Redbud



ARBUTUS MARINA
Strawberry Tree



GEIJERA PARVIFOLIA
Australian Willow



KOELREUTERIA BIPINATA
Chinese Flame Tree



LAGERSTROEMIA INDICA
'NATCHEZ'
Natchez Crape Myrtle



PISTACHIA CHINENSIS
Chinese Pistache



TRISTANIA CONFERTA
Brisbane Box

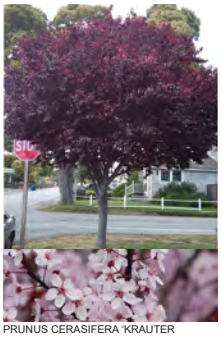
4 PLANT PALETTE

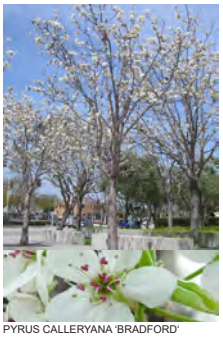
TREES

CONCEPT PLANT PALETTE

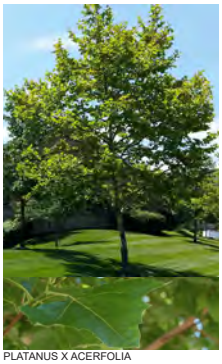
Designers may choose plants that are not on this list but have matching characteristics to maintain the look and feel of this concept palette. Selecting regionally appropriate plants and the consideration of climate and microclimate adaptability is the responsibility of the designer.


GEIJERA PARVIFOLIA
australian willow


PRUNUS CERASIFERA 'KRAUTER VESUVIUS'
krauter vesuvius purple leaf plum


PYRUS CALLERYANA 'BRADFORD'
bradford pear


OLEA EUROPAEA 'SWAN HILL'
fruitless olive

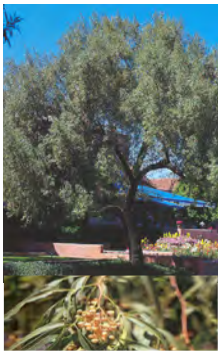

PLATANUS X ACERFOLIA
london plane tree


CERCIDIUM X 'DESERT MUSEUM'
desert museum

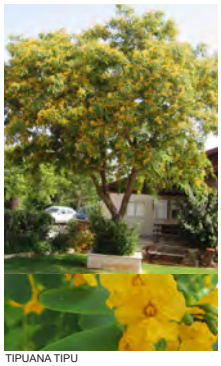

KOELREUTERIA BIPINATA
chinese flame tree


KOELREUTERIA PANICULATA
goldenrain tree

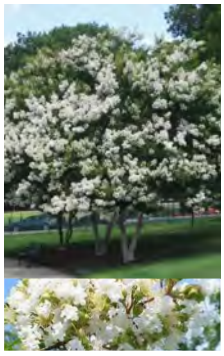

ARBUTUS MARINA
strawberry tree


RHUS LANCEA
african sumac


ULMUS PARVIFOLIA 'DRAKE'
chinese elm


TIPUANA TIPU
tipu tree

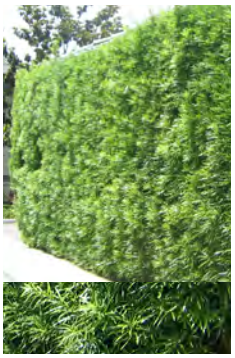

PODOCARPUS GRACILIOR
fern pine


LAGERSTROEMIA INDICA 'NATCHEZ'
natchez crape myrtle

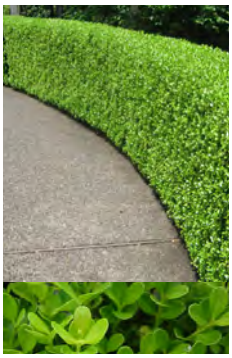
4 PLANT PALETTE

HEDGES AND SHRUBS

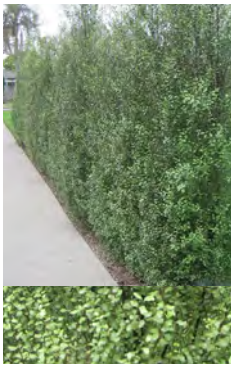

PITTOSPORUM CRASSIFOLIUM
karo


PODOCARPUS GRACILIOR
fern pine

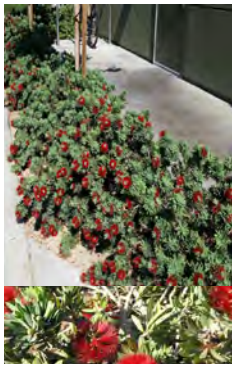

LIGUSTRUM JAPONICUM 'TEXANUM'
texas privet


BUXUS MICROPHYLLA JAPONICA
japanese boxwood


FICUS NITIDA
indian laurel fig


PITTOSPORUM TENUIFOLIUM 'SILVER SHEEN'
silver sheen kohuhu


DIANELLA CAERULEA 'CASSA BLUE'
blue flax lily

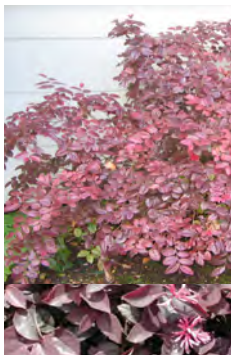

CALLISTEMON 'LITTLE JOHN'
little john bottlebrush


AGAVE ATTENUATA
foxtail agave

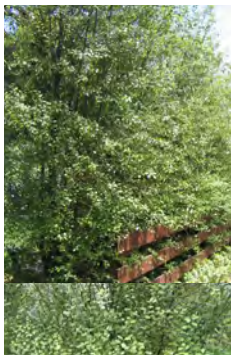

ALOE ARBORESCENS
torch aloe

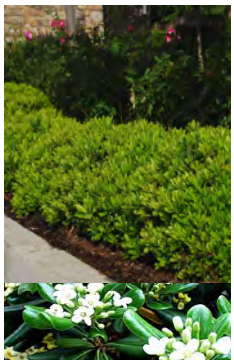

KALANCHOE THRYSIFLORA
paddle plant


LIRIOPE GIGANTEA
big blue lilly turf


LOROPETALUM CHINESE 'RAZZLEBERRI'
razzleberri fringe flower


MYOPORUM PACIFICUM
myoporum


PITTOSPORUM 'SILVER SHEEN'
kohuhu 'Silver Sheen'


PITTOSPORUM TOBIRA 'WHEELER'S DWARF'
wheeler's dwarf tobira


AGAVE AMERICANA
century plant


AGAVE 'BLUE FLAME'
blue flame agave


DIETES BICOLOR
fortnight lily


ROSA 'ICEBERG'
iceberg rose

4 PLANT PALETTE

SHRUBS AND VINES



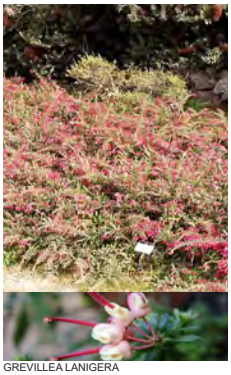
FURCREA FOETIDA 'MEDIOPICTA'
furcrea



ROSMARINUS OFFICINALIS 'PROSTRATUS'
trailing rosemary



WESTRINGIA FRUTICOSA 'MORNING LIGHT'
coast rosemary



GREVILLEA LANIGERA
prostrate wooly grevillea



DIANELLA TASMANICA 'VARIEGATA'
white striped tasman flax lily



AEONIUM SPP



ASPARAGUS DENSIFLORUS 'MYERS'
foxtail fern



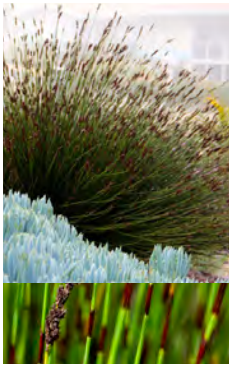
SANSEVIERIA TRIFASCIATA 'LAURENTII'
striped mother-in-laws tongue



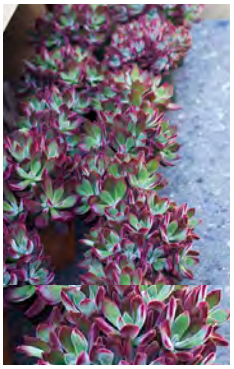
PHILODENDRON 'XANADU'
winterbourne philodendron



RHOEO SPATHACEA 'STRIPE ME PINK'
rhoeo strike me pink



CHONDROPETALUM TECTORUM
small cape rush



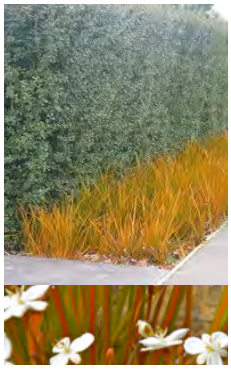
ECHEVERIA 'DEVOTION'
devotion echeveria



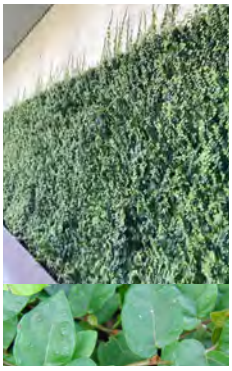
JUNCUS INFLEXUS
'BLUE ARROWS'
blue arrows rush



OLEA EUROPAEA 'MONTRA'
little ollie dwarf olive



LIBERTIA PEREGRINANS
orange libertia



FICUS PUMILA
creeping fig



SOLANDRA MAXIMA
cup of gold vine

4 PLANT PALETTE

GRASSES AND GROUNDCOVER



SENECIO SERPENS
dwarf blue senecio



TRACHELOSPERMUM JASMINOIDES
star jasmine



SEDUM SP
sedum



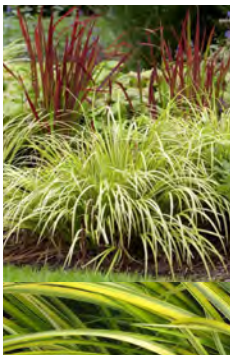
MYOPORUM PARVIFOLIUM
prostrate myoporum



CERASTIUM TOMENTOSUM
snow in summer



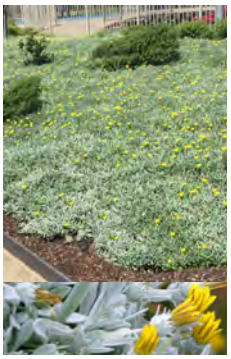
DYMONDIA MARGARETE
dymondia



ACORUS GRAMINEUS 'OGON'
golden variegated sweet flag



FESTUCA GLAUCA
blue fescue



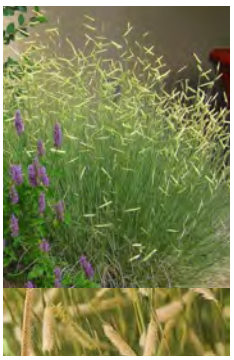
GAZANIA RIGENS 'TALENT'
treasure flower



SENECIO MANDRALISCAE
blue chalk sticks



LAWN



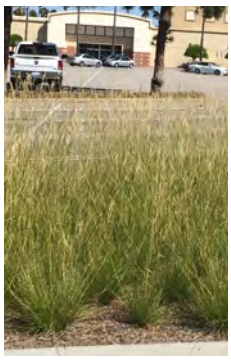
BOUTELOUA GRACILIS 'BLONDE AMBITION'
blonde ambition blue grama grass



CAREX DIVULSA
berkeley sedge



LOMANDRA LONGIFOLIA 'BREEZE'
dwarf mat rush



PENNISETUM SPATHIOLATUM
slender veldt grass

Exhibit No. 8

KEYSER MARSTON ASSOCIATES
ADVISORS IN PUBLIC/PRIVATE REAL ESTATE DEVELOPMENT

MEMORANDUM

ADVISORS IN:
Real Estate
Affordable Housing
Economic Development

BERKELEY
A. Jerry Keyser
Timothy C. Kelly
Debbie M. Kern
David Doezema
Kevin Feeney

LOS ANGELES
Kathleen H. Head
James A. Rabe
Gregory D. Soo-Hoo
Kevin E. Engstrom
Julie L. Romey
Tim R. Bretz

SAN DIEGO
Paul C. Marra

To: Paul Samaras, AICP, Principal Planner
City of El Segundo

From: James Rabe, CRE

cc: Jack Wong

Date: August 24, 2021

Subject: Development Feasibility Analysis – Pacific Coast Commons

Pursuant to your request, Keyser Marston Associates, Inc. (KMA) prepared an analysis of the development feasibility of the proposed Pacific Coast Commons Project (Project). KMA also reviewed the fiscal analysis prepared for the Project. The Project will be developed by Mar Ventures and Continental Development (Developer).

The Project is located on the west side of Pacific Coast Highway (PCH) between Holly Avenue and Palm Avenue in the City of El Segundo (City). The properties are currently developed with hotels, commercial buildings and surface parking lots. The proposed development will replace the surface parking lots and some of the obsolete commercial space with residential buildings that include some commercial space and structured parking.

PROJECT DESCRIPTION

The project is logically divided into two parts: the south site (PCC South) located at PCH and Holly Avenue; and the north site (PCC North & Fairfield) which covers the primarily residential project at PCH and Palm Avenue and the proposed parking structure at PCH and Mariposa Avenue. The properties include two existing hotels (Aloft and Fairfield Inn & Suites), which are not part of this analysis.

The PCC South component occupies approximately 1.24 acres. Developer proposes to build 120 rental residential units, 5,756 square feet of commercial space and 336 parking spaces in a parking structure, including spaces for the Aloft Hotel. The residential/commercial building is proposed to be six stories tall. The PCC North & Fairfield project covers approximately 2.53 acres. The project includes 137 rental residential units, six for sale townhouse units, 5,496 square feet of commercial space and 456 parking spaces in a parking structure, a portion of which is below grade. Some of the parking spaces are replacement parking spaces for the Fairfield Inn & Suites hotel.

The overall Project consists of 263 residential units, 11,252 square feet of commercial space and parking structures containing 792 parking spaces. The Developer has proposed to set aside 10% of the units (26 units) as affordable units. The Developer and the City are still in discussions as to whether these will be labeled as "State" moderate income units or "Federal" low-income units. In terms of the rents charged to tenants, there is little difference between the two designations. KMA has evaluated the Project as both an all-market rate project and as a project with 10% affordable units, assuming the Federal low-income rates.

FEASIBILITY ANALYSIS

In preparing this analysis, KMA has met with the City and the Developer. The Developer provided:

- Conceptual site plans and renderings
- Conceptual development costs and rents
- Conceptual pro forma
- Project market and fiscal reports

Independently, KMA reviewed project costs for a number of residential and mixed-use projects in Southern California and reviewed market rents and prices and unit sizes for apartment units and townhome units in the El Segundo market area.

For the feasibility analysis KMA evaluated the two components separately, as they could be independently developed. The market rate evaluation of PCC South is provided in Attachment 1 and the market rate evaluation of PCC North & Fairfield in Attachment 2.

The analysis conducted herein relies on the submittal from the Developer and our experience with other mixed-use developments in Southern California. The KMA analysis is presented in constant 2021 dollars. The KMA pro forma analysis is organized as follows:

- Table 1 - Estimated Development Cost
- Table 2 - Estimated Net Operating Income/Sales Revenue
- Table 3 - Estimated Project Surplus/(Feasibility Gap)

In the feasibility analysis, KMA first evaluated the projects as all-market rate projects to understand whether the overall project was feasible. KMA then evaluated the project assuming that 10% of the units were set aside for low-income tenants.[1] This evaluation was conducted to see if the project was still feasible and to indicate the "value lost" by including the affordable units.

Estimated Development Costs

The estimated development costs are shown in Table 1 of each attachment. After reviewing the conceptual development costs provided by the Developer, KMA prepared its pro forma based upon projected development costs for a number of residential projects currently in planning or development. The projects ranged from all-market rate projects to 100% affordable projects. Most projects include a limited amount of commercial space.

In general, the projects are similar in construction type – multi story buildings with structured or subterranean parking. There are differences in unit mix with a number of the projects being family projects (primarily two and three bedroom). The family projects were nearly all 100% affordable projects and are subject to prevailing wage requirements.

The site is currently developed with two hotels, commercial space and surface parking lots. The two hotels will remain. The proposed development will occur primarily on the surface parking lots, although some of the existing commercial space will be

[1] The low-income rents utilized were the Federal low-income rates. These are approximately the same as the State of California moderate income rates.

demolished. This results in construction and development inefficiencies, which increase the overall costs of the projects compared to projects developed on cleared sites. The key direct cost assumptions are shown in Table 1 and described below:

1. KMA used the Developer's estimates for offsite improvements ($600,000 per site) and demolition ($600,000 for PCC North & Fairfield and $250,000 for PCC South).

2. KMA estimated sitework costs at $25 per square foot of land on the PCC South site and $20 per square foot for the PCC North & Fairfield site. These assumptions are consistent with other projects but are less than the Developer estimates of $52 per square foot for PCC south and $38 per square foot for PCC North & Fairfield.

3. Parking costs are estimated at $33,000 per space for the PCC South site and $30,000 per space for the PCC North & Fairfield site. The subterranean parking level on the PCC South site increases its cost per space. These assumptions are consistent with other projects but are less than the Developer estimates of approximately $39,000 per space for PCC South and $36,700 for PCC North & Fairfield.

4. Building costs are estimated at $190 per gross square foot for the PCC South project and $200 per gross square foot for the PCC North & Fairfield project. These assumptions are consistent with other projects but are less than the Developer estimates of $211 per gross square foot tor PCC South and $204 per gross square foot for PCC North & Fairfield.

5. Tenant improvement costs for the retail space are estimated at $60 per square foot.

6. Contractor fees, insurance costs and contingency allowance are assumed at 12%, 2.0% and 5.0%, respectively.

7. The architecture, engineering and consultant costs are estimated at 7.0% of direct costs, which is consistent with industry standards.

8. Based on information provided by the Developer, the permits and fees are estimated at $2.8 million for PCC South and $3.3 million for PCC North & Fairfield.

9. The taxes, insurance, legal and accounting costs are estimated at 2.0% of direct costs, which is within the range of typical costs (1.0% to 3.0%).

10. Typical development management fees range from 3% to 5% of direct costs. Given the large-scale of the overall Project, a 3.5% development management fee is assumed.

11. A standard contingency allowance of 5% of indirect costs is assumed.

12. The capitalized financing costs are estimated at nearly $2.8 million for the PCC South project and nearly $3.5 million for the PCC North & Fairfield project.

Overall project costs are shown below.

	PCC South	**PCC North & Fairfield**	**Total**
Direct Costs	$49,652,000	$64,000,000	$113,652,000
Indirect Costs	10,137,000	12,654,000	22,791,000
Financing Costs	2,804,000	3,460,000	6,264,000
Total Costs	$62,593,000	$80,114,000	$142,707,000

Total overall development cost for the PCC South component is nearly $62.6 million and over $80.1 million for the PCC North & Fairfield component for a total cost of $142.7 million. KMA believes the construction costs are reasonable for a project of this type to move forward.

The development cost information provided by the Developer was significantly higher than the KMA estimates. The Developer's estimate of total costs was $155.7 million. The Developer's conceptual development costs seem high and KMA expects that they will decline if the project moves forward.

Estimated Net Operating Income

The estimates of stabilized net operating income are shown in Table 2 of Attachments 1 and 2. The stabilized net operating income is estimated assuming a project is 95% occupied and is equal to total rent less total operating expenses.

In evaluating the market for the project KMA reviewed the Developer's pro forma, a market study prepared for the Developer, information included in the fiscal analysis prepared for the Developer and our own research of market rents in the El Segundo area. There is very little new rental product in the City, so the market area was expanded to include portions of the Cities of Los Angeles and Inglewood that are adjacent/near El Segundo even though their locations are inferior to this site. Average rents by unit type are shown below:

Unit Type	Monthly Rent	Rent per SF
Studio	$2,160	$3.76
One Bedroom	$2,469	$3.19
Two Bedroom	$3,160	$3.04

The above rents are averages for the larger market area. The various market analyses recognize that new rental product at this location will justify higher rents than the averages for existing product. In addition, the proposed units are being developed at a higher quality than the existing units in the area. As a result, KMA estimated the following rents for the projects.

Unit Type	PCC South Monthly Rent	PCC North & Fairfield Monthly Rent
Studio	$2,710	$2,804
One Bedroom	$3,217	$3,125
Two Bedroom	$4,283	$4,283

For this analysis KMA assumed miscellaneous revenues at $25 per unit and vacancy at 5.0% of revenues. Operating expenses including management and property taxes were estimated at $11,250 per unit. Residential apartment net operating income was estimated at $3,122,400 for PCC South and $3,510,000 for PCC North & Fairfield.

The nominal amount of retail space adds $202,400 of net income for PCC South (5,756 SF) and $193,100 of net income for PCC North & Fairfield (5,496 SF). Total stabilized net operating income for PCC South is $3,324,800 and $3,703,100 for PCC North & Fairfield, as shown in Table 2 of each Attachment.

Estimated Townhouse Sales Value

The PCC North & Fairfield component also include six for sale townhouse units. The proposed units are 1,590 square foot, three-bedroom units. Estimated price is $1,300,000 or nearly $820 per square foot. Gross sales revenues are estimated at $7,800,000. After allowing 6.0% of value for commissions and closing costs, the townhouses provide $7,332,000 of value to the Project.

Estimated Project Surplus/(Feasibility Gap)

The analysis of project feasibility is provided in Table 3 of Attachments 1 and 2. The evaluation compares the value of the completed project to the development costs, including an allowance for a reasonable developer profit. The remainder, in this case, represents what the developer can afford to pay for the site.

1. The NOI for the PCC South site is $3,324,800 and the PCC North & Fairfield site is $3,510,000.

2. Typical capitalization rates for apartment projects range from 4.0% to 5.5%, depending on location and quality level. The analysis utilizes a 4.5% capitalization rate reflecting a strong market and good location.

3. The projected value of the PCC South site at completion is $73,884,000 and the PCC North & Fairfield value is $82,291,000. The PCC North & Fairfield project has additional value from the townhouse units of $7,332,000 for a total value of $89,623,000.

From these amounts KMA deducts a 9% profit margin and the total development costs to derive a supportable land value.[2] This is the amount a developer would pay to the landowner to move forward with a project.

[2] Developers typically target a profit margin of between 8.0% and 10.0% of project value.

	PCC South	PCC North & Fairfield
Project Valuation	$73,884,000	$89,623,000
Less profit @ 9% of value	(6,650,000)	(8,066,000)
Less Development Costs	(62,593,000)	(80,114,000)
Supportable Land Value	$4,641,000	$1,443,000

The PCC South component has a supportable land value of approximately $4.6 million, while the PCC North & Fairfield component can support approximately $1.4 million for a total of nearly $6.1 million. The PCC North & Fairfield project is less profitable in part due to the less efficient parking structure required to provide replacement parking for the Fairfield Inn & Suites.

AFFORDABLE HOUSING

As noted at the beginning of this memorandum the Developer proposed to set aside 10% of the units to be affordable units. The Developer indicated that these units would be "workforce" units. For purposes of this analysis, KMA assumed that these units would be priced as low-income units using the Federal definition of low income.[3] Affordable rents are: Studio - $1,612 per month; One-bedroom - $1,716 per month; Two-bedroom - $2,055 per month. Also, KMA reduced the vacancy factor from 5% to 4% to reflect the lower turnover of affordable units.

The Developer proposed the following mix of affordable units at each site:

Unit Type	PCC South	PCC North & Fairfield
Studio	10 units	11 units
One Bedroom	1 unit	2 units
Two Bedroom	1 unit	1 unit

[3] The federal low-income limits are approximately the same as the California moderate income limits. These rents are net of utility costs.

The inclusion of the affordable units substantially reduces the value of the completed projects and what the Developer can pay for land, as shown below.

	PCC South	PCC North & Fairfield
Project Valuation	$71,164,000	$86,156,000
Less profit @ 9% of value	(6,405,000)	(7,754,000)
Less Development Costs	(62,563,000)	(80,076,000)
Supportable Land Value	$2,196,000	($1,674,000)

The inclusion of the affordable housing reduces the gross building value of the PCC South site by approximately $2.7 million and the value of the PCC North & Fairfield site by nearly $3.5 million for a total building value loss of approximately $6.2 million. The profit projected for the Developer and financing costs also decline somewhat. As a result, the overall supportable land value declines by $5.56 million to $522,000.

FISCAL ANALYSIS REVIEW

The Developer provided an initial fiscal analysis prepared by Stanley Hoffman Associates (SHA), dated June 8, 2020. KMA reviewed this report and identified several cost items that were overlooked and several underlying assumptions with which we disagreed. We discussed these issues with SHA. SHA issued a new report, dated April 23, 2021. This report incorporated most of KMA's comments and was updated to use the 2020-21 City Budget and updated employment and population estimates.

KMA reviewed the updated version and believes that it provides a reasonable estimate of the fiscal impact that the project will have on the City. The SHA report estimates that the Project (with the affordable housing units) will generate approximately $273,500 in annual City revenues but will incur approximately $401,200 in annual City service costs for a net annual cost to the City of approximately $127,600.

CONCLUSION

The City requested KMA undertake an independent review of the proposed overall project. The Developer proposed to intensify the development on three parcels that front on PCH between Holly Avenue and Palm Avenue. The properties are currently developed with hotels commercial buildings and surface parking lots.

KMA examined the overall feasibility of the project as both an all-market project and a project with 10% of the units set aside for 'workforce" housing assuming the federal low income rent limits. As part of its analysis KMA reviewed development costs, market rents and return and valuation requirements. As a result of our analysis KMA estimated that the all-market version of the Project can support a nearly $6.1 million land payment, indicating that this version of the project is feasible.

On the other hand, the version of the Project that includes 10% affordable housing is more problematic. The inclusion of the affordable units reduces the value of the overall project by nearly $5.5 million, which reduces the supportable land value to $522,000. This may still represent a feasible project provided the Developer and landowner can come to an agreement on price.

The Developer's conceptual analysis did not value the Project at completion. Instead, they prepared an equity cash flow projection of the project with the 10% affordable units. Using this methodology, KMA would expect to see equity internal rates of return between 15% and 20% for this type of project. The Developer's projections were significantly below that. Using the KMA methodology and the Developer's costs estimates, the Project cannot support any land value and instead shows a $24.6 million loss.

KMA also reviewed the fiscal analysis submitted by the Developer. It is KMA's opinion that the most recent submittal by the Developer's consultant provides a reasonable estimate of the Project's fiscal impact on the City. The Project with 10% affordable housing is projected to have a net annual cost to the City of approximately $127,600.

Attachments

TABLE 1

CONSTRUCTION COST COMPARISON
PCC NORTH AND SOUTH

	PCC SOUTH		PCC NORTH & FAIRFIELD	
Project Description				
Land Area	1.24	Acres	2.53	Acres
Gross Building Area	146,550	SF GBA	180,245	SF GBA
Unit Mix				
Studio Units	44	Units	47	Units
1-Bdrm Units	52	Units	67	Units
2-Bdrm Units	24	Units	23	Units
3-Bdrm Units		Units	0	Units
Total Apartment Units	120	Units	137	Units
Townhouse Units			6	Units
Average Unit Size	698	SF	730	SF
Commercial Space	5,756	SF	5,496	SF
Rentable Building Aea	89,540	SF	109,877	SF
RBA / GBA Ratio	0.61		0.61	
Density	97		54	
FAR	2.71		1.63	
Parking Type	Structure - above & below grade		Structure - above grade	
Parking Spaces	336	Spaces	456	Spaces
Prevailing Wage Premium included	No		No	
Direct Costs				
Demolition	$250,000	$4.63/SF Land	$600,000	$5.44/SF Land
Offsite Improvements	$600,000	Allowance	$600,000	Allowance
Onsite Improvements	$1,352,000	$25/Sf Land	$2,208,000	$20/Sf Land
Parking Costs	$11,088,000	$33,000/Space	$13,680,000	$30,000/Space
Shell Costs	$27,845,000	$190/SF GBA	$36,049,000	$200/SF GBA
Tenant Improvements	$345,000	$60/SF Retail GBA	$330,000	$60/SF Retail GBA
Contractor Fee/ General Conditions	$4,978,000	12% of Const Cost	$6,416,000	12% of Const Cost
Construction Insuance / bonds	$830,000	2% of Const Cost	$1,069,000	2% of Const Cost
Contigency Allowance	$2,364,000	5% of Direct Cost	$3,048,000	5% of Direct Cost
Total Direct Costs	$49,652,000		$64,000,000	
Per Unit (incl retail)	$413,767	per Unit	$447,552	per Unit
Per SF GBA	$338.81	per SF GBA	$355.07	per SF GBA
Per SF RBA	$554.52	per SF RBA	$582.47	per SF RBA

Prepared by: Keyser Marston Associates, Inc.
Date: 8/24/2021

ATTACHMENT 1

PCC South – All Market

TABLE 1 - ATTACHMENT 1

ESTIMATED CONSTRUCTION COSTS
PCC SOUTH - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Property Assemblage Costs**						
	City Parcel Acqusition Costs		0	Sf Land	$0	/Sf Land	$0
	Agency Parcel Acquisition Costs		0	Sf Land	$0	/Sf Land	0
	Total Property Assemblage Costs						**$0**
II.	**Direct Costs**	[1]					
	Off-site Improvements			Allowance			$600,000
	Demolition Costs			Allowance			250,000
	On-Site Improvements		54,072	Sf Land	$25	/Sf Land	1,352,000
	Structured Parking Spaces		336	Spaces	$33,000	/Space	11,088,000
	Residential Shell Costs		140,794	Sf Res GBA	$190	/Sf GBA	26,751,000
	Retail Shell Costs		5,756	Sf Retail GBA	$190	/Sf Retail GBA	1,094,000
	Retail Tenant Improvement Costs		5,756	Sf Retail GBA	$60	/Sf GBA	345,000
	Contractor Fees / General Requirements		12%	Construction Costs			4,978,000
	General Liability Insurance / Const Bonds		2%	Construction Costs			830,000
	Contingency Allowance		5%	Other Direct Costs			2,364,000
	Total Direct Costs		**120**	**Units**	**$413,800**	**/Unit**	**$49,652,000**
III.	**Indirect Costs**						
	Architecture, Engineering & Consulting		7%	Direct Costs			$3,476,000
	Permits & Fees	[2]	120	Units	$23,342	/Unit	2,801,000
	Taxes, Ins, Legal & Accounting		2%	Direct Costs			993,000
	Marketing & Leasing						
	Residential		120	Units	$5,000	/Unit	600,000
	Retail		5,756	Sf Retail GBA	$8.00	/Sf Retail GBA	46,000
	Development Management Fee		3.5%	Direct Costs			1,738,000
	Contingency Allowance		5%	Other Indirects			483,000
	Total Indirect Costs						**$10,137,000**
IV.	**Financing Costs**						
	Interest During Construction	[3]	37,556,000	Loan Amount	4.50%	Interest	$2,028,000
	Loan Origination Fees		70%	Loan to Value	1.50	Points	776,000
	Total Financing Costs						**$2,804,000**
V.	**Total Construction Costs**		**120**	**Units**	**$521,600**	**/Unit**	**$62,593,000**

[1] Assumes the project will not be subject to prevailing wage requirements.

[2] Per City staff.

[3] Assumes the Developer will fund 40% of the construction costs with equity. Assumes an 24-month construction period with a 60% average outstanding balance and a 0-month absorption period with a 100% average outstanding balance.

TABLE 2 - ATTACHMENT 1

STABILIZED NET OPERATING INCOME
PCC SOUTH - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Gross Residential Income**	[1]					
	Studio Units @ (529-Sf)		44	Units	$2,710	/Unit/Month	$1,430,900
	1-Bedroom Units @ (701-Sf)		52	Units	$3,217	/Unit/Month	2,007,400
	2-Bedroom Units @ (1,004-Sf)		24	Units	$4,283	/Unit/Month	1,233,500
	Other Miscellaneous Income		120	Units	$25	/Unit/Month	36,000
	Gross Income						$4,707,800
	(Less) Vacancy & Collection Allowance		5%	Gross Income			(235,400)
	Effective Gross Income						**$4,472,400**
II.	**Operating Expenses**						
	General Operating Expenses		120	Units	$6,100	/Unit	$732,000
	Property Taxes	[2]	120	Units	$4,900	/Unit	588,000
	Replacement Reserve		120	Units	$250	/Unit	30,000
	Total Operating Expenses		120	Units	$11,250	/Unit	**$1,350,000**
III.	**Residential Net Operating Income**						**$3,122,400**
IV.	**Retail Income**						
	Retail Lease Revenue	[3]	5,756	Sf Retail GBA	$3.25	/Sf/Month	$224,500
	CAM Reimbursements		5,756	Sf Retail GBA	$10.00	/Sf/Year	57,600
	Gross Retail Income						$282,100
	(Less) Vacancy & Collection Allowance		5%	Gross Retail Income			(14,100)
	Effective Gross Retail Income						**$268,000**
V.	**Retail Operating Expenses**						
	Operating Expenses		5,756	Sf Retail GBA	$10.00	/Sf/Year	$57,600
	Management Fee		3%	Effective Gross Retail Income			8,000
	Total Retail Operating Expenses						**$65,600**
VI.	**Retail Net Operating Income**						**$202,400**
VII.	**Total Project Net Operating Income**						**$3,324,800**

[1] Based on Stan Hoffman and Keyser Marston Associates, Inc. analyses.
[2] Based on a 4.50% capitalization rate and a 1.10% property tax rate.
[3] Based on Developer estimate.

Prepared by: Keyser Marston Associates, Inc.
Filename: PCC South - 12% - update; Pro Forma; 8/24/2021; jar

TABLE 3 - ATTACHMENT 1

RESIDUAL LAND VALUE CALCULATION
PCC SOUTH - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Estimated Project Value**				
	Net Operating Income		See Table 2	$3,324,800	
	Capitalization Rate	[1]		4.50%	
	Total Estimated Project Value				**$73,884,000**
II.	**Residual Land Value Calculation**				
	Total Estimated Project Value			$73,884,000	
	(Less) Threshold Developer Profit	9%	Total Estimated Project Value	(6,650,000)	
	(Less) Total Development Costs			(62,593,000)	
III.	**Estimated Residual Land Value**				**$4,641,000**

[1] Based on a weighted average of: a 4.50% capitalization rate for the residential component and a 4.50% capitalization rate for the retail component. Based on the rates published by RERC for the 2nd quarter of 2019.

ATTACHMENT 2

PCC North & Fairfield – All Market

TABLE 1 - ATTACHMENT 2

ESTIMATED CONSTRUCTION COSTS
PCC NORTH & FAIRFIELD - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Property Assemblage Costs**						
	City Parcel Acqusition Costs		0	Sf Land	$0	/Sf Land	$0
	Agency Parcel Acquisition Costs		0	Sf Land	$0	/Sf Land	0
	Total Property Assemblage Costs						**$0**
II.	**Direct Costs**	[1]					
	Off-site Improvements			Allowance			$600,000
	Demolition Costs			Allowance			600,000
	On-Site Improvements		110,379	Sf Land	$20	/Sf Land	2,208,000
	Structured Parking Spaces		456	Spaces	$30,000	/Space	13,680,000
	Residential Shell Costs		174,749	Sf Res GBA	$200	/Sf GBA	34,950,000
	Retail Shell Costs		5,496	Sf Retail GBA	$200	/Sf Retail GBA	1,099,000
	Retail Tenant Improvement Costs		5,496	Sf Retail GBA	$60	/Sf GBA	330,000
	Contractor Fees / General Requirements		12%	Construction Costs			6,416,000
	General Liability Insurance / Const Bonds		2%	Construction Costs			1,069,000
	Contingency Allowance		5%	Other Direct Costs			3,048,000
	Total Direct Costs		**137**	**Units**	**$467,200**	**/Unit**	**$64,000,000**
III.	**Indirect Costs**						
	Architecture, Engineering & Consulting		7%	Direct Costs			$4,480,000
	Permits & Fees	[2]	137	Units	$24,251	/Unit	3,322,000
	Taxes, Ins, Legal & Accounting		2%	Direct Costs			1,280,000
	Marketing & Leasing						
	Residential		137	Units	$5,000	/Unit	685,000
	Retail		5,496	Sf Retail GBA	$8.00	/Sf Retail GBA	44,000
	Development Management Fee		3.5%	Direct Costs			2,240,000
	Contingency Allowance		5%	Other Indirects			603,000
	Total Indirect Costs						**$12,654,000**
IV.	**Financing Costs**						
	Interest During Construction	[3]	48,068,000	Loan Amount	4.50%	Interest	$2,596,000
	Loan Origination Fees		70%	Loan to Value	1.50	Points	864,000
	Total Financing Costs						**$3,460,000**
V.	**Total Construction Costs**		**137**	**Units**	**$584,800**	**/Unit**	**$80,114,000**

[1] Assumes the project will not be subject to prevailing wage requirements.

[2] Per City staff.

[3] Assumes the Developer will fund 40% of the construction costs with equity. Assumes an 24-month construction period with a 60% average outstanding balance and a 0-month absorption period with a 100% average outstanding balance.

TABLE 2 - ATTACHMENT 2

STABILIZED NET OPERATING INCOME
PCC NORTH & FAIRFIELD - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Gross Residential Income**	[1]					
	Studio Units		47	Units	$2,804	/Unit/Month	$1,581,500
	1-Bedroom Units		67	Units	$3,125	/Unit/Month	2,512,500
	2-Bedroom Units		23	Units	$4,283	/Unit/Month	1,182,100
	Other Miscellaneous Income		137	Units	$25	/Unit/Month	41,100
	Gross Income						$5,317,200
	(Less) Vacancy & Collection Allowance		5%	Gross Income			(265,900)
	Effective Gross Income						**$5,051,300**
II.	**Operating Expenses**						
	General Operating Expenses		137	Units	$6,100	/Unit	$835,700
	Property Taxes	[2]	137	Units	$4,900	/Unit	671,300
	Replacement Reserve		137	Units	$250	/Unit	34,300
	Total Operating Expenses		137	Units	$11,250	/Unit	**$1,541,300**
III.	**Residential Net Operating Income**						**$3,510,000**
IV.	**Retail Income**						
	Retail Lease Revenue	[3]	5,496	Sf Retail GBA	$3.25	/Sf/Month	$214,300
	CAM Reimbursements		5,496	Sf Retail GBA	$10.00	/Sf/Year	55,000
	Gross Retail Income						$269,300
	(Less) Vacancy & Collection Allowance		5%	Gross Retail Income			(13,500)
	Effective Gross Retail Income						**$255,800**
V.	**Retail Operating Expenses**						
	Operating Expenses		5,496	Sf Retail GBA	$10.00	/Sf/Year	$55,000
	Management Fee		3%	Effective Gross Retail Income			7,700
	Total Retail Operating Expenses						**$62,700**
VI.	**Retail Net Operating Income**						**$193,100**
VII.	**Total Project Net Operating Income**						**$3,703,100**
VIII.	**Townhouse Valuation**						
	Townhouse Units		6	Units	$1,300,000	/Unit	$7,800,000
	Less Costs of Sale				6.00%	% of Value	(468,000)
	Net Sale Proceeds						**$7,332,000**

[1] Based on Stan Hoffman and Keyser Marston Associates, Inc. analyses.
[2] Based on a 4.50% capitalization rate and a 1.10% property tax rate.
[3] Based on Developer estimate.

Prepared by: Keyser Marston Associates, Inc.
Filename: PCC North & Fairfield - 12% - update; Pro Forma; 8/24/2021; jar

TABLE 3 - ATTACHMENT 2

RESIDUAL LAND VALUE CALCULATION
PCC NORTH & FAIRFIELD - ALL MARKET - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Estimated Project Value**				
	Net Operating Income		See Table 2	$3,703,100	
	Capitalization Rate	[1]		4.50%	
	Total Estimated Project Value				**$82,291,000**
	Townhouse Net Sale Proceeds				**$7,332,000**
	Total Project Valueation				**$89,623,000**
II.	**Residual Land Value Calculation**				
	Total Estimated Project Value			$89,623,000	
	(Less) Threshold Developer Profit		9% Total Estimated Project Value	(8,066,000)	
	(Less) Total Development Costs			(80,114,000)	
III.	**Estimated Residual Land Value**				**$1,443,000**

[1] Based on a weighted average of: a 4.50% capitalization rate for the residential component and a 4.50% capitalization rate for the retail component. Based on the rates published by RERC for the 2nd quarter of 2019.

ATTACHMENT 3

PCC South – 10% Affordable

TABLE 1 - ATTACHMENT 3

ESTIMATED CONSTRUCTION COSTS
PCC SOUTH - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Property Assemblage Costs**						
	City Parcel Acqusition Costs		0	Sf Land	$0	/Sf Land	$0
	Agency Parcel Acquisition Costs		0	Sf Land	$0	/Sf Land	0
	Total Property Assemblage Costs						**$0**
II.	**Direct Costs**	[1]					
	Off-site Improvements			Allowance			$600,000
	Demolition Costs			Allowance			250,000
	On-Site Improvements		54,072	Sf Land	$25	/Sf Land	1,352,000
	Structured Parking Spaces		336	Spaces	$33,000	/Space	11,088,000
	Residential Shell Costs		140,794	Sf Res GBA	$190	/Sf GBA	26,751,000
	Retail Shell Costs		5,756	Sf Retail GBA	$190	/Sf Retail GBA	1,094,000
	Retail Tenant Improvement Costs		5,756	Sf Retail GBA	$60	/Sf GBA	345,000
	Contractor Fees / General Requirements		12%	Construction Costs			4,978,000
	General Liability Insurance / Const Bonds		2%	Construction Costs			830,000
	Contingency Allowance		5%	Other Direct Costs			2,364,000
	Total Direct Costs		**120**	**Units**	**$413,800**	**/Unit**	**$49,652,000**
III.	**Indirect Costs**						
	Architecture, Engineering & Consulting		7%	Direct Costs			$3,476,000
	Permits & Fees	[2]	120	Units	$23,342	/Unit	2,801,000
	Taxes, Ins, Legal & Accounting		2%	Direct Costs			993,000
	Marketing & Leasing						
	Residential		120	Units	$5,000	/Unit	600,000
	Retail		5,756	Sf Retail GBA	$8.00	/Sf Retail GBA	46,000
	Development Management Fee		3.5%	Direct Costs			1,738,000
	Contingency Allowance		5%	Other Indirects			483,000
	Total Indirect Costs						**$10,137,000**
IV.	**Financing Costs**						
	Interest During Construction	[3]	37,538,000	Loan Amount	4.50%	Interest	$2,027,000
	Loan Origination Fees		70%	Loan to Value	1.50	Points	747,000
	Total Financing Costs						**$2,774,000**
V.	**Total Construction Costs**		**120**	**Units**	**$521,400**	**/Unit**	**$62,563,000**

[1] Assumes the project will not be subject to prevailing wage requirements.

[2] Per City staff.

[3] Assumes the Developer will fund 40% of the construction costs with equity. Assumes an 24-month construction period with a 60% average outstanding balance and a 0-month absorption period with a 100% average outstanding balance.

TABLE 2 - ATTACHMENT 3

STABILIZED NET OPERATING INCOME
PCC SOUTH - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Gross Residential Income**	[1]					
	Studio Units		34	Units	$2,710	/Unit/Month	$1,105,700
	1-Bedroom Units		51	Units	$3,217	/Unit/Month	1,968,800
	2-Bedroom Units		23	Units	$4,283	/Unit/Month	1,182,100
	Studio Units - Low Inocme		10	Units	$1,612	/Unit/Month	193,400
	1-Bedroom Units - Low Income		1	Units	$1,716	/Unit/Month	20,600
	2-Bedroom Units - Low Income		1	Units	$2,055	/Unit/Month	24,700
	Other Miscellaneous Income		120	Units	$25	/Unit/Month	36,000
	Gross Income						$4,531,300
	(Less) Vacancy & Collection Allowance		4%	Gross Income			(181,300)
	Effective Gross Income						**$4,350,000**
II.	**Operating Expenses**						
	General Operating Expenses		120	Units	$6,100	/Unit	$732,000
	Property Taxes	[2]	120	Units	$4,900	/Unit	588,000
	Replacement Reserve		120	Units	$250	/Unit	30,000
	Total Operating Expenses		120	Units	$11,250	/Unit	**$1,350,000**
III.	**Residential Net Operating Income**						**$3,000,000**
IV.	**Retail Income**						
	Retail Lease Revenue	[3]	5,756	Sf Retail GBA	$3.25	/Sf/Month	$224,500
	CAM Reimbursements		5,756	Sf Retail GBA	$10.00	/Sf/Year	57,600
	Gross Retail Income						$282,100
	(Less) Vacancy & Collection Allowance		5%	Gross Retail Income			(14,100)
	Effective Gross Retail Income						**$268,000**
V.	**Retail Operating Expenses**						
	Operating Expenses		5,756	Sf Retail GBA	$10.00	/Sf/Year	$57,600
	Management Fee		3%	Effective Gross Retail Income			8,000
	Total Retail Operating Expenses						**$65,600**
VI.	**Retail Net Operating Income**						**$202,400**
VII.	**Total Project Net Operating Income**						**$3,202,400**

[1] Based on Stan Hoffman and Keyser Marston Associates analyses.
[2] Based on a 4.50% capitalization rate and a 1.10% property tax rate.
[3] Based on Developer estimate.

Prepared by: Keyser Marston Associates, Inc.
Filename: PCC South - affordable - 12% - update; Pro Forma; 8/24/2021; jar

TABLE 3 - ATTACHMENT 3

RESIDUAL LAND VALUE CALCULATION
PCC SOUTH - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Estimated Project Value**				
	Net Operating Income		See Table 2	$3,202,400	
	Capitalization Rate	[1]		4.50%	
	Total Estimated Project Value				**$71,164,000**
II.	**Residual Land Value Calculation**				
	Total Estimated Project Value			$71,164,000	
	(Less) Threshold Developer Profit	9%	Total Estimated Project Value	(6,405,000)	
	(Less) Total Development Costs			(62,563,000)	
III.	**Estimated Residual Land Value**				**$2,196,000**

[1] Based on a weighted average of: a 4.50% capitalization rate for the residential component and a 4.50% capitalization rate for the retail component. Based on the rates published by RERC for the 2nd quarter of 2019.

ATTACHMENT 4

PCC North & Fairfield – 10% Affordabl

TABLE 1 - ATACHMENT 4

ESTIMATED CONSTRUCTION COSTS
PCC NORTH & FAIRFIELD - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Property Assemblage Costs**						
	City Parcel Acqusition Costs		0	Sf Land	$0	/Sf Land	$0
	Agency Parcel Acquisition Costs		0	Sf Land	$0	/Sf Land	0
	Total Property Assemblage Costs						**$0**
II.	**Direct Costs**	[1]					
	Off-site Improvements			Allowance			$600,000
	Demolition Costs			Allowance			600,000
	On-Site Improvements		110,379	Sf Land	$20	/Sf Land	2,208,000
	Structured Parking Spaces		456	Spaces	$30,000	/Space	13,680,000
	Residential Shell Costs		174,749	Sf Res GBA	$200	/Sf GBA	34,950,000
	Retail Shell Costs		5,496	Sf Retail GBA	$200	/Sf Retail GBA	1,099,000
	Retail Tenant Improvement Costs		5,496	Sf Retail GBA	$60	/Sf GBA	330,000
	Contractor Fees / General Requirements		12%	Construction Costs			6,416,000
	General Liability Insurance / Const Bonds		2%	Construction Costs			1,069,000
	Contingency Allowance		5%	Other Direct Costs			3,048,000
	Total Direct Costs		**137**	**Units**	**$467,200**	**/Unit**	**$64,000,000**
III.	**Indirect Costs**						
	Architecture, Engineering & Consulting		7%	Direct Costs			$4,480,000
	Permits & Fees	[2]	137	Units	$24,251	/Unit	3,322,000
	Taxes, Ins, Legal & Accounting		2%	Direct Costs			1,280,000
	Marketing & Leasing						
	Residential		137	Units	$5,000	/Unit	685,000
	Retail		5,496	Sf Retail GBA	$8.00	/Sf Retail GBA	44,000
	Development Management Fee		3.5%	Direct Costs			2,240,000
	Contingency Allowance		5%	Other Indirects			603,000
	Total Indirect Costs						**$12,654,000**
IV.	**Financing Costs**						
	Interest During Construction	[3]	48,046,000	Loan Amount	4.50%	Interest	$2,594,000
	Loan Origination Fees		70%	Loan to Value	1.50	Points	828,000
	Total Financing Costs						**$3,422,000**
V.	**Total Construction Costs**		**137**	**Units**	**$584,500**	**/Unit**	**$80,076,000**

[1] Assumes the project will not be subject to prevailing wage requirements.

[2] Per City staff.

[3] Assumes the Developer will fund 40% of the construction costs with equity. Assumes an 24-month construction period with a 60% average outstanding balance and a 0-month absorption period with a 100% average outstanding balance.

TABLE 2 - ATACHMENT 4

STABILIZED NET OPERATING INCOME
PCC NORTH & FAIRFIELD - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Gross Residential Income**	[1]					
	Studio Units		36	Units	$2,804	/Unit/Month	$1,211,300
	1-Bedroom Units		65	Units	$3,125	/Unit/Month	2,437,500
	2-Bedroom Units		22	Units	$4,283	/Unit/Month	1,130,700
	Studio Units - Low Income		11	Units	$1,612	/Unit/Month	212,800
	1-Bedroom Units - Low Income		2	Units	$1,716	/Unit/Month	41,200
	2-Bedroom Units - Low Income		1	Units	$2,055	/Unit/Month	24,700
	Other Miscellaneous Income		137	Units	$25	/Unit/Month	41,100
	Gross Income						$5,099,300
	(Less) Vacancy & Collection Allowance		4%	Gross Income			(204,000)
	Effective Gross Income						**$4,895,300**
II.	**Operating Expenses**						
	General Operating Expenses		137	Units	$6,100	/Unit	$835,700
	Property Taxes	[2]	137	Units	$4,900	/Unit	671,300
	Replacement Reserve		137	Units	$250	/Unit	34,300
	Total Operating Expenses		137	Units	$11,250	/Unit	**$1,541,300**
III.	**Residential Net Operating Income**						**$3,354,000**
IV.	**Retail Income**						
	Retail Lease Revenue	[3]	5,496	Sf Retail GBA	$3.25	/Sf/Month	$214,300
	CAM Reimbursements		5,496	Sf Retail GBA	$10.00	/Sf/Year	55,000
	Gross Retail Income						$269,300
	(Less) Vacancy & Collection Allowance		5%	Gross Retail Income			(13,500)
	Effective Gross Retail Income						**$255,800**
V.	**Retail Operating Expenses**						
	Operating Expenses		5,496	Sf Retail GBA	$10.00	/Sf/Year	$55,000
	Management Fee		3%	Effective Gross Retail Income			7,700
	Total Retail Operating Expenses						**$62,700**
VI.	**Retail Net Operating Income**						**$193,100**
VII.	**Total Project Net Operating Income**						**$3,547,100**
VIII.	**Townhouse Valuation**						
	Townhouse Units		6	Units	$1,300,000	/Unit	$7,800,000
	Less Costs of Sale				6.00%	% of Value	(468,000)
	Net Sale Proceeds						**$7,332,000**

[1] Based on Stan Hoffman and Keyser Marston Associates analyses.
[2] Based on a 4.50% capitalization rate and a 1.10% property tax rate.
[3] Based on Developer estimate.

Prepared by: Keyser Marston Associates, Inc.
Filename: PCC North & Fairfield - affordable - 12% - Update; Pro Forma; 8/24/2021; jar

TABLE 3 - ATACHMENT 4

RESIDUAL LAND VALUE CALCULATION
PCC NORTH & FAIRFIELD - BASE AFFORDABLE - 12% contractor
EL SEGUNDO, CALIFORNIA

I.	**Estimated Project Value**				
	Net Operating Income		See Table 2	$3,547,100	
	Capitalization Rate	[1]		4.50%	
	Total Estimated Project Value				**$78,824,000**
	Townhouse Net Sale Proceeds				**$7,332,000**
	Total Project Valueation				**$86,156,000**
II.	**Residual Land Value Calculation**				
	Total Estimated Project Value			$86,156,000	
	(Less) Threshold Developer Profit		9% Total Estimated Project Value	(7,754,000)	
	(Less) Total Development Costs			(80,076,000)	
III.	**Estimated Residual Land Value**				**($1,674,000)**

[1] Based on a weighted average of: a 4.50% capitalization rate for the residential component and a 4.50% capitalization rate for the retail component. Based on the rates published by RERC for the 2nd quarter of 2019.

Exhibit No. 9

STANLEY R. HOFFMAN ASSOCIATES

11661 San Vicente Boulevard Suite 306
Los Angeles, California 90049-5111
P: 310.820.2680, F: 310.820.8341
www.stanleyrhoffman.com

Memorandum

To: Mr. Lionel Uhry, Senior Vice President, Acquisitions & Development
Mar Ventures, Inc.

From: Bravish Mallavarapu, Director/Principal Economist

Date: April 23, 2021

Re: Fiscal Impact Analysis Update, Pacific Coast Commons, City of El Segundo
SRHA Job # 1385

This memorandum presents an updated fiscal impact analysis for the proposed Pacific Coast Commons development located within the City of El Segundo between Holly Ave and Palm Ave along the Pacific Coast Highway. This is an update to the original analysis, prepared and documented in our memo dated June 8, 2020, following changes to the project description, specifically the inclusion of affordable housing units, changes to the unit mix and rents, project new valuation, comments received from the City regarding the fiscal impact methodology, and updated City budget factors.

The proposed project includes the redevelopment of currently underutilized parking lots and commercial uses that serve the Fairfield Marriot and Loft hotels to alternate uses, including residential use (market and affordable units) and structured parking with ground floor commercial.

This updated analysis examines the annual recurring fiscal impacts of the proposed project at buildout on the City's General Fund presented in constant 2021 dollars. The analysis calculates the annual recurring revenues and annual recurring costs for operations and maintenance accruing to the City General Fund.

It is noted that based on discussions and direction provided by the City Finance Director, we have used the Adopted 2020-21 City Budget, passed by Council for a 9-month period, which we have extrapolated to a 12-month period to develop annual General Fund revenue and cost projection factors, applied to specific revenue and cost components of this fiscal analysis of the project.

1. Summary of Analysis

- The project adds 263 residential units, 11,000 square feet of commercial retail use and a structured commercial parking operation.
- The residential component includes 231 market rate apartment rental units, 26 affordable apartment rental units and 6 ownership townhomes.
- At project buildout the development is estimated to add a total of 252 households (occupied units) at a 4 percent vacancy rate with an estimated residential population of 395 persons, and an estimated 58 jobs associated with the commercial uses at 5 percent vacancy rate, parking operations and residential operations.

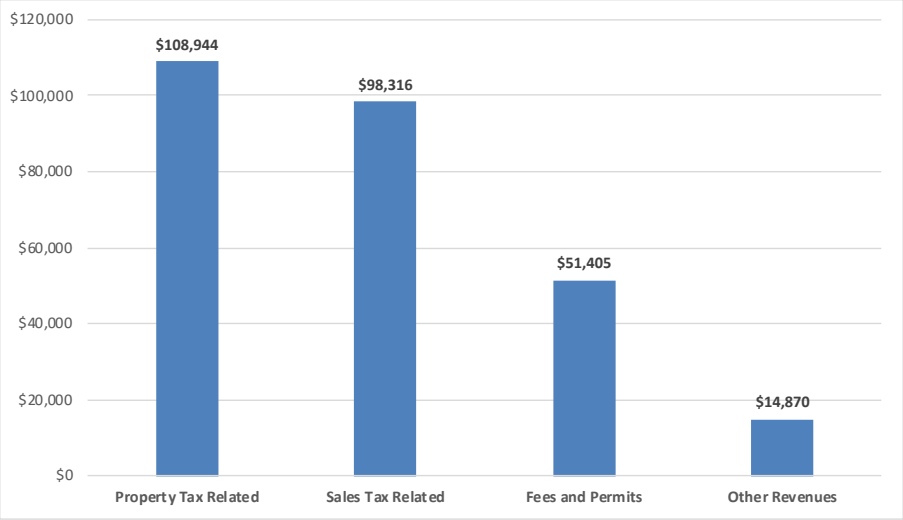
- The Pacific Coast Commons project adds new project valuation at buildout of $141 million, resulting in annual recurring all property tax related revenues of $105,091 to the City General Fund.
- Project households are estimated to account for a total of $31.8 million in aggregate annual household income with an annual average household income of $125,786.
- Retail and food spending by project residents and on-site employees is estimated at a total of about $5.6 million in taxable sales captured within the City.
- Combined with the on-site commercial retail operations, estimated annually at $3.4 million, the total sales tax generated from the project to the City General Fund is estimated at around $98,316 per annum.
- From the overall fiscal impact perspective, as shown in **Table 1**, the proposed Pacific Coast Commons project at buildout is estimated to generate $273,535 in annual recurring revenues, and $401,166 in annual recurring costs to the City General Fund in constant 2021 dollars.
- As shown in **Figure 1**, major annually recurring General Fund revenues include $108,944 in total property-related taxes, including the City General Fund share of the 1 percent property tax for $88,276, property tax in-lieu of VLF (PTVLF) for $16,815 and $3,853 for property transfer tax, sales-tax related revenues of $98,316 and all other revenues, including fees and permits, amounting to $66,275.
- Major annually recurring General Fund costs include $141,394 in Police Services, $103,347 for Fire Services, $22,760 for Recreation and Parks, $55,985 for Library Services, $16,719 in Public Works O&M (street maintenance). General Government costs of about $60,960 are projected at an overhead rate of 17.9 percent of the above line expenditure categories, as shown in **Figure 2**.

Table 1
Fiscal Impact Summary
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

Category	Proposed Project
A. Fiscal Impact to General Fund	
Annual Recurring Revenues	$273,535
Annual Recurring Costs	$401,166
Net Fiscal Impacts	**($127,631)**
Revenue/Cost Ratio	**0.68**

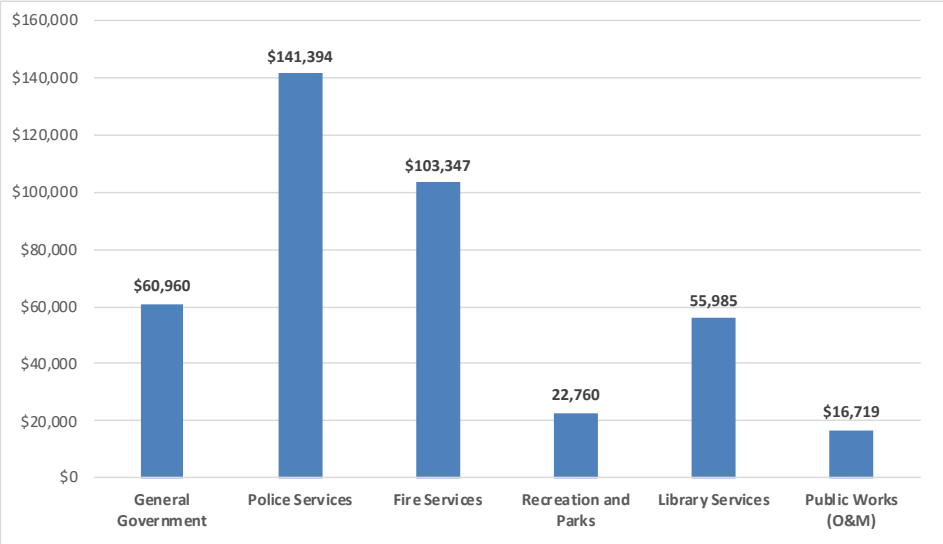
Source: Stanley R. Hoffman Associates, Inc.

Figure 1
Projected General Fund Revenues
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)



Source: Stanley R. Hoffman Associates, Inc.

Figure 2
Projected General Fund Expenditures
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)



Source: Stanley R. Hoffman Associates, Inc.

2. Project Description

Based on the information provided by the project proponent, as shown in **Figure 3 and Table 2**, the proposed Pacific Coast Commons project is spread over a total of five site areas, which also include the current Aloft Hotel (Area 2) and the Fairfield Marriot Hotel (Area 3) that remain unchanged. Three other sites including a surface parking lot (**Area 1**), an older commercial building (**Area 4**) and a second surface parking lot (**Area 5**) will be redeveloped to other uses as follows:

Area 1: The current surface parking lot will be redeveloped into a mixed-use development, which will include 120 multifamily units, including 12 affordable units, a clubhouse, gym and pool, and 6,200 square feet of ground floor commercial. Area 1 is zoned as general commercial – G3.

Area 4: Current uses include the old Carrasco's Restaurant, no longer in operation, a Discovery Rent-A-Car business, and ballroom and meeting area for the hotel used periodically. The site will be primarily redeveloped as structured parking for 187 parking spaces and will include 2,800 square feet of ground floor commercial. Area 4 is currently zoned as general commercial – G3.

Area 5: The current surface parking lot will be redeveloped to include residential, commercial and structured parking uses. Mixed use development will include 137 multifamily rental units, including 14 affordable housing units, 2,000 square feet of ground floor commercial and structured parking. Additionally, this area will include 6 for-sale townhomes. Area 5 is currently zoned as parking – P.

Project Valuation

As shown in **Table 3**, based on the information provided by the project proponent, the total new valuation for the Pacific Coast Commons is estimated at around $140.1 million.

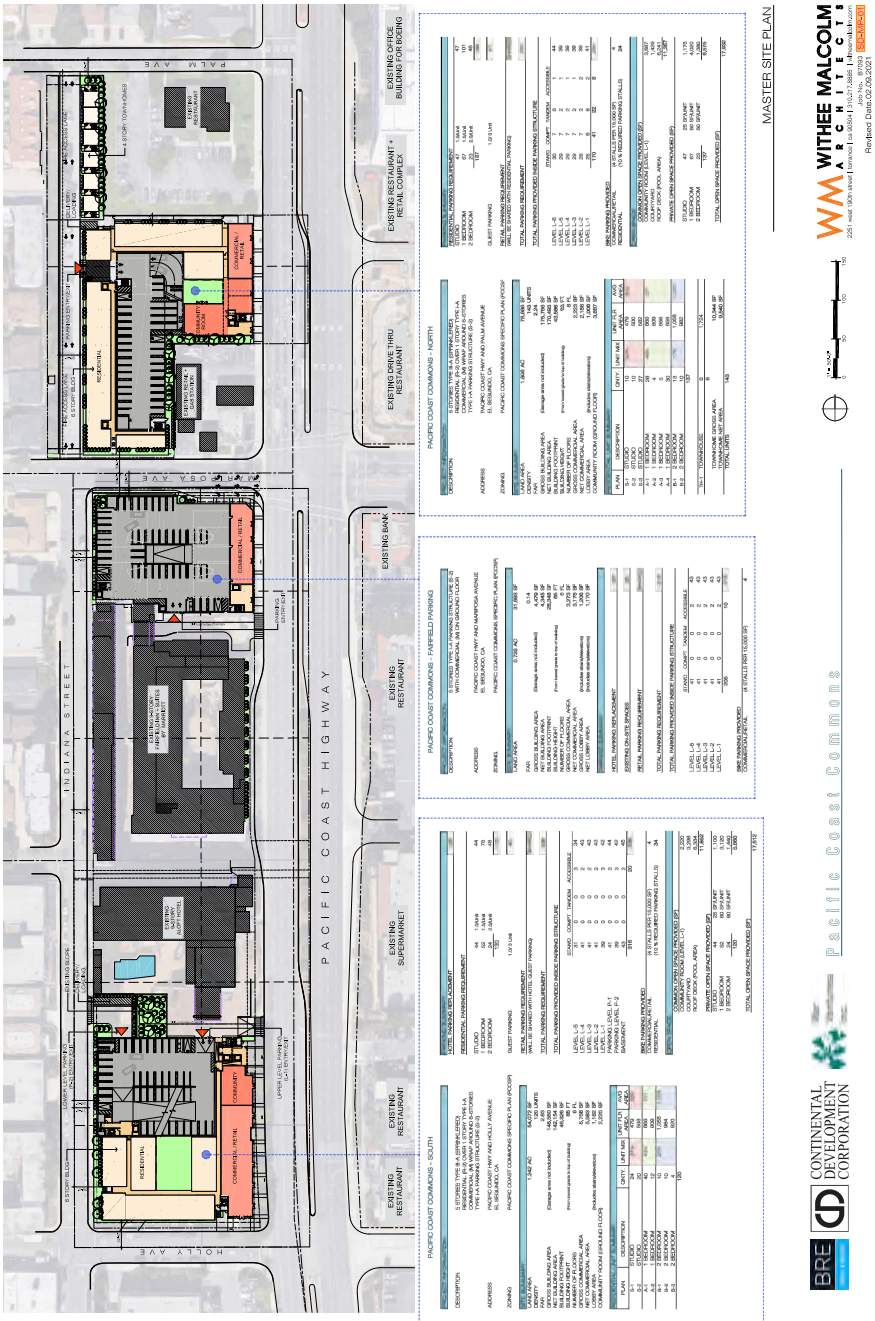
- This includes the mixed use project in Area 1 with a valuation of $60.4 million;
- The new structured parking in Area 4 is estimated at $12.0 million;
- The new development in Area 5, including the mixed-use multifamily development and the proposed townhomes, is estimated for $67.7 million.

Residential Population

The household population resulting from the residential use in Pacific Coast Commons is estimated by translating the unit mix by number of bedrooms proposed for the mixed-use project in Area 1 and the mixed-use project and townhomes in Area 5, as shown in **Table 4**.

Given typical variations found in household sizes across dwelling unit types, the total residential population for the two project areas is calculated by applying appropriate persons by household ratios to the rental multifamily units across studios, one-bedroom and two-bedroom units, and to the owner-occupied townhomes.

Figure 3
Project Site Plan
Pacific Coast Commons, City of El Segundo



Source: Stanley R. Hoffman Associates, Inc.

Table 2
Project Description
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

	Proposed Project [1]
Panel A. Project Description	
Acres	3.84
Designated Land Use Mix	
Residential	YES
Commercial	YES
Structured Parking	YES
Surface Parking	NO
Built Uses	
Residential Units	*263*
Commercial Square Feet	*11,000*
Panel B. Estimated Service Population	
Households (Units at 4 percent Vacancy)	252
Residential Populatiion	395
On-Site Employment [2]	58
TOTAL SERVICE POPULATION [3]	439
Panel C. Estimated Project Valuation	
Total New Valuation	$140,121,360

1. Project details as provided by the project proponent.
2. Includes estimated employees for commercial use with 5 percent vacancy, parking operations and residential operations.
3. Service population includes 100% of residential population and 75% of on-site employment.

Sources: Stanley R. Hoffman Associates, Inc.
Mar Ventures Inc.

Table 3
Project New Valuation
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

AREA/PARCEL NO.	PROPOSED USE	VALUATION
NEW DEVELOPMENT AREA		
Area 1		
Surface Parking Loft of Aloft Hotel	Mixed Use (Residential and Commercial)	$60,400,000
Area 4		
Commercial Building	Parking Structure	$12,000,000
Area 5		
Surface Parking Loft of Marriot Hotel	Mixed Use (Residential and Commercial); Townhomes	$67,700,000
TOTAL		**$140,100,000**

Source: Stanley R. Hoffman Associates, Inc.
Mar Ventures, Inc.

Table 4
Projected Residential Population
Pacific Coast Commons, City of El Segundo

	Persons per Household [1]	Number of Units [2]	Residential Population
MARKET RATE HOUSING			
AREA 1 (PCC South)			
Apartments	**Rental (PPH)**		
Studio	1.21	39	47
One Bedroom	1.36	47	64
Two Bedroom	2.74	22	60
Subtotal		**108**	**171**
AREA 5 (PCC North)			
Apartments	**Rental (PPH)**		
Studio	1.21	42	51
One Bedroom	1.36	60	81
Two Bedroom	2.74	21	58
Subtotal		**123**	**190**
Townhomes	**Ownership (PPH)**		
Type TH-1	2.09	5	10
Type TH-2	2.09	1	2
Subtotal		**6**	**12**
AFFORDABLE HOUSING			
AREA 1 (PCC South)			
Apartments	**Rental (PPH)**		
Studio	1.21	5	6
One Bedroom	1.36	5	7
Two Bedroom	2.74	2	5
Subtotal		**12**	**18**
AREA 5 (PCC North)			
Apartments	**Rental (PPH)**		
Studio	1.21	5	6
One Bedroom	1.36	7	9
Two Bedroom	2.74	2	5
Subtotal		**14**	**20**
TOTAL PROJECT		**263**	**411**
LESS 4% VACANCY		**252**	**395**

1. Persons per household by number of bedrooms estimated from the ACS PUMS microdata for the Public Use Microdata Area (PUMA) including the City of El Segundo.
2. Based on information provided by the project proponent.

Source: Stanley R. Hoffman Associates, Inc.
Census American Community Survey (ACS) 2018, Public Use Microdata Sample (PUMS)

Estimated persons per household ratios for the apartment units by number of bedrooms and owner-occupied townhomes were calculated from the American Community Survey (ACS) Public Use Microdata Sample (PUMS) for the year 2018. These estimates were developed for the Public Use Microdata Area (PUMA), including the City of El Segundo, GEOID 0603760. Additionally, a vacancy factor of about 5 percent is assumed to calculate the resulting number of households (occupied units).

Applying these ratios and assumptions, the total resident population for the Pacific Coast Commons is estimated at 395 persons over 252 households, accounting for a 4 percent vacancy rate, for an average household size of 1.56 persons per household, as shown in **Table 4**.

On-Site Employment

Employment generated within the Pacific Coast Commons is estimated for on-site commercial operations associated with the ground floor commercial space across the three areas. Additionally, jobs generated for residential operations and maintenance are also estimated based on gross building square feet. Parking operations are assumed only for the dedicated parking structure in Area 4, while residential parking is assumed to be part of the residential operations in Area 1 and Area 5. Full-time equivalent (FTE) job numbers are calculated by applying industry-standard square feet per employee factor to the project gross leasable area (GLA) information assuming a 5 percent vacancy factor provided by the project proponent, as shown in **Table 5**.

Table 5
Projected On Site Full-Time Employment
Pacific Coast Commons, City of El Segundo

PROPOSED USE	TOTAL GLA OR PARKING SPACES	OCCUPIED GLA [1]	SQUARE FEET OR PARKING SPACES PER EMPLOYEE	ON-SITE EMPLOYMENT
Commercial Operations (Sq.Ft.)				
Area 1	6,200	5,890	250	24
Area 4	2,800	2,660	250	11
Area 5	2,000	1,900	250	8
Commercial Subtotal	**11,000**	**10,450**		**42**
Residential Operations (Sq.Ft.)				
Area 1	115,171		20,000	6
Area 5	110,644		20,000	6
Residential Subtotal	**225,815**			**12**
Parking Structure Operations (Spaces)				
Area 4	**187**		**50**	**4**
Residential Subtotal				
TOTAL EMPLOYMENT				**58**

1. Assumes a 5 percent vacancy factor, and forms the basis for the on-site employment estimate.

Source: Stanley R. Hoffman Associates, Inc.
Mar Ventures, Inc.

3. Projected Household and Employee Expenditures

The Pacific Coast Commons will generate benefits to the City of El Segundo in terms of expenditures on retail goods and services made primarily by the new residents, and additionally by employees working on-site. At the same time, these expenditure levels depend considerably on the income characteristics of the households across the housing unit types proposed, and the type of on-site jobs and their associated wages estimated for the project.

Household Income and Expenditure Characteristics

The average household income of the households projected for the Pacific Coast Commons is estimated across the housing product types (unit mix) for the project. This is based on the average monthly housing cost by housing type, which is assumed to constitute, using conventional standards, 30 percent of the household income. While this percentage share has moved progressively to the 40 percent mark in recent times, current federal, state and local policy standards still continue to use the lower number.

As shown in **Table 6**, proposed monthly rents for the project market-rate and affordable units, have been provided by the project proponent. Rents for market-rate units range from $2,804 for studios to $4,283 for two-bedroom apartments. Rents for affordable units range from $1,528 for studios to $2,028 for two-bedroom apartments. Townhomes are estimated for a sale price of about $1.3 million, which translates to a monthly ownership cost of approximately $6,200.

This implies a range of minimum household incomes that can meet the conventional 30 percent income threshold that the Pacific Coast Commons aims to attract within El Segundo. Estimated average annual household incomes for the apartments range from $63,000 to $171,320 indicating a fit with a mix of professional office and workforce segment that the City of El Segundo has attracted over the last decade. Average household income for townhomes is estimated at $248,000 per annum.

Applying the estimated average annual household income to the number of households by each housing category results in the aggregate annual income for that category, as shown in **Table 6**. Summing up all the household categories further results in a total of $31.8 million aggregate annual household income for the Pacific Coast Commons project, as shown in **Table 7**.

The City of El Segundo will benefit from the spending potential of households living in the Pacific Coast Commons. This potential is estimated from the aggregate household income, as shown in **Table 8**. Examining household spending patterns from the US Bureau of Labor Statistics (BLS) Consumer Expenditure Survey (CES), it is estimated that households in the Los Angeles-Long Beach-Anaheim MSA spent around 21.1 percent of their pre-tax income on retail and local services items. When applied to the aggregate household income of $31.8 million for the project, the total household spending potential is calculated at $6.71 million per annum on food and discretionary products and services, as shown in **Table 7**.

Table 6
Projected Average and Aggregate Household Income
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

	Rental or Ownership	Estimated Households	Monthly Rent OR Estimated Monthly Ownership Cost [1]	Estimated Average Annual Household Income [2]	Project Aggregate Annual Household Income
MARKET RATE HOUSING					
AREA 1 (PCC South)					
Apartments	**Rental**				
Studio		37	$2,804	$112,160	$4,199,270
One Bedroom		45	$3,125	$125,000	$5,640,000
Two Bedroom		21	$4,283	$171,320	$3,618,278
Subtotal		**104**			**$13,457,549**
AREA 5 (PCC North)					
Apartments	**Rental**				
Studio		40	$2,804	$112,160	$4,522,291
One Bedroom		58	$3,125	$125,000	$7,200,000
Two Bedroom		20	$4,283	$171,320	$3,453,811
Subtotal		**118**			**$15,176,102**
Townhomes	**Ownership** Price				
Type TH-1	$1,300,000	5	$6,200	$248,000	$1,190,400
Type TH-2	$1,300,000	1	$6,200	$248,000	$238,080
Subtotal		**6**			**$1,428,480**
AFFORDABLE HOUSING					
AREA 1 (PCC South)					
Apartments	**Rental**				
Studio		5	$1,578	$63,120	$302,976
One Bedroom		5	$1,690	$67,600	$324,480
Two Bedroom		2	$2,028	$81,120	$155,750
Subtotal		**12**			**$783,206**
AREA 5 (PCC North)					
Apartments	**Rental**				
Studio		5	$1,578	$63,120	$302,976
One Bedroom		7	$1,690	$67,600	$454,272
Two Bedroom		2	$2,028	$81,120	$155,750
Subtotal		**13**			**$912,998**
TOTAL		**252**		**$125,786**	**$31,758,336**

1.Monthly rents provided by the project proponent market study for the Pacific Coast Commons. Monthly ownership costs include mortgage estimated assuming 20 percent down payment at 3.6% for 30 years, estimated effective property tax rate of $7.73 per $1,000 of home value, and an estimated $630 per month for home insurance and HOA costs.

2. Estimated based on the annual housing cost (rent or mortgage) representing a conventional share of 30 percent of annual household income following CA HCD and Federal Guidelines.

Source: Stanley R. Hoffman Associates, Inc.
Mar Ventures, Inc.

Table 7
Projected Household Expenditures
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

Project Aggregate Household Income	$31,758,336
Estimated Household Spending on Retail Food and Local Services as % HH Income [1]	21.1%
Estimated Household Spending on Retail Food and Local Services	$6,714,022

1. Expenditures share of pre-tax household income for Los Angeles-Long Beach-Anaheim MSA obtained from the US Bureau of Labor Statistics.

Source: Stanley R. Hoffman Associates, Inc.
US Bureau of Labor Statistics (BLS),
Consumer Expenditure Survey (CES). 2018-19.

Table 8
Household Spending Patterns
Los Angeles-Long Beach-Anaheim MSA

Los Angeles MSA, 2018-19 [1]	Amount	Taxable Spending Component %	Taxable Spending Amount	Taxable Spend Share of HH Income
Average Household Income Before Taxes	**$90,037**			
RETAIL CATEGORIES				
Food-related				
Food at home	$4,934	35%	$1,727	1.9%
Food away from home	$3,996	100%	$3,996	4.4%
Alcoholic beverages	$644	100%	$644	0.7%
Housing-related				
Housekeeping supplies	$746	100%	$746	0.8%
Household furnishings and equipment	$2,238	100%	$2,238	2.5%
Apparel and services	$1,989	100%	$1,989	2.2%
Transportation-related				
Gasoline, other fuels, and motor oil	$2,397	100%	$2,397	2.7%
Entertainment	$3,554	100%	$3,554	3.9%
Personal care products and services	$847	100%	$847	0.9%
Reading [2]	$107	60%	$64	0.1%
Education [2]	$1,469	40%	$588	0.7%
Tobacco products and smoking supplies	$245	100%	$245	0.3%
TOTAL	**$23,166**		**$19,035**	**21.1%**

1. Most recent release by the BLS Consumer Expenditure Survey (CES), accessed April 2021.
2. Expenses related to reading materials, such as books, periodicals and newspapers, and eductional supplies.

Source: Stanley R. Hoffman Associates, Inc.
US Bureau of Labor Statistics (BLS), Consumer Expenditure Survey (CES), 2018-19.

Projected Employee Expenditures

In addition to households, potential spending on retail goods and services also originate from workers employed within the Pacific Coast Commons. These purchases are typically made over during work breaks in and around the place of work. This spending potential is calculated from the jobs estimated for the project, as shown previously in Table 6. It is assumed that these jobs are entry-level, clerical and operational functions across the commercial uses, and parking and residential operations of the proposed project.

Based data from the International Council of Shopping Centers (ICSC) for 2012, adjusted for inflation, workers in entry-level, clerical and support functions spend about $73 per week or $3,796 per annum on retail, food and services. Applied to the estimated 58 workers for the project, this results in $209,160 of annual spending on these taxable sales categories made around the workplace within El Segundo.

4. Project On-Site Taxable Sales

The proposed project additionally generates taxable retail sales from the commercial use space planned for the development. Based on inputs from the project proponent, the total 10,450 square feet of retail use, including a 5 percent vacancy rate, is distributed across limited service restaurants, health and personal care stores, and miscellaneous retail stores, as shown in **Table 9**. Using industry sales per square foot factors, these uses generate a total of $3.40 million in taxable sales at buildout, as shown below.

Table 9
On-Site Retail Sales
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

Retail Categories	GLA [1]	Occcupied GLA [1]	Sales/SF [2]	Sales [3]	Taxable Percent	Taxable Sales	Sales Tax
Limited-service restaurants	3,700	3,515	$355	$1,247,757	100%	$1,247,757	$12,478
Retail - Health and personal care stores	3,650	3,468	$368	$1,275,284	100%	$1,275,284	$12,753
Retail - Miscellaneous store retailers	3,650	3,468	$254	$881,536	100%	$881,536	$8,815
	11,000	10,450	$310	$3,404,577		$3,404,577	$34,046
SUMMARY							
Retail Stores	7,300	6,935	$311	$2,156,820		$2,156,820	$21,568
Restaurants	3,700	3,515	$355	$1,247,757		$1,247,757	$12,478
TOTAL	**11,000**	**10,450**		**$3,404,577**		**$3,404,577**	**$34,046**

1. Based on information provided by project proponent. Occupied GLA assumes a 5 percent vacancy factor.
2. Estimated from IMPLAN regional sales factors by retail segment output per job, converted to a square foot basis.
3. Estimated from the occuped GLA.

Source: Stanley R Hoffman Associates, Inc.
Mar Ventures Inc.
IMPLAN , MIG Group Regional Data and Impact Model.

5. Fiscal Analysis Details

The final section of this memo examines the annual recurring fiscal impacts of the proposed project at buildout on the City's General Fund in constant 2021 dollars. The analysis calculates the annual recurring General Fund revenues and costs for operations and maintenance at buildout, shown in **Table 10**, with the fiscal analysis methodology shown in **Appendix A**. General city-wide assumptions including service population estimation are shown in Appendix Table A-1, General Fund revenue factors in Table A-2, and General Fund cost factors in Table A-3.

Fiscal Impact Summary

The proposed Pacific Coast Commons mixed-use project at buildout is estimated to generate around $273,535 in annual recurring revenues, and $401,166 in annual recurring costs to the City General Fund, in constant 2021 dollars, as shown in **Table 10.**

Annual Recurring Revenues Details

The annual recurring General Fund revenues include four broad categories, including property-related, sales-related, fees and permits, and other city-specific revenues. The detailed revenue and costs for the proposed project are shown in **Table 10**.

- Property Tax Related: The total annual recurring revenues for the proposed project at buildout includes $88,276 in the City General Fund portion of the 1 percent property tax and $16,815 in property tax in-lieu of the motor vehicle license fee (PTVLF), as calculated in **Appendix Table A-6**. Property transfer tax additionally is estimated at $3,853.
- Sales-tax related revenues, composed of the 1 percent sales tax and a separate use tax, from both on-site sales and off-site expenditures is estimated at $98,316, as calculated in **Appendix Table A-9**.
- Fees and permits, including franchise fees, business license fees and utilities user tax, amount to $51,405. The balance of revenues of $14,870 includes a combination of different city service related charges and fees, based on revenue factors developed in **Appendix Table A-2**.

Annual Recurring Cost Details

The annual recurring General Fund costs include six categories, including Police Services, Fire Services, Recreation and Parks, Library Services, Public Works O&M and General Government, as shown in **Table 10**.

- Police Services: These costs have been developed on a service population basis, as shown in **Appendix Table A-10**. The project is estimated to generate annual police services costs of $141,394, based on an estimated service population of 439 persons.
- Fire Services: These costs have been developed on a service population basis, as shown in **Appendix Table A-10**. The project is estimated to generate annual police services costs of $103,347, based on an estimated service population of 439 persons.
- Recreation and Parks Services: These costs have been developed on a service population based on General Fund expenditure factors, shown in **Appendix Table A-3**. The project is estimated to generate recreation and park services costs of $22,760, based on an estimated service population of 439 persons.

- Library Services: These costs have been developed on a resident population based on GF expenditure factors, shown in **Appendix Table A-3**. The project is estimated to generate library services costs of $55,985, based on an estimated project resident population of 395 persons.
- Public Works Operations and Maintenance: These costs have been developed for public street maintenance O&M, shown in **Appendix Table A-12**. The project is estimated to generate $16,719 of street costs, based on an estimated 0.397 lineal miles of public street adjacent to the project.
- General Government costs are projected at an overhead rate of 17.9 percent of the above line expenditures, as calculated in **Appendix Tables A-3 and A-5**.

Table 10
Detailed Fiscal Impact Summary
Pacific Coast Commons, City of El Segundo
(Constant 2021 Dollars)

General Fund Category	Proposed Project
Annual Recurring Revenues	
General Property Tax	$88,276
Property Tax In-Lieu VLF	16,815
Property Transfer Tax	3,853
Sales and Use Tax	98,316
Franchise Tax	17,794
Utility User Tax	29,608
Business Licenses	4,003
Paramedic Transport Charges	4,153
Administrative Charges	6,744
City and Parking Revenues	3,600
Other Revenues	373
Total General Fund Revenues	**$273,535**
Annual Recurring Costs	
General Government	$60,960
Police Services	141,394
Fire Services	103,347
Recreation and Parks	22,760
Library Services	55,985
Public Works (O&M)	16,719
Total General Fund Costs	**$401,166**
Net Fiscal Impacts	**($127,631)**
Revenue/Cost Ratio	**0.68**

Source: Stanley R. Hoffman Associates, Inc.

APPENDIX A

Fiscal Impact Methodology

Annual recurring impacts on the City of El Segundo General Fund from the proposed Pacific Coast Commons are projected based on a combination of assumptions, including those related to project development, revenues and costs, in constant 2021 dollars.

These impacts are projected based on a specific set of general assumptions, revenue and cost factors, as shown in **Appendix Tables A-1 through A-3**.

Further, the revenue and cost factors have been developed, as applicable, based on project specific factors and service population related factors, which were developed by analyzing the City's Adopted 9-month Annual Budget for 2020-21, adjusted per City Finance Director guidance, to an annual 12-month basis.

The recurring annual revenue and cost categories identified from the City Adopted Annual Budget, are shown in **Appendix Tables A-4 and A-5**.

Property tax calculations, including the City share of the 1% property tax and the property in-lieu of the motor vehicle license fee (PTVLF) for the project is shown in **Appendix Table A-6**. City PTVLF factor calculation is shown in **Appendix Table A-7**.

Business license tax calculations for the commercial operations for the proposed project is shown in **Appendix Table A-8**. These fees are specific to the type and size of establishments.

Sales and use tax calculations for the onsite commercial operations for the proposed project is shown in **Appendix Table A-9**. The table also shows the offsite sales and use tax impacts on the City from the expenditures of the new project residents and employees.

Police and Fire Services costs incurred by the proposed project is shown in **Appendix Table A-10**. These are based on service call and related department cost trends for the City, as shown in **Appendix Table A-11.**

Public Works (Street Maintenance O&M) are shown in **Appendix Table A-12**.

Appendix Table A-1
City General Assumptions
City of El Segundo, 2020-21

Assumption	Description
	Population and Housing [1]
16,701	Total Household Population
76	Group Quarters Population
16,777	Total Resident Population
3,576	Single Family Units (Detached, Attached, Mobile Homes)
3,887	Multi-Family Units (2 Plus Units per Structure)
7,463	Total Housing Units
7,111	Occupied Housing Units
2.38	Citywide Average Household Size
	Employment
76,207	Total City Employment [2]
	Service Population [3]
16,777	Total Resident Population
57,155	Employment (75% of total city employment)
73,932	**Total Service Population**

1. Population and housing numbers are January 1, 2020 estimates provided by the California Department of Finance (DOF).
2. Employment estimate based on total primaty jobs in 2018 reported by Census LEHD for El Segundo, adjusted for a 10 percent self-employment rate. Total primary jobs are reported at 68,586.
3. This analysis defines the service population as population plus 75 percent of employment for the El segundo context.

Sources: Stanley R. Hoffman Associates, Inc.
State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State - January 1, 2011-2020.*
United States Census, Longitudinal Employer-Household Dynamics (LEHD)

Appendix Table A-2
Summary of General Fund Recurring Revenue Factors
City of El Segundo

General Fund Revenue Source	FY 2020-21 Adjusted Budget [1]	Projection Basis [2]	Projection Factor
General Property Tax	$12,193,367	Case Study: Project Valuation	6.32% City general share of 1% levy
VLF Swap (Property Tax in Lieu VLF)	$2,512,596	Case Study	$120 per $1,000,000 assessed valuation
Real Property Transfer Tax	$666,667	Property turnover and valuation assumptions	5.0% Turnover rate $0.55 per $1,000 assessed valuation
Sales and Use Tax	$11,164,911	Taxable Sales	100% of 1% of projected sales and use tax
Use Tax Factor		Use Tax as Percent of Sales Tax	14.3% of sales tax
Franchise Tax	$3,000,000	Service Population = 73,932	$40.58 per service population
Utility User Tax	$4,992,063	Service Population = 73,932	$67.52 per service population
Business Licenses [3]	$13,985,813	Case Study	varies by alternative
Paramedic Transport Charges	$700,000	Service Population = 73,932	$9.47 per service population
Administrative Charges	$1,136,819	Service Population = 73,932	$15.38 per service population
City Code and Parking Fines and Forfeitures	$382,667	Service Population = 73,932	$5.18 per service population
Property Rentals and Parking-In-Lieu Fees	$224,000	Service Population = 73,932	$3.03 per service population
Sales of Reports, Documents, Cable DVDs	$3,133	Service Population = 73,932	$0.04 per service population
Miscellaneous Revenue	$60,000	Service Population = 73,932	$0.81 per service population

1. Based on direction from City Staff, the 9-month 2020-21 Adopted Budget has been extrapolated over a 12-month annual period.
2. This analysis assumes service population as total population plus 75% of employment.
3. The calculation of business license tax is presented in Table A-8.

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, Statement of Estimated Revenue - General Fund, Preliminary Fiscal Year 2020-21
City of El Segundo, Finance Department

Appendix Table A-3
Summary of General Fund Recurring Cost Factors
City of El Segundo

Cost Category	FY 2020-21 Adjusted Adopted Budget [1] Total	Net	Projection Basis [2]	Cost Factor
General Government - Overhead [3]	$18,106,457	$10,863,874	Share of Line Costs at 60% Marginal Rate	17.9% of direct department costs
Police Department [4]	$23,839,367	$23,839,367	Service Population = 73,932	$322.45 per Per Capita Service Population
Fire Department [5]	$17,424,524	$17,424,524	Service Population = 73,932	$235.68 per Per Capita Service Population
Recreation and Parks [5]	$3,837,395	$3,837,395	Service Population = 73,932	$51.90 per Capita Service Population
Library Services [5]	$2,377,885	$2,377,885	Resident Population = 16,777	$141.73 per Capita Resident Population
Planning and Building Safety [6]	$3,478,699	$74,232	Service Population = 73,932	not projected
Street Maintenance [7]	$2,798,792	$2,665,833	City Street Mile = 63.3	$42,114 per street mile

1. Based on direction from City Staff, the 9-month 2020-21 Adopted Budget has been extrapolated over a 12-month annual period.
2. This analysis assumes service population as total population plus 75% of total employment.
3. Based on previous studies, general government services for the proposed project are projected at 60 percent of the current overhead rate because the proposed project will not require a one for one increase in staffing and services.
4. Projected police and fire costs are presented in Appendix Table A-10. Police and fire costs are projected based on costs per call calculated from data provided by police and fire department staff, as shown in Appendix Table A-11.
5. Recreation and parks based on annual budget expenditures attributed to service population, while library services factor based on annual budget expenditures attrubuted to residential population.
6. Planning and building safety costs are not projected because estimated one-time permits, fees and charges for services are estimated to cover planning and building safety costs.
7. Net street maintenance costs of $2,665,833 are based on the 2020-21 adopted budget of $2,798,792 minus the estimated one-time revenues, as shown in Appendix Table A-12.

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, Adopted Budget 2020-21

Appendix Table A-4
Summary of General Fund Revenues, Fiscal Year 2020-21
City of El Segundo

Revenue Category	Adopted 2020-21 Budget [1]			
	Total	Non-Recurring [2]	Not Projected [3]	Projected
Property Taxes				
Property Taxes - Current Year Secured	$11,651,568	$0	$0	$11,651,568
Property Taxes - Current Year Unsecured	$395,132	0	0	395,132
Property Taxes - Prior Year Secured	$66,667	0	0	66,667
Property Taxes - Prior Year Unsecured	$26,667	0	0	26,667
Property Taxes - Penalties and Interest	$6,667	0	0	6,667
Property Taxes - Homeowners Reimbursement	$46,667	0	0	46,667
Total General Property Taxes	*$12,193,367*	*$0*	*$0*	*$12,193,367*
Other Taxes				
Sales and Use Tax	$11,164,911	$0	$0	$11,164,911
Franchise Tax	$3,000,000	0	0	3,000,000
Transient Occupancy Tax	$10,032,760	0	10,032,760	0
Real Property Transfer Tax	$666,667	0	0	666,667
Gas Utility User Tax (UUT)	$1,892,063	0	0	1,892,063
Water UUT	$300,000	0	0	300,000
Telecommunication UUT	$900,000	0	0	900,000
Cogenerated Electric UUT	$1,000,000	0	1,000,000	0
Electric UUT	$1,900,000	0	0	1,900,000
Tax Resolution Agreement	$8,000,000	0	8,000,000	0
Total Other Taxes	*$38,856,400*	*$0*	*$19,032,760*	*$19,823,640*
Business License Taxes				
Commercial Industrial	$13,919,147	$0	$0	$13,919,147
Contractors	$0	0	0	0
Vehicles	$0	0	0	0
Contract Employees	$0	0	0	0
Other Business Licenses Fees	$0	0	0	0
Business License Penalty Charges	$0	0	0	0
Filming Fees	$66,667	0	0	66,667
Total Business License Taxes	*$13,985,813*	*$0*	*$0*	*$13,985,813*
Other Licenses and Permits				
Animal Licenses	$20,400	$0	$0	$20,400
License Agreements Data Centers	$10,000	10,000	0	0
Building Permits	$900,000	900,000	0	0
Plumbing Permits	$82,000	82,000	0	0
Electrical Permits	$250,000	250,000	0	0
Street Permits	$130,959	130,959	0	0
Building Permits SMI Fee #1	$0	0	0	0
Building Permits SMI Fee #2	$0	0	0	0
Mechanical Permits	$145,000	145,000	0	0
Total Other Licenses and Permits	*$1,538,359*	*$1,517,959*	*$0*	*$20,400*
Fines and Forfeitures				
City Code Fines	$6,667	$0	$0	$6,667
Library Fees and Fines	$6,667	0	0	6,667
Parking Fines	$350,000	0	0	350,000
Sur-Charge Parking Fines	$0	0	0	0
Handicap Parking Fines	$1,000	0	0	1,000
Towing Service Fines	$25,000	0	0	25,000
Internet Printing	$2,667	0	2,667	0
Library Book Fair	$0	0	0	0
Total Fines and Forfeitures	*$392,000*	*$0*	*$2,667*	*$389,333*
Use of Money and Property				
Interest on Investments	$580,000	$0	$0	$580,000
Property Rentals	$200,000	0	0	200,000
Interest Allocation Contra	$0	0	0	0
Chevron USA, Inc Grant	$0	0	0	0
Securities GASB 31 Adjustment	$0	0	0	0
CD's GASB 31 Adjustment	$0	0	0	0
Parking-in-Lieu Fees	$24,000	0	0	24,000
Total Use of Money and Property	*$804,000*	*$0*	*$0*	*$804,000*
Intergovernmental				
Motor Vehicle In Lieu Tax	$11,097	$0	$0	$11,097
State Grants	$0	0	0	0
VLF Swap	$2,512,596	0	0	2,512,596
Federal Grants	$0	0	0	0
ESUSD Library Support Reimbursement	$66,667	0	0	66,667
Total Intergovernmental	*$2,590,360*	*$0*	*$0*	*$2,590,360*

Continued.....

Appendix Table A-4 (Continued)
Summary of General Fund Revenues, Fiscal Year 2019-20
City of El Segundo

Revenue Category	Adopted 2020-21 Budget [1]			
	Total	Non-Recurring [2]	Not Projected [3]	Projected
Charges For Services				
Zoning and Planning Fees	$70,000	$70,000	$0	$0
SB 1473 Admin Special Revolving	$0	0	0	0
Special Police Services	$30,600	0	30,600	0
Public Works Services	$2,000	2,000	0	0
Plan Check Fees	$1,850,000	1,850,000	0	0
Plan Retention Fees	$20,000	20,000	0	0
Building After-Hours Inspection Fees	$4,000	4,000	0	0
Sales - Reports/Documents	$2,667	0	0	2,667
Energy Plan Check Fees	$0	0	0	0
Planning Service Fees	$800	800	0	0
Local Record Check Fees	$7,000	7,000	0	0
Cable DVD Sales	$467	0	0	467
Environmental Safety/Above Ground Storage Tanks	$0	0	0	0
Environmental Safety/New Construction Reinspection	$21,848	21,848	0	0
Environmental Safety/Underground Tanks	$0	0	0	0
Environmental Safety/Surcharge	$0	0	0	0
Environmental Safety/Hazardous Waste	$0	0	0	0
Environmental Safety/Disclosure	$0	0	0	0
Environmental Safety/Risk Management Program	$0	0	0	0
Environmental Safety/Industrial	$0	0	0	0
Environmental Safety/Storm Water	$0	0	0	0
Booking Service Fees	$0	0	0	0
Accelerated Plan Check Fees	$500,000	0	0	500,000
Tobacco Retail License Fee	$4,000	0	4,000	0
Special Fire Services	$3,333	0	3,333	0
Paramedic Transport	$700,000	0	0	700,000
Fire Permit Inspection	$22,667	22,667	0	0
High Rise Building Inspection	$82,667	82,667	0	0
Haz Mat Response	$0	0	0	0
Fire Protection Equipment Test	$33,333	0	33,333	0
Annual Fire Inspection	$244,800	0	244,800	0
Fire Prevention Overtime	$47,600	0	47,600	0
CPR Class Fee	$0	0	0	0
CASP Training	$0	0	0	0
Recreation and Parks Activities	$141,333	0	0	141,333
Contract Class Fees	$173,333	0	0	173,333
Special Events Fees	$29,333	0	0	29,333
Drama	$21,333	0	0	21,333
Reservation Fee	$266,667	0	0	266,667
Farmers Market Vendors	$34,667	0	0	34,667
Classes, Camps and Programs	$240,000	0	0	240,000
Total Charges for Services	*$4,554,448*	*$2,080,981*	*$363,667*	*$2,109,800*
Other Revenues				
Sale of Surplus Property	$6,667	$0	$6,667	$0
Refunds	$0	0	0	0
SB 90 Reimbursement	$13,600	0	0	13,600
Administrative Charges	$1,136,819	0	0	1,136,819
Traffic Control Program	$4,000	0	0	4,000
Miscellaneous Revenue	$60,000	0	0	60,000
Electric Vehicle Charging	$2,667	0	0	2,667
Strike Team Reimbursements	$112,200	0	0	112,200
Damage to City Property Reimbursement	$13,333	13,333	0	0
Smoky Hollow Park In Lieu	$73,333	73,333	0	0
City Staff Reimbursement	$133,333	133,333		0
Computer Refresh Charge	$0	0	0	0
Developers Contributions	$1,000,000	0	1,000,000	0
Developer Deposit Revenue	$0	0	0	0
Total Other Revenues	*$2,555,952*	*$220,000*	*$1,006,667*	*$1,329,285*
Interfund Transfers				
Transfer from Traffic Safety Fund	$1,264,944	$0	$0	$1,264,944
Total Interfund Transfers Due	$1,264,944	$0	$0	$1,264,944
General Fund Total	**$78,735,643**	**$3,818,940**	**$20,405,760**	**$54,510,943**

1. 9-month Adopted 2020-21 Budget extrapolated to 12 months (annual), based on discussion with City Finance Director.

1. One-time development related fees are not projected as recurring revenues because they are netted from projected development services co
2. Certain recurring revenues (such as transient occupancy tax, RDA revenues and set payment amounts) that are not impacted by the proposed project are not projected in the fiscal analysis.

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, *Statement of Estimated Revenue - General Fund, Adopted Fiscal Year 2020-21*
City of El Segundo, Finance Department

Appendix Table A-5
Summary of General Fund Expenditures, Fiscal Year 2020-21
City of El Segundo

General Fund Expenditures	FY 2020-21 Adopted Budget [1] Total	General Government	Non-General Government
General Government			
City Council	$347,871	$347,871	
City Treasurer	$206,268	$206,268	
City Clerk	$561,543	$561,543	
City Manager	$2,546,115	$2,546,115	
City Attorney	$749,267	$749,267	
Human Resources	$1,223,207	$1,223,207	
Information Services	$3,253,424	$3,253,424	
Finance	$2,511,807	$2,511,807	
Non-Departmental (vacation and sick leave, retirement and CalPERS, insurance, unemployment compensation)	$5,040,291	$5,040,291	
Transfers Out (Economic Uncertainty Fund, Facilities Maintenance Fund, Capital Improvement Fund)	$1,666,667	$1,666,667	
Non-General Government			
Police Department	$23,839,367		$23,839,367
Fire Department	$17,424,524		$17,424,524
Planning and Building Safety	$3,478,699		$3,478,699
Public Works	$9,671,317		$9,671,317
Recreation and Parks	$3,837,395		$3,837,395
Library Services	$2,377,885		$2,377,885
GRAND TOTAL GENERAL FUND	**$78,735,644**	**$18,106,457**	**$60,629,187**
Current General Government Overhead Rate			
General Government Expenditures			$18,106,457
		divided by	
Direct General Fund Expenditures			$60,629,187
		equals	
Current General Government Overhead Rate			**29.9%**
At 60% Marginal Rate			*17.9%*

1. Based on direction from City Staff, the 9-month 2020-21 Adopted Budget has been extrapolated over a 12-month annual period.

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, *Statement of Estimated Expenditures - General Fund, Adoopted Budget, Fiscal Year 2020-21*
City of El Segundo, Finance Department

Appendix Table A-6
Project Property Tax and PTVLF Estimations

Category	Proposed Project
Panel A. Estimated General Property Tax Revenue	
Estimated Valuation [1]	$140,121,360
1% Property Tax Levy	0.01
Estimated General Fund Share	0.063
Estimated General Fund Share [2]	0.063%
Estimated Incremental Property Tax Revenue	***$88,276***
Panel B. Estimated Property Tax In-Lieu VLF	
Estimated Valuation	$140,121,360
VLF Factor	$120
Estimated Property Tax In-Lieu VLF Revenues	***$16,815***

1. Estimated valuation is presented in development summary.
2. The City's share is the basic one percent property tax levy times their 6.3 percent share of the one percent share (0.01 times 0.063 = 0.00063).

Source: Stanley R. Hoffman Associates, Inc.

Appendix Table A-7
PTVLF Factor Calculation

Fiscal Year	VLF - Property Tax In Lieu [1]	Assessed Valuation (AV) [2]	VLF per $1,000,000 AV [3]
2011-2012	$1,213,600	$9,635,152,459	$130
2012-2013	$1,258,621	$10,284,261,810	$120
2013-2014	$1,343,412	$10,025,144,400	$130
2014-2015	$1,309,564	$10,617,872,863	$120
2015-2016	$1,390,099	$10,947,287,185	$130
2016-2017	$1,423,717	$12,215,580,623	$120
2017-2018	$1,597,050	$13,069,326,068	$120
2018-2019	$1,708,987	$14,192,470,440	$120
Average			***$120***

1. The property tax in lieu VLF amounts are from the City's budget as cited below.
2. City assessed valuation is from the County Assessor report as cited below.
3. Estimated VLF per $1,000,000 AV is rounded to the nearest tens.

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, General Fund Revenues, 2012 through 2019.
County of Los Angeles, Annual Reports, 2012 through 2019.

Appendix Table A-8
Calculation of Business License Tax
City of El Segundo

Business License Tax Calculations	Proposed Project
Apartment Operations	
Apartments (No. of Units)	257
Apartment Business License Tax Assumptions [1]	
Estimated Tax - First Three Units	$32
Estimated Tax - Additional Units	$2,794
Apartment Operations Subtotal	**$2,826**
Commercial Operations	
10 Employees or Less Business Size Category	
Total Square Feet	11,000
Number of Establiishments	10
Average Store Size	1,100
Total Employment	44
Average Employment per Store	4.4
Over 10 Employees Business Size Category	
Total Square Feet	0
Number of Establiishments	0
Average Store Size	0
Total Employment	0
Average Employment per Store	0
Commercial Business License Tax Assumptions [1]	
Base Tax per Business	$107.00
Employee Tax per Employee over 10	$133.45
Tax per Sq. Ft. over 5,000 Sq. Ft. per Firm	$0.26
Estimated Business License Tax	
Base Tax	$1,070
Employee Based Tax	$0
Square Footage Based Tax	$0
Commercial Operations Subtotal	**$1,070**
Commercial Parking Operations	
Number of Operations	1
Number of Employeees	4
Estimated Business License Tax	
Base Tax	**$107**
Total Estimated Business License Tax	**$4,003**

1. Assumption are based on the City of El Segundo's 2020 Business License Schedule.

Sources: Stanley R. Hoffman Associates, Inc.

Appendix Table A-9
Calculation of Sales and Use Tax
City of El Segundo

	Proposed Project
On Site Taxable Sales	
Retail Stores	$2,156,820
Restaurants	$1,247,757
On-Site Taxable Sales Subtotal	$3,404,577
Sales Tax at 1 %	$34,046
Use Tax at 14.3%	$487
Total On-Site Sales and Use Tax	**$34,533**
Project Related Off Site Sales	
Residential Population Expenditures (80% City Capture) [1]	$5,371,218
Employee Expenditures [2]	$209,160
Off-Site Taxable Sales Subtotal	**$5,580,378**
Sales Tax at 1 %	$55,804
Use Tax at 14.3%	$7,980
Total Off-Site Sales and Use Tax	**$63,784**
Overall Sales and Use Tax (Onsite and Offsite)	**$98,316**

1 An 80 percent capture assumptiion results in a project per capita (residential) of $12,187, which is only a third of the current citywide 2019 annual estimate of $36,555 based on data obtained from the California State Bureau of Equalization (SBOE) and DOF 2020 population.

2. Estimated based at on average of $73 per week for junior, clerical and administrative workers obtained from the International Council of Shopping Centers 2012 report, *Office-Worker Retail Spending in a Digital Age, Table BN-4,* adjusted for inflation to 2020 dollars.

Source: Stanley R. Hoffman Associates, Inc.
International Council for Shopping Centers, 2012.

Appendix Table A-10
Project Police and Fire Services Costs Calculations
City of El Segundo

Category	Proposed Project
Panel A. Estimated Police Costs	
Estimated Annual Cost per Service Population	$322
Estimated Service Population	439
Total Project Estimated Police Costs	**$141,394**
Panel B. Estimated Fire Costs	
Estimated Annual Cost per Service Population	$236
Estimated Service Population	439
Total Project Estimated Fire Costs	**$103,347**

1. The estimated cost per police call and per fire call is presented in Appendix Table A-11.

Source: Stanley R. Hoffman Associates, Inc.

Appendix Table A-11
Police and Fire Services Cost Factors
City of El Segundo

Category	Police	Fire
Panel A. Estimated Service Cost per Call for El Segundo		
Total Service Costs for El Segundo [1]	$23,839,367	$17,424,524
Total El Segundo Calls for Service [2]	37,145	2,600
Cost per Call	**$642**	**$6,702**
Panel B. Estimated Calls per Service Population		
Total City Service Population	73,932	73,932
Total Calls per Service Population	0.50	0.04
Total Cost per Service Population	**$322**	**$236**

1. Total police and fire costs for El Segundo are from the 12-month adjusted 2020-21 Adopted Budget.

2. Estimated total calls for service for the police and fire department are estimated as average trend for prior ye

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo Police and Fire Departments
City of El Segundo, Statement of Estimated Revenue - General Fund, Adopted Fiscal Year 2020-21

Appendix Table A-12
Project Street Maintenance Cost Factors
City of El Segundo

Category		Amount
A. AVERAGE STREET MAINTENANCE COST PER STREET MILE		
Annual Street Maintenance Costs		
Street Services		$501,481
Street Maintenance		878,280
Traffic Safety		896,926
Storm Drains		522,105
Total Street Maintenance Costs		$2,798,792
	minus	
One-Time Licenses, Permits and Charges for Services		
Street Permits		$130,959
Public Works Services		2,000
Environmental Safety/Storm Water		0
One-Time Licenses, Permits and Charges for Services		$132,959
	equals	
Net Street Maintenance Costs		$2,665,833
	divided by	
Total City Street Miles		*63.3*
	equals	
Average Maintenance Cost per Street Mile		***$42,114***
B. ESTIMATED STREET MAINTENANCE COSTS FOR PROJECT		
Average Maintenance Cost per Street Mile		$42,114
	times	
Lineal Miles Adjacent to Project		*0.397*
	equals	
Total Street Maintenance Costs for Project		***$16,719***

Sources: Stanley R. Hoffman Associates, Inc.
City of El Segundo, Adopted Operating & Capital Improvement Budget, Fiscal Year 2020-21

Exhibit No. 10

El Segundo
TheCHAMBER
The Voice for Business

November 1, 2021

El Segundo Planning Commission
City of El Segundo
350 Main Street
El Segundo, CA 90245

Re: Pacific Coast Commons

Dear Members of the El Segundo Planning Commission,

I am writing on behalf of the El Segundo Chamber of Commerce in support of the proposed Pacific Coast Commons project on Pacific Coast Highway in El Segundo. This project will have a positive impact on our business community which will be beneficial to our city.

As the City of El Segundo continues our growth with "big ideas taking off", providing housing for our current and future residents is of utmost importance. Additional housing closer to employment centers not only reduces traffic and congestion but also provides a better quality of life for our employees. In addition, these residents will shop, dine, play, and volunteer in our community thus contributing to our financial and overall well-being.

The Pacific Coast Commons project beautifies a highly visible area of our City as well as contributes to the State mandated housing goals. The developers of this project have proven their commitment to El Segundo with community involvement as well as projects that have added to the desirability of El Segundo for many years.

Please accept this letter as an endorsement of the Pacific Coast Commons project from the El Segundo Chamber of Commerce.

Please feel free to contact me at 310-322-1220 or director@elsegundochamber.org if you have any questions.

Best regards,

Marsha Hansen

Marsha Hansen
CEO/President
El Segundo Chamber of Commerce

From:	Planning
To:	Allen, Michael
Cc:	Samaras, Paul; Schonborn, Eduardo
Subject:	FW: Pacific Coast Commons Specific Plan
Date:	Friday, December 10, 2021 8:30:32 AM

FYI

From: Jack Cool <coolj538@gmail.com>
Sent: Thursday, December 9, 2021 8:12 PM
To: Planning <Planning@elsegundo.org>
Subject: Pacific Coast Commons Specific Plan

Hello,

This email is in regard to the Pacific Coast Commons Specific Plan on 475-629 North Pacific Coast Highway.

I live at 403, Indiana Street, Unit 25, El Segundo CA 90245 and am writing this email because I oppose the project. Parking is already difficult in the streets surrounding my apartment and the construction will only make matters worse. Construction also picks up plenty of dust that will surely make its way into neighboring windows.

Thank you,
Jack A Cool

From: Jennie Rowell-Pastorelli <jennieraejean@rocketmail.com>
Sent: Saturday, January 1, 2022 3:07 PM
To: Planning <Planning@elsegundo.org>
Subject: Pacific Coast Commons Concern

Hi,

I'm a resident of condos on Illinois and Pine and wanted to raise a very big concern about the availability of street parking both during and after the constructions of the Pacific Coast Commons.

It is already incredibly difficult to find street parking for residents in the area due to hotel patrons parking on the street as opposed to in the designated parking lots. With the potential construction and elimination of parking for hotel patrons that will only get worse. Will permit parking be put in place to protect residence and allow them and their guests to find already limited parking on the streets?

Thank you,
Jennie

JENNIE ROWELL-PASTORELLI
jennieraejean@rocketmail.com

(310) 403-6328

Exhibit No. 11

Pacific Coast Commons Specific Plan
Final Environmental Impact Report
Responses to Additional Comments Received

State Clearinghouse No. 2020050508

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

FEBRUARY 2022

Printed on 30% post-consumer recycled material.

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Section 1. Introduction

All comment letters received by the City of El Segundo ("City") through December 9, 2021 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses. The City received comment letters from two organizations prior to the City's Planning Commission meeting on December 9, 2021, and verbal comments were also presented at the meeting.

For the new comment letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 1 lists the comment letters received, including the commenting organization's name; the assigned numbering; and the date of the correspondence for responses provided in Section 2, Written Comments.

Table 1. List of Comment Letters Received

Comment Letter	Name	Type	Date
1	Southwest Regional Council of Carpenters (via Mitchell M. Tsai, Attorney at Law)	Organization	December 8, 2021
2	Supporters Alliance for Environmental Responsibility ("SAFER", via Lozeau Drury LLP)	Organization	December 9, 2021

Members of the public who attended the City's Planning Commission meeting on December 9, 2021 were also given opportunities to provide verbal comments. The individuals that provided comments are listed in Table 2. Written transcriptions of the verbal comments are provided, with brackets delineating the individual comments and a numeric identifier have been added to the right margin. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 2 lists the commenters from the City's Planning Commission meeting on December 9, 2021 and the assigned numbering for responses provided in Section 3, Verbal Comments.

Table 2. List of Verbal Commenters

Comments	Name	Type	Date
1	Nino Mascolo	Individual	December 9, 2021
2	Byron Washum	Individual	December 9, 2021
3	Ray Lawson (Southwest Regional Council of Carpenters)	Individual	December 9, 2021
4	Paul Morrison	Individual	December 9, 2021
5	Amalia Fuentes - Supporters Alliance for Environmental Responsibility ("SAFER")	Individual	December 9, 2021
6	Maria Barron	Individual	December 9, 2021
7	Matthew Klemp	Individual	December 9, 2021

As presented in Sections 2 and 3 below, none of the comment received identified deficiencies in the Draft or Final EIR analyses that would require recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5.

CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, is presented below for reference:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before

certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

Although no comments have been raised that would require revisions to the Final EIR, these comments are available to the City's decision makers for their review and consideration as part of their deliberations on the Project's environmental documentation.

Comment Letter 1

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

December 8, 2021

El Segundo Planning Commission
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: planning@elsegundo.org

RE: Agenda Item No. H-1: Pacific Coast Commons Specific Plan Project

Dear Chair Baldino and Honorable Commissioners,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWRCC**"), my Office is submitting these comments on Agenda Item No. H-1 for the November 18, 2021 City Planning Commission Meeting for the City of El Segundo's ("**City**" or "**Lead Agency**") Final Environmental Impact Report ("**FEIR** or **DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project. The Project proposes to demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

1-1

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield*

Citizens for Local Control v. Bakersfield (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

1-1 Cont.

Moreover, SWRCC requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

1-2

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

1-3

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Recently, on May 7, 2021, the South Coast Air Quality Management District found that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

1-3 Cont.

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The

1-3 Cont.

[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

> city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

1-3 Cont.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations (**"CCR"** or **"CEQA Guidelines"**) § 15002(a)(1).[8] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.

1-4

[8] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

App. 4th 1344, 1354 (*"Berkeley Jets"*); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the

1-4 Cont.

project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

1-4 Cont.

B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

1-5

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency

is required to revise and recirculate that information as part of the environmental impact report.

Here, the City has made significant revisions to the Draft EIR which are detailed in the FEIR beginning on page 3-1 of that document. These revisions require recirculation of the EIR for an additional public comment period. These are not minor non-substantive revisions.

The City has significantly altered its transportation and cumulative impacts analyses. The City has now added three additional related projects and attached them to the FEIR as Appendix A in the *Revised Future Analysis*. As a result, all related impacts are substantially altered and the EIR needs to be recirculated to allow for adequate public review and comment. The City has changed its transportation analysis as it relates to trip generation, traffic volume, and level of service analysis. (See FEIR, Appendix A.) These changes are accompanied by dozens of pages of expert data analysis that cannot be left to the public for a last-minute glance.

1-5 Cont.

C. The FEIR Failed to Respond to SWRCC's and Expert's Comments

CEQA requires that a lead agency "evaluate comments on environmental issues received from persons who reviewed the draft EIR" and provide a written response with good faith and reasoned analysis. CEQA Guidelines § 15088. The responses are required to be provided in a revision to the draft EIR or in a separate section in the final EIR. *Id.*

SWRCC submitted comments to the DEIR on April 12, 2021 addressed to Planner Paul Samaras. Upon review of the FEIR, it does not appear that the City responded to or considered SWRCC's comments. Those comments are attached hereto as Exhibit A for the City's renewed consideration. A copy of the e-mail where my Office transmitted these comments are attached as Exhibit B.

1-6

III. **CONCLUSION**

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

1-7

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

April 12, 2021 SWRCC Letter to Paul Samaras and Exhibits (Exhibit A); and

April 12, 2021 E-mail from Leon Ramsey Jr, Mitchell M. Tsai, Attorney at Law to Paul Samaras (Exhibit B).

1-7
Cont.

EXHIBIT A

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

1-8

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

1-8 Cont.

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

1-9

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips,

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reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

1-10 Cont.

I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

1-11

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particular matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants, Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert

1-11 Cont.

on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

1-11 Cont.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

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Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

[2] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

1-12 Cont.

B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

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An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.

1-14

[3] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.

1-14 Cont.

- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[4]

1-14 Cont.

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

1-15

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

1-15 Cont.

Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

1-15 Cont.

(DEIR, ES-10~16.)

E. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an

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impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

1-16 Cont.

1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project's GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency "should explain the limitations of the particular model or methodology selected for use." CEQA Guidelines § 15064.4(c).

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAPs should include the following features:

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(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

1-17 Cont.

Collectively, the above-listed CAP features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

1-17 Cont.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

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(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts. 1-18 Cont.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT. 1-19

The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the 1-20

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

1-20 Cont.

F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

1-21

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

1-21 Cont.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal. App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

1-22

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

1-22 Cont.

B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

1-23

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

1-23 Cont.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

1-24

CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

The DEIR should be revised and recirculated with an affordable housing component.

1-24 Cont.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

1-25
Cont.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

1-26

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

"$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$

Where:

n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

"$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$

Where:

$\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

1-26 Cont.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

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number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added).[12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

1-26 Cont.

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

3

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

1-26 Cont.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

1-26 Cont.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

1-27

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

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Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofiller. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*. 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

1-27 Cont.

Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting.* Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII. Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution.* Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

1-27 Cont.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

1-27 Cont.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

1-27 Cont.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

1-27 Cont.

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case; No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

1-27 Cont.

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

1-27 Cont.

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

1-27 Cont.

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

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Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 – 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989 – 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 - 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

1-27 Cont.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

1-27 Cont.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

1-27 Cont.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

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Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

1-27 Cont.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

1-27 Cont.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

1-27 Cont.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

1-27 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

EXHIBIT D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

April 12, 2021

Greg Sonstein, Esq.
Mitchell M. Tsai, Attorney at Law
155 South El Molino Avenue Suite 104
Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site.

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

1-28

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes

1-29

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

1-29 Cont.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

1-30

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

1-31

[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

3

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

1-31 Cont.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

1-32

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

1-32 Cont.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

1-33

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

1-33 Cont.

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

1-34

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-34 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

1-35

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

1-35 Cont.

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

1-36

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

1-36 Cont.

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

9

Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

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As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

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These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

1-37 Cont.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

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However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

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[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

1-40

[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

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project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-40 Cont.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

1-41 Cont.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

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[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

1-42 Cont.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

1-42 Cont.

[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

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concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

1-42 Cont.

[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

1-42 Cont.

[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1-43

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

1-44

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

1-45

[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

1-45 Cont.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

1-46

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

1-46 Cont.

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

1-47

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

1-47 Cont.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

1-48

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			-8%
% difference from Plan (2035) to Baseline (2005)			-19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

1-48 Cont.

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

1-48 Cont.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

1-48 Cont.

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

1-49

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones.

1-49 Cont.

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Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

1-49 Cont.

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• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

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• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

1-49 Cont.

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Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

1-49 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

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Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

1-49 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

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ii. The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level. iii. The Certification Statement signed and printed on the contractor's letterhead.	
b. The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify: 1. Source of supply 2. Quantity of fuel 3. Quality of fuel, including sulfur content (percent by weight)	1-49 Cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties. 1-50

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	2.83				4.2E-06
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	30.25			**Lifetime Exposure**	7.9E-05

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Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
		Total Emissions From Passenger and Light Duty Vehicles
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) [Calc: (L1*L2)]
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) [Calc: (L3 converted into lbs) / (365 days)]
5	674	Service Population [618 residents + 56 long-term jobs]
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) [Calc: (L4/L5)]
		Daily VMT Per Capita From Passenger and Light Duty Vehicles
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles [Calc: (L9/365)]
11	674	Service Population [618 residents + 56 long-term jobs]
12	24.14	Daily VMT Per Capita [(Calc: L10/L11)]

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

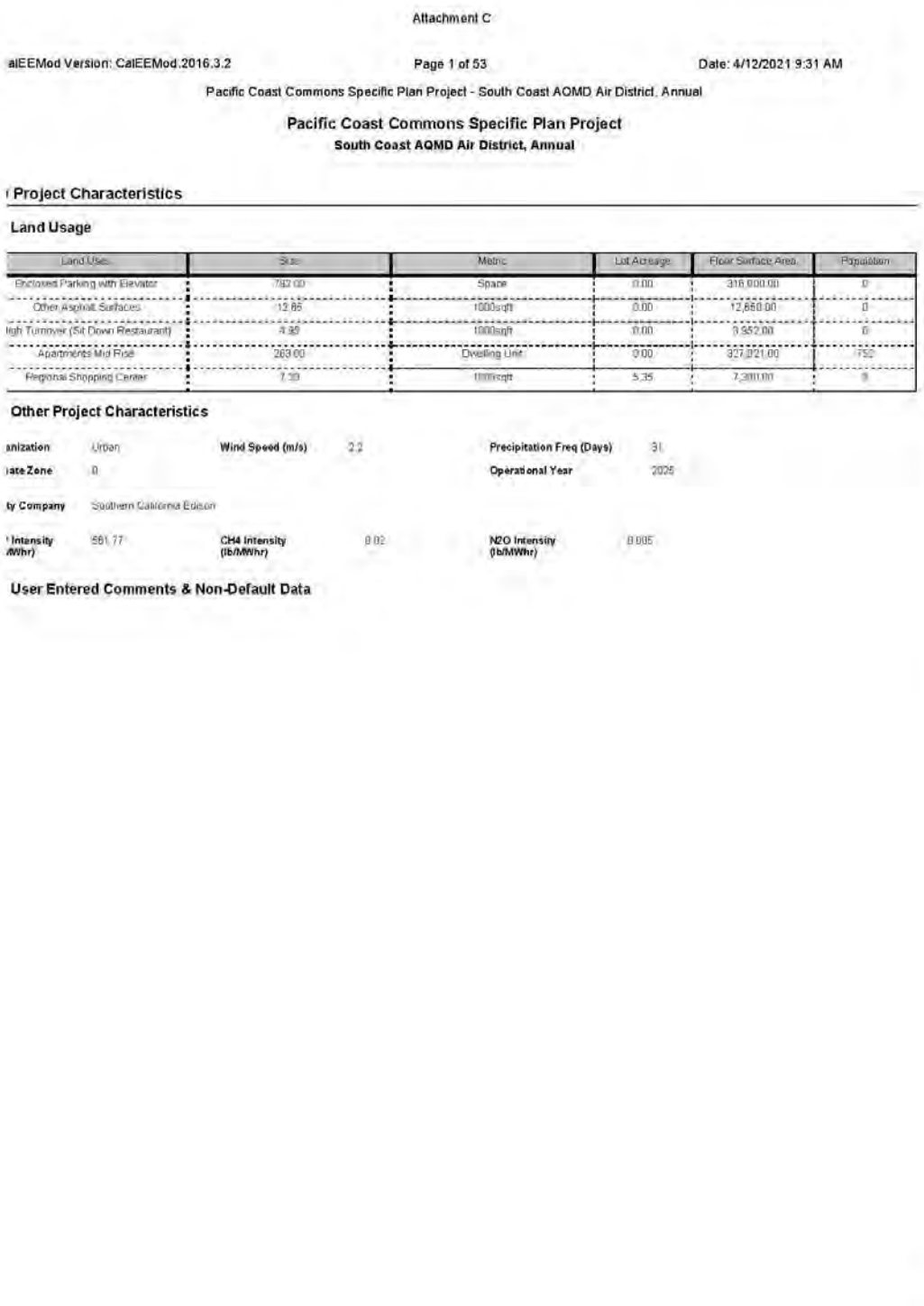
1-51 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

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Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes



Attachment C

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Annual

Project Characteristics

Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
igh Turnover (Sit Down Restaurant)	9.95	1000sqft	0.00	9,952.00	0
Apartments Mid Rise	263.00	Dwelling Unit	9.00	327,921.00	752
Regional Shopping Center	7.39	1000sqft	5.35	7,390.00	0

Other Project Characteristics

anization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
ate Zone	8			Operational Year	2025
ty Company	Southern California Edison				
Intensity /MWhr)	561.77	CH4 Intensity (lb/MWhr)	0.02	N2O Intensity (lb/MWhr)	0.005

User Entered Comments & Non-Default Data

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	282.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
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tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
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tblTripsAndVMT	WorkerTripNumber	332.00	300.00
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tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.05	5.04
tblVehicleTrips	SU_TR	131.04	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	8.65	5.19
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tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstovesDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1620	0.7437	1.6700e-003	0.3852	0.0626	0.4077	0.1937	0.0486	0.2122	0.0000	150.2969	150.2969	0.0339	0.0000	151.1444
2022	1.3593	2.3980	2.6896	5.9700e-003	0.7647	0.1049	0.8696	0.0970	0.0983	0.1953	0.0000	532.1323	532.1323	0.0966	0.0000	534.2970
2023	0.3882	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8981	832.8981	0.1113	0.0000	835.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8981**	**832.8981**	**0.1113**	**0.0000**	**835.6806**

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7435	1.6700e-003	0.3552	0.0526	0.4077	0.1637	0.0485	0.2122	0.0000	160.2959	160.2959	0.0039	0.0000	161.1442
2022	1.3593	2.3850	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1320	532.1320	0.0886	0.0000	534.2966
2023	0.3592	2.9109	3.2200	9.1600e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8977	832.8977	0.1113	0.0000	835.6802
2024	1.2711	1.8401	1.9799	5.3600e-003	0.2664	0.0473	0.3137	0.0765	0.0443	0.1208	0.0000	483.9749	483.9749	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1600e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8977**	**832.8977**	**0.1113**	**0.0000**	**835.6802**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.5769	0.5769
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6766	1.6766
6	1-1-2023	3-31-2023	0.9621	0.9621
7	4-1-2023	6-30-2023	0.6759	0.6759
8	7-1-2023	9-30-2023	0.7218	0.7218

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9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6606	0.6606
11	4-1-2024	6-30-2024	1.1603	1.1603
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.6765	1.6765

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

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Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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uilding Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
aving - Phases 2 and 3	Pavers	2	8.00	130	0.42
aving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
aving - Phases 2 and 3	Rollers	2	8.00	80	0.38
rchitectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

rips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
emolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction - hase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
emolition - Phases 2 nd 3	6	108.00	40.00	408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phases 2 nd 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction hases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phases 2 and	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

.1 Mitigation Measures Construction

1-51
Cont.

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1680	15.1680	1.0400e-003	0.0000	15.1939
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.6000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.9300e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	0.0275	0.0275	2.2000e-004	0.0000	0.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**20.3126**	**20.3126**	**1.5800e-003**	**0.0000**	**20.3621**

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4300e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.8000e-004	3.6600e-003	9.6000e-004	1.8000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1830
Vendor	8.0000e-004	0.0283	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.8900e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0339
Total	**5.5900e-003**	**0.0759**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.4700e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	8.3000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6865	2.6865	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0700e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0349**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2800e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0111	2.7800e-003	3.0000e-006	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.6300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	6.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8500e-003**	**9.0000e-005**	**2.9600e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8000e-004	9.6300e-003	2.3800e-002	3.0000e-005	6.6000e-004	2.0000e-005	6.6000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0254**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9688e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5600e-004**	**0.0000**	**10.2895**

1-51 Cont.

.4 Grading - Phase 1 - 2022

litigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

litigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6500e-003	2.3900e-003	3.0000e-005	6.6800e-004	2.0000e-005	6.8800e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

1-51 Cont.

5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2863
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9321**	**225.9321**	**0.0541**	**0.0000**	**227.2863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-003	0.2604	0.0663	7.3000e-004	0.0184	4.9000e-004	0.0189	5.1000e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3500e-003	0.0000	70.8928
Worker	0.0458	0.0326	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6800e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3089**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1482**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5875**	**178.5875**	**7.0600e-003**	**0.0000**	**178.7639**

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2650
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2650

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2684	0.0663	7.3000e-004	0.0184	4.9000e-004	0.0189	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3600e-003	0.0000	70.8926
Worker	0.0460	0.0525	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	0.0536	0.3209	0.4428	1.9200e-003	0.1468	1.4300e-003	0.1482	0.0394	1.3300e-003	0.0407	0.0000	178.5875	178.5875	7.0600e-003	0.0000	178.7639

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.5800e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	8.6500e-003	7.0000e-005	8.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

6 Paving - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9300e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	5.8000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0408	9.9800e-003	1.1000e-004	2.7700e-003	7.6000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0585	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2165	16.2165	4.1000e-004	0.0000	16.2246
Total	**8.0600e-003**	**0.0457**	**0.0685**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.6000e-003**	**1.6000e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9600e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	5.5000e-004	0.0000	10.6642
Worker	8.0900e-003	4.9000e-003	0.0556	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	15.2166	15.2166	4.1000e-004	0.0000	15.2268
Total	**9.2600e-003**	**0.0453**	**0.0656**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**25.8645**	**25.8645**	**1.0600e-003**	**0.0000**	**25.8910**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8831**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.5000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2500e-003	7.0000e-005	5.3200e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.4000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3649	14.3649	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.9000e-005	5.3800e-003	1.5300e-003	8.0000e-005	1.6100e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0230	1.6000e-004	0.0232	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	18.8277	18.8277	4.4000e-004	0.0000	18.8387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.1600e-003	5.0000e-005	1.3500e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1535	5.1535	2.8000e-004	0.0000	5.1706
Worker	4.6600e-003	3.8200e-003	0.0392	1.3000e-004	0.0145	1.6000e-004	0.0146	3.8500e-003	1.4000e-004	3.9900e-003	0.0000	11.7093	11.7093	2.8000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.4000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.6000e-004**	**0.0000**	**16.8863**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2087	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2087**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.8000e-004	0.0000	5.1706
Worker	4.8600e-003	3.2200e-003	0.0282	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0326**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.4000e-004**	**0.0000**	**16.8863**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3096	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1698
Total	**0.0359**	**0.3767**	**0.3096**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1698**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0193	3.0000e-004	0.0195	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.6500e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	8.5700e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0597	3.3000e-004	0.0399	2.6000e-004	0.0371	9.7800e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1700e-003**	**0.0000**	**115.1055**

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	0.0359	0.3767	0.3098	6.2000e-004	0.1386	0.0163	0.1548	0.0709	0.0150	0.0858	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-003	0.1642	0.0524	7.6000e-004	0.0103	3.0000e-004	0.0106	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.8900e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.9575	9.9575	5.4000e-004	0.0000	9.9711
Worker	0.0124	8.4600e-003	0.0997	3.3000e-004	0.0769	2.6000e-004	0.0771	9.7500e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8219
Total	0.0181	0.2017	0.1606	1.1900e-003	0.0578	5.9000e-004	0.0584	0.0156	5.6000e-004	0.0161	0.0000	114.9521	114.9521	6.1300e-003	0.0000	115.1055

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3149	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	0.0931	0.3722	0.7689	3.3400e-003	0.2769	2.1300e-003	0.2810	0.0747	1.9700e-003	0.0767	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0924	1.1000e-003	0.0257	3.6000e-004	0.0261	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1715
Worker	0.0840	0.0574	0.5764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.5300e-003	0.0681	0.0000	202.2438	202.2438	4.7500e-003	0.0000	202.3627
Total	0.0931	0.3722	0.7689	3.3400e-003	0.2759	2.1300e-003	0.2780	0.0727	1.9700e-003	0.0747	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.9000e-004	0.0208	2.6000e-004	0.0211	5.0000e-003	2.4000e-004	5.2900e-003	0.0000	77.1792	77.1792	4.1900e-003	0.0000	77.2831
Worker	0.0576	0.0379	0.4566	1.5600e-003	0.1810	1.2700e-003	0.1823	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	5.1500e-003	0.0000	141.6229
Total	0.0641	0.2651	0.5216	2.3500e-003	0.2018	1.5300e-003	0.2034	0.0541	1.4100e-003	0.0555	0.0000	218.7233	218.7233	7.3400e-003	0.0000	218.9060

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	**0.0809**	**0.7394**	**0.8892**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5169**	**127.5169**	**0.0302**	**0.0000**	**128.2707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.3273	0.0690	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2811
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	5.1500e-003	0.0000	141.6529
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

1-51 Cont.

12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0296	8.4000e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0707
Worker	5.0100e-003	3.9400e-003	0.0479	1.6000e-004	0.0189	1.9000e-004	0.0190	5.0100e-003	1.8000e-004	5.1900e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7627
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**0.0008**	**0.0000**	**24.8333**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	0.0286	8.4800e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6000e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.6500e-003**	**0.0326**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0666	4.0000e-004	0.0670	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	1.0783	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0692	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5800e-003	6.0000e-005	1.6400e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0565	4.0000e-004	0.0570	0.0150	3.8000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	0.0197	0.0811	0.1597	7.0000e-004	0.0620	4.7000e-004	0.0625	0.0166	4.4000e-004	0.0170	0.0000	64.3778	64.3778	2.0800e-003	0.0000	64.4298

1-51 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,394.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	990.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	308.60	171.62	554,321	554,321
Total	2,516.01	3,099.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.80	9.40	6.80	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	9.40	6.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.80	9.40	6.80	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	9.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.025696	0.002143	0.001678	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
NaturalGas Mitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5300e-005	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-005		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7937
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

1-51 Cont.

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	MMBtu/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6880	54.6880	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14600	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.9000e-005	5.9000e-005		5.9000e-005	5.9000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7927
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

6.0 Area Detail

6.1 Mitigation Measures Area

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0827	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

1-51 Cont.

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0033	0.0013	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0013**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

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1-51 Cont.

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5109	0.6283	0.0156	121.8697
Unmitigated	101.5109	0.6283	0.0156	121.8697

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1955 / 10.8028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.90248 / 0.0559837	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331415	2.9039	0.0127	4.4000e-004	3.4760
Total		**101.5109**	**0.6283**	**0.0156**	**121.8697**

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.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.8028	82.8736	0.5815	0.0140	111.8715
nclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
igh Turnover (Sit down Restaurant)	1.55249 / 0.0958039	5.7304	0.0482	1.2000e-003	7.1304
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.6407 29 / 0.331415	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5100**	**0.6283**	**0.0156**	**121.8697**

.0 Waste Detail

.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2601	0.0000	94.3242
Unmitigated	38.0730	2.2601	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.96	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5569	0.0920	0.0000	3.8573
Total		**38.0730**	**2.2601**	**0.0000**	**94.3242**

1-51 Cont.

8.2 Waste by Land Use

Mitigated

Land Use	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5569	0.0920	0.0000	3.8573
Total		38.0730	2.2501	0.0000	94.3242

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	782.00	Space	0.00	318,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

1-51 Cont.

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.05	5.04
tblVehicleTrips	SU_TR	131.04	205.63
tblVehicleTrips	SU_TR	26.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,669.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0592	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,669.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0592	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1-51 Cont.

.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 3
Mobile	3.9049	17.6189	43.6820	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7969		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6728**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,564.21 61**	**24,564.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 3
Mobile	3.9049	17.6189	43.6820	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7969		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6728**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,564.21 61**	**24,564.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

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Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	347	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	150.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

1-51 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1483	4.8911	1.0364	0.0146	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e- 003	0.1200	3.8400e- 003	0.1318	0.0369	3.6700e- 003	0.0406		544.8769	544.8769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8900e- 003	0.0842	6.5800e- 003	0.0908	0.2372	6.0800e- 003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.5396	7.0176	4.5018	0.0288	1.3600	0.0256	1.3956	0.3666	0.0242	0.3908		3,034.576 1	3,034.576 1	0.1638		3,038.670 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1405	4.7911	1.0304	0.0148	0.3776	0.0152	0.3928	0.0926	0.0146	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1230	3.8400e-003	0.1318	0.0389	3.6700e-003	0.0425		544.9769	544.9769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8000e-003	0.8943	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		886.9227	886.9227	0.0238		886.5192
Total	**0.5338**	**7.0176**	**4.5018**	**0.0288**	**1.3600**	**0.0256**	**1.3856**	**0.3666**	**0.0242**	**0.2969**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.670 6**

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0360		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.467 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0360**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.467 3**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.9530	0.2263	2.6500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4365	272.4365	0.0165		272.8505
Worker	0.2111	0.1369	1.8896	5.5600e-003	0.6589	4.1100e-003	0.6630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	**0.2389**	**1.0906**	**2.1160**	**8.1100e-003**	**0.6229**	**6.0300e-003**	**0.6289**	**0.1647**	**5.6300e-003**	**0.1703**		**826.1401**	**826.1401**	**0.0314**		**826.9244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.0663	0.0000	10.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**10.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.457 3**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.8598	0.2353	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1369	1.6836	5.5800e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1667	5.6300e-003	0.1723		826.1401	826.1401	0.0314		826.9244

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.8598	0.2253	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0184	1.2400e-003	0.0200		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.9000e-003	0.9667	0.2556	7.2800e-003	0.2635		1,158.361 1	1,158.361 1	0.0403		1,159.368 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0279	0.8598	0.2359	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0184	1.2400e-003	0.0200		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5600e-003	0.9008	0.2372	6.0500e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.8800e-003	0.9667	0.2556	7.2900e-003	0.2635		1,158.361 1	1,158.361 1	0.0403		1,159.368 7

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5200e-003	0.0640	1.5600e-003	0.0657	0.0164	1.5800e-003	0.0180		270.0691	270.0691	0.0159		270.4668
Worker	0.3168	0.1978	2.7888	8.5700e-003	0.9942	6.3900e-003	1.0006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3429**	**1.1032**	**3.0027**	**0.0111**	**1.0582**	**8.0500e-003**	**1.0663**	**0.2536**	**7.4600e-003**	**0.2611**		**1,124.248 3**	**1,124.248 3**	**0.0374**		**1,125.173 2**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0640	1.6600e-003	0.0657	0.0184	1.5900e-003	0.0200		370.0591	370.0591	0.0159		370.4569
Worker	0.3168	0.1970	2.7860	8.5700e-003	0.0942	6.3900e-003	0.1006	0.2372	5.8900e-003	0.2430		654.1791	654.1791	0.0215		654.7174
Total	0.3429	1.1032	3.0007	0.0111	0.1582	8.0500e-003	0.1663	0.2556	7.4800e-003	0.2631		1,124.238 3	1,124.238 3	0.0374		1,125.173 2

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.8900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.078 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0783	2.7168	0.6417	7.5800e-003	0.1920	4.9900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1282	0.0129	1.3413	9.5800e-003	1.3508	0.3557	8.8300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	0.5534	3.0128	4.7699	0.0204	1.5333	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0840	1.6800e-003	0.0857	0.0184	1.5900e-003	0.0200		270.0591	270.0591	0.0159		270.4558
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5311**	**4.8600e-003**	**0.5360**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**697.8145**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0548	1.6900e-003	0.0567	0.0184	1.6900e-003	0.0200		270.0591	270.0591	0.0159		270.4568
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0895	427.0895	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**4.8600e-003**	**0.5160**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**698.0155**

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**49.0421**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.9107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	6.3900e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.7200e-003**	**1.0319**	**0.2740**	**9.5700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0522	1.8102	0.4276	5.0600e-003	0.1280	3.5300e-003	0.1313	0.0365	3.1900e-003	0.0400		540.1183	540.1183	0.0312		540.9115
Worker	0.3168	0.1978	2.7760	6.6700e-003	0.8842	6.3900e-003	0.9006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3690	2.0080	3.2146	0.0136	1.0122	9.7200e-003	1.0319	0.2740	9.0700e-003	0.2831		1,394.297 4	1,394.297 4	0.0533		1,395.628 9

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0380		0.9975	0.9975		0.9280	0.9280		3,746.904 0	3,746.904 0	1.0494		3,773.210 3
Total	2.2691	21.4844	19.6434	0.0380	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450		3,746.904 0	3,746.904 0	1.0494		3,773.210 3

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4619	0.4663	7.0100e-003	0.1689	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0484		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2560	3.6800e-003	0.2591	0.0737	3.4000e-003	0.0766		1,047.470 9	1,047.470 9	0.0553		1,049.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4541**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1280**		**2,839.598 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6434	0.0388		0.9975	0.9975		0.9200	0.9200	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4044**	**19.6434**	**0.0388**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9200**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5600e-003	0.0489		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 3	1,047.470 3	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4741**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1266**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3699	0.3954	4.9000e-003	0.1299	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4693	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0351		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0351	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0399	1.3989	0.3454	4.9000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4457	0.2585	3.8824	9.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	**0.4857**	**1.6574**	**4.2458**	**0.0173**	**1.4693**	**0.0109**	**1.4802**	**0.3926**	**0.0101**	**0.4026**		**1,757.251 6**	**1,757.251 6**	**0.0568**		**1,758.671 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.919 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.919 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2306	7.6512	2.4404	0.0367	0.9841	0.0142	0.9983	0.2423	0.0136	0.2559		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0389	1.3889	0.9854	4.9000e-003	0.1269	1.5400e-003	0.1285	0.0389	1.4700e-003	0.0403		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3680	5.1471	0.0165	1.7584	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.668 3	1,644.668 3	0.0388		1,645.639 2
Total	0.8652	9.3781	7.9729	0.0581	2.8695	0.0282	2.8287	0.7534	0.0265	0.7799		6,151.470 9	6,151.470 9	0.3196		6,159.439 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2308	7.6512	2.4409	0.0367	0.8841	0.0140	0.8983	0.2423	0.0136	0.2559		3,963.047 2	3,963.047 2	0.2630		3,969.373 3
Vendor	0.0285	1.3689	0.3854	4.9000e-003	0.1260	1.6400e-003	0.1276	0.0359	1.4700e-003	0.0373		523.7364	523.7364	0.0277		524.4272
Worker	0.5957	0.3590	5.1471	0.0165	1.7984	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 3
Total	0.8552	9.3791	7.9729	0.0581	2.8085	0.0282	2.8267	0.7534	0.0265	0.7799		6,151.470 9	6,151.470 9	0.3196		6,159.459 6

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 5
Worker	1.1169	0.6713	9.6509	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2337	4.7779	10.8092	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1169	4.1080	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2357	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0964	1.1230	0.0146	0.3640	4.5700e-003	0.3686	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.6118	9.0151	0.0299	3.3533	0.0230	3.3763	0.8890	0.0212	0.9103		2,982.626 8	2,982.626 8	0.0688		2,984.295 7
Total	**1.1714**	**4.7082**	**10.1382**	**0.0445**	**3.7173**	**0.0276**	**3.7449**	**0.9996**	**0.0256**	**1.0254**		**4,548.136 5**	**4,548.136 5**	**0.1505**		**4,551.848 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	**1.4716**	**13.4436**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.698 9**	**2,555.698 9**	**0.6044**		**2,570.807 7**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0864	1.1290	0.0145	0.3848	4.5700e-003	0.3886	0.1100	4.3700e-003	0.1143		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.5118	9.0151	0.0299	3.3539	0.0230	3.3763	0.8893	0.0212	0.9105		2,982.626 9	2,982.626 9	0.0668		2,984.295 7
Total	1.1714	4.7082	10.1382	0.0445	3.7373	0.0276	3.7649	0.9993	0.0256	1.0254		4,548.136 5	4,548.136 5	0.1485		4,551.848 3

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0226		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	0.9882	9.5246	14.6258	0.0226		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	4.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4000e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0226		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0226**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	6.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4800e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1531	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5196**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2189**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6626	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9186	0.0215	2.9601	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6626	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9186	0.0215	2.9601	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7998		18,212.30 01
Unmitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7998		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.24	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	906.80	171.62	554,321	554,321
Total	2,515.91	3,089.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	9224.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7539
Total		0.1195	1.0380	0.5574	6.5100e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	6.23403	0.0668	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.60776	0.0280	0.2763	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3240	330.3240	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		47.059	47.059	9.0000e-005	9.0000e-005	47.309
Total		**0.1495**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.7404**	**1,303.7404**	**0.0250**	**0.0239**	**1,311.4879**

6.0 Area Detail

6.1 Mitigation Measures Area

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 5	5,058.071 5	0.1341	0.0920	5,088.842 9
Unmitigated	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 5	5,058.071 5	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9914	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7805	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**8.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.923 5	5,018.923 5	0.0962	0.0920	5,048.647 8
Landscaping	0.6686	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1997
Total	5.4599	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.847 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	269.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.80	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

1-51 Cont.

tblVehicleTrips	SU_TR	5.88	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 8
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0858	3.9608	0.6411	4.5196	1.0592	0.8027	1.8025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

1-51 Cont.

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 8
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0858	3.9608	0.6411	4.5196	1.0592	0.8027	1.8025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1619	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7886	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0863**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,593.83 45**	**23,593.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1619	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7886	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0863**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,593.83 45**	**23,593.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	3/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

1-51 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	3.9493	1.1116	0.0145	0.3376	0.0154	0.3530	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.890 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1230	3.9600e-003	0.1320	0.0389	3.7900e-003	0.0426		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2388	2.7080	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		828.0894
Total	**0.5710**	**7.0895**	**4.3263**	**0.0278**	**1.3548**	**0.0259**	**1.3858**	**0.3686**	**0.0246**	**0.2912**		**2,931.745 6**	**2,931.745 6**	**0.1691**		**2,935.973 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1116	0.0145	0.3378	0.0154	0.3532	0.0928	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9015	0.5085	4.9600e-003	0.1280	3.9900e-003	0.1320	0.0353	3.7000e-003	0.0406		529.1004	529.1004	0.0354		529.9864
Worker	0.3680	0.2338	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5718	7.0805	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931.745 6	2,931.745 6	0.1691		2,935.973 6

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9500	0.2583	2.4800e-003	0.0640	1.9600e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1496	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1006	1.9460	7.6800e-003	0.6229	6.0700e-003	0.6290	0.1647	5.6900e-003	0.1703		782.3841	782.3841	0.0316		783.1736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.6589	4.1100e-003	0.6630	0.1492	3.7900e-003	0.1529		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1086	1.9460	7.6800e-003	0.6229	6.0900e-003	0.6290	0.1657	5.6900e-003	0.1733		782.3841	782.3841	0.0316		783.1736

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9268		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9268		2,895.149 5

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9587	0.2533	2.4600e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3680	0.2398	2.7083	8.3100e-003	0.8943	6.5800e-003	0.9009	0.2372	6.0600e-003	0.2432		829.5343	829.5343	0.0222		829.0894
Total	0.3982	1.1985	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2536	7.9600e-003	0.2615		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1589	1.1589		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1589	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5

1-51 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.9697	0.2633	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.6502	264.6502	0.0177		264.9927
Worker	0.3699	0.2398	2.7083	8.3100e-003	0.6942	6.5800e-003	0.7008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		827.0894
Total	0.3982	1.1905	2.9616	0.0108	0.7582	8.5600e-003	0.7668	0.2536	7.9600e-003	0.2615		1,093.084 5	1,093.084 5	0.0399		1,091.082 1

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9289		2,895.269 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2386	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2186	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		796.8292	796.8292	0.0201		799.3305
Total	0.3745	1.1102	2.7393	0.0105	0.9482	0.0106	0.9553	0.2556	0.0065	0.2621		1,061.023 4	1,061.023 4	0.0371		1,061.950 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2737	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

1-51 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2356	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0164	1.6400e-003	0.0181		362.1942	362.1942	0.0170		362.6199
Worker	0.3470	0.2156	2.4995	8.0100e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		799.8292	799.8292	0.0201		799.3306
Total	0.3745	1.1182	2.7350	0.0105	0.9582	0.0100	0.9663	0.2536	7.5300e-003	0.2611		1,161.023 4	1,161.023 4	0.0371		1,161.950 4

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0024	0.7052	0.7185	7.3600e-003	0.1926	5.1600e-003	0.1977	0.0553	4.9300e-003	0.0602		786.5827	786.5827	0.0511		787.8598
Worker	0.8206	0.3248	3.7497	0.0120	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,199.243 0	1,199.243 8	0.0301		1,199.998 8
Total	0.8229	1.0299	4.4682	0.0194	1.5339	0.0148	1.5486	0.4110	0.0138	0.4248		1,984.826 5	1,984.826 5	0.0812		1,986.858 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0824	2.7952	0.7186	7.3600e-003	0.1420	5.1600e-003	0.1972	0.0553	4.9300e-003	0.0602		786.5827	786.5827	0.0511		787.8596
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	8.5900e-003	1.3500	0.3557	8.8300e-003	0.3646		1,198.243 8	1,198.243 8	0.0301		1,198.995 8
Total	**0.6029**	**3.0299**	**4.4682**	**0.0194**	**1.5333**	**0.0148**	**1.5481**	**0.4110**	**0.0138**	**0.4248**		**1,984.826 5**	**1,984.826 5**	**0.0812**		**1,986.855 6**

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1020	11.1249	14.5805	0.0220		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1020**	**11.1249**	**14.5805**	**0.0220**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9617	0.2385	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1089	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6653
Total	0.2010	1.0100	1.4884	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

1-51 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2395	2.4500e-003	0.0649	1.7200e-003	0.0667	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1083	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6663
Total	0.2010	1.0100	1.4894	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2862

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0193		281.9062
Total	48.8421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0193		281.9062

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2186	2.4936	6.0100e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9788**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 4**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2185	2.4936	6.0100e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9788**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 4**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4644	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4644**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4906	6.6800e-003	0.1699	2.7800e-003	0.1727	0.0463	2.6300e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4527**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4164**	**0.0129**	**0.4293**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4844**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4906	6.6800e-003	0.1699	2.7800e-003	0.1727	0.0463	2.6300e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4527**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4164**	**0.0129**	**0.4293**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	16.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**16.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3991	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2938	3.4559	0.0116	1.3415	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**	**0.0000**	**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3691	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2835	3.4553	0.0116	1.3415	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6877	2.5678	0.0360	0.8841	0.0146	0.8986	0.2423	0.0139	0.2562		3,909.269 2	3,909.269 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0363	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.6079	0.0154	1.7584	0.0125	1.8008	0.4743	0.0115	0.4859		1,538.074 3	1,538.074 3	0.0361		1,538.977 6
Total	0.9329	9.4395	7.5992	0.0562	2.8005	0.0286	2.8291	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6871	2.5878	0.0360	0.8841	0.0146	0.8986	0.2423	0.0139	0.2562		3,909.368 2	3,909.368 2	0.2617		3,915.911 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0359	1.5400e-003	0.0374		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.8079	0.0154	1.7684	0.0125	1.7809	0.4743	0.0115	0.4858		1,538.074 3	1,538.074 3	0.0381		1,538.977 6
Total	0.9329	9.4389	7.5992	0.0562	2.8005	0.0286	2.8291	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5726	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5726	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0803	1.3706	0.0143	0.3840	4.8400e-003	0.3889	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0886		1,528.381 3
Worker	1.2272	0.7344	8.6398	0.0089	3.3533	0.0734	3.3767	0.8990	0.0215	0.9205		2,883.889 3	2,883.889 3	0.0678		2,885.583 0
Total	1.3502	4.8146	9.9105	0.0232	3.7373	0.0282	3.7655	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1562		4,413.964 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0800	1.2705	0.0143	0.3840	4.6400e-003	0.3888	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0895		1,528.351 3
Worker	1.2272	0.7344	8.6299	0.0289	3.3530	0.0234	3.3767	0.8893	0.0215	0.9108		2,883.889 3	2,883.889 3	0.0671		2,885.563 0
Total	1.3502	4.8146	9.9005	0.0432	3.7373	0.0282	3.7655	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1566		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.3342	0.0142	0.3640	4.7700e-003	0.3688	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0970		1,523.164 1
Worker	1.1649	0.6690	9.0553	0.0260	3.3533	0.0230	3.3763	0.8893	0.0212	0.9105		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0402	3.7173	0.0278	3.7451	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1590		4,313.582 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.2342	0.0142	0.3849	4.7700e-003	0.3896	0.1106	4.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0879		1,523.164 1
Worker	1.1849	0.6690	8.0583	0.0280	3.9533	0.0230	3.9763	0.6883	0.0212	0.9095		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0422	3.7373	0.0278	3.7651	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1490		4,313.572 4

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5500e-003	0.1296	0.0368	1.5200e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1000e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0220**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5900e-003	0.1296	0.0368	1.5200e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 8**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1800	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

1-51 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.94	1,094.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	869.51	1,476.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	263.17	498.60	171.62	554,321	554,321
Total	2,516.01	3,069.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	6.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000712	0.000925
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000925
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000712	0.000925
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000925
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	6234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	6.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.80776	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

1-51 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Health	0.4801	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

1-51 Cont.

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4501	3.8314	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,010.023 5	5,010.023 5	0.0962	0.0930	5,048.847 9
Landscaping	0.6586	0.2506	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1960
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0930	5,088.043 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

1-51 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

1-51 Cont.

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

```
Anemometer Height:   10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type:    Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON



AERSCREEN output file:

2021.04.05_PacificCoastCommons_Operation.out



*** AERSCREEN Run is Ready to Begin



No terrain used, AERMAP will not be run

**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

1-51 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

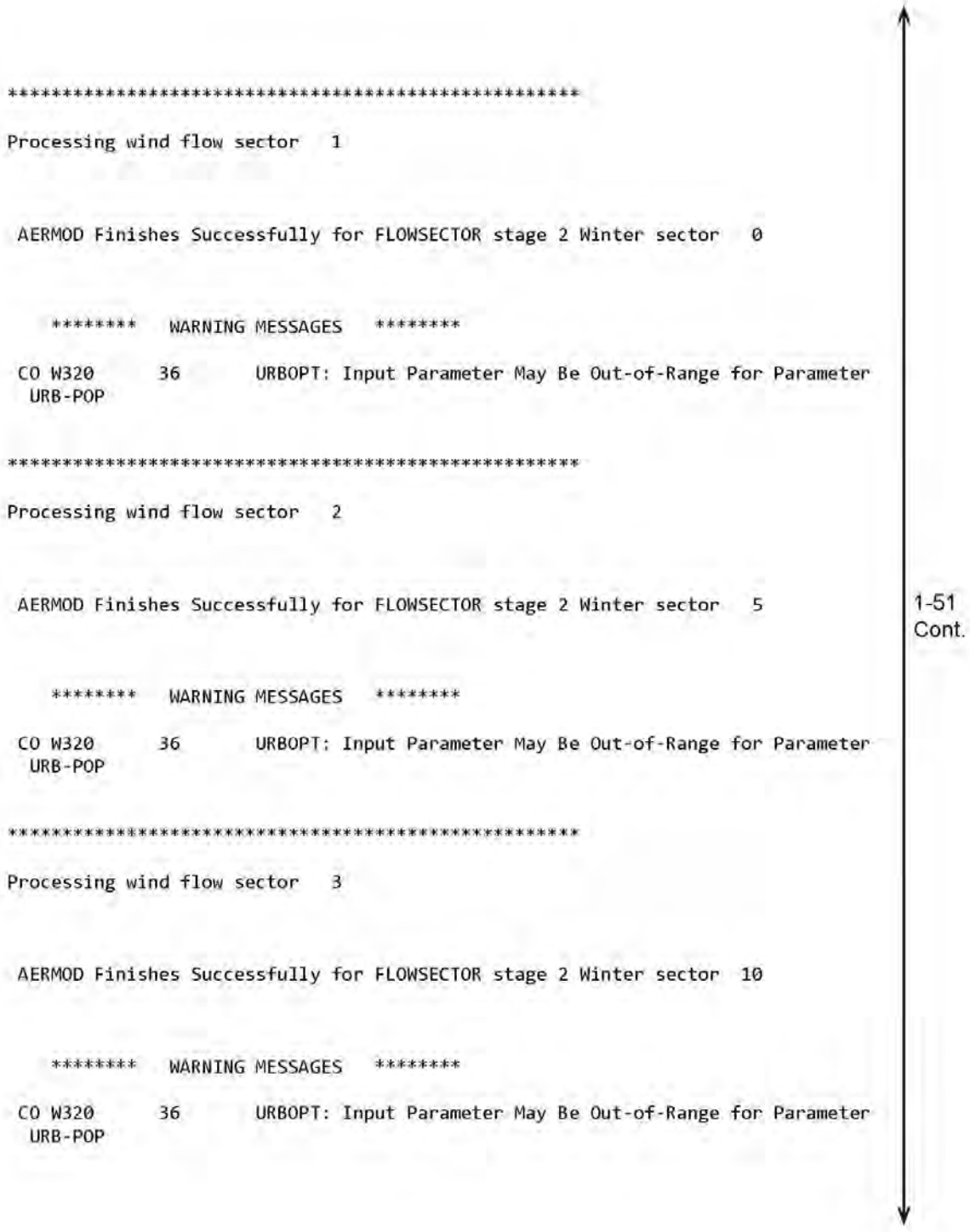
FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD

 Processing Winter

Processing surface roughness sector  1
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

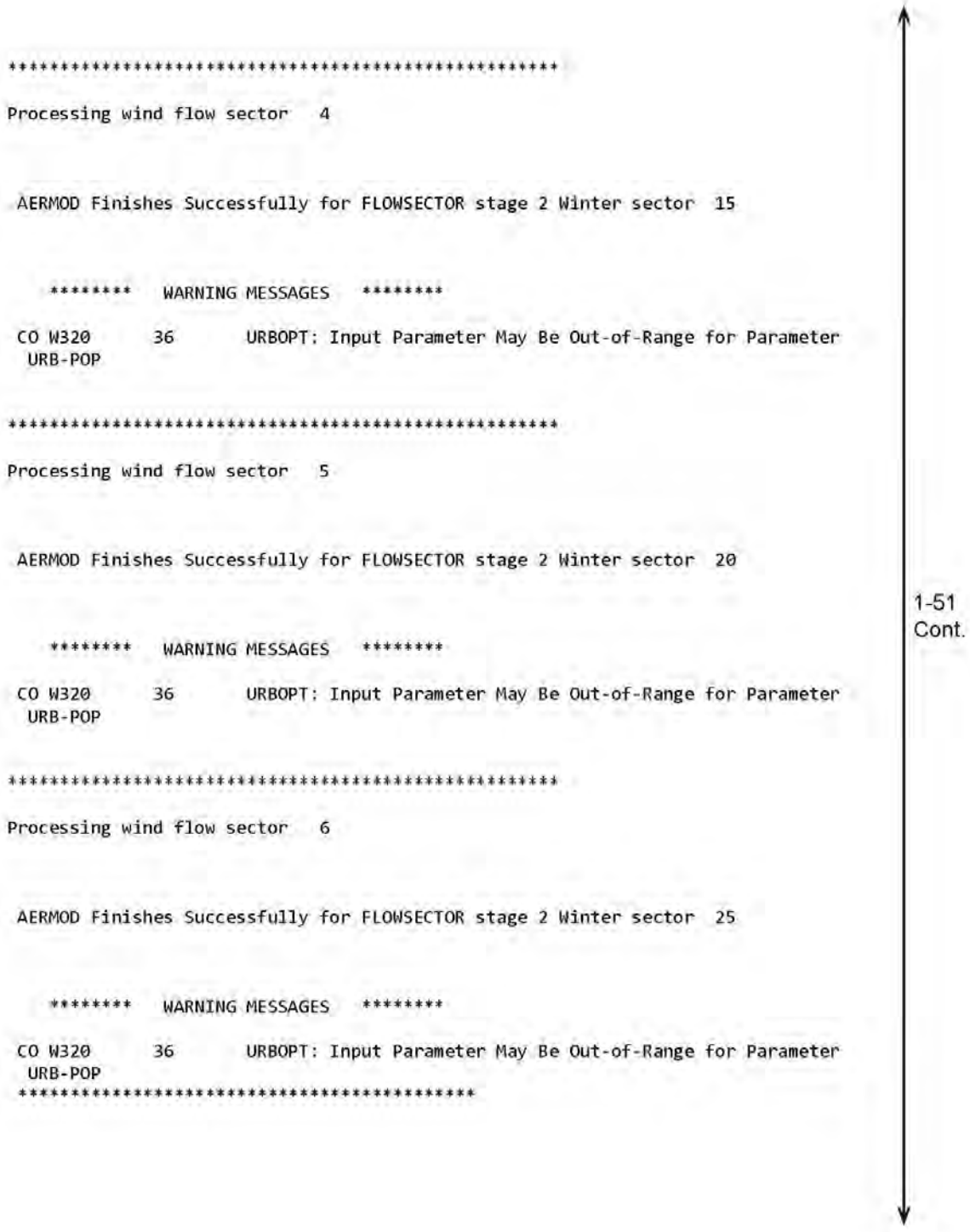
Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

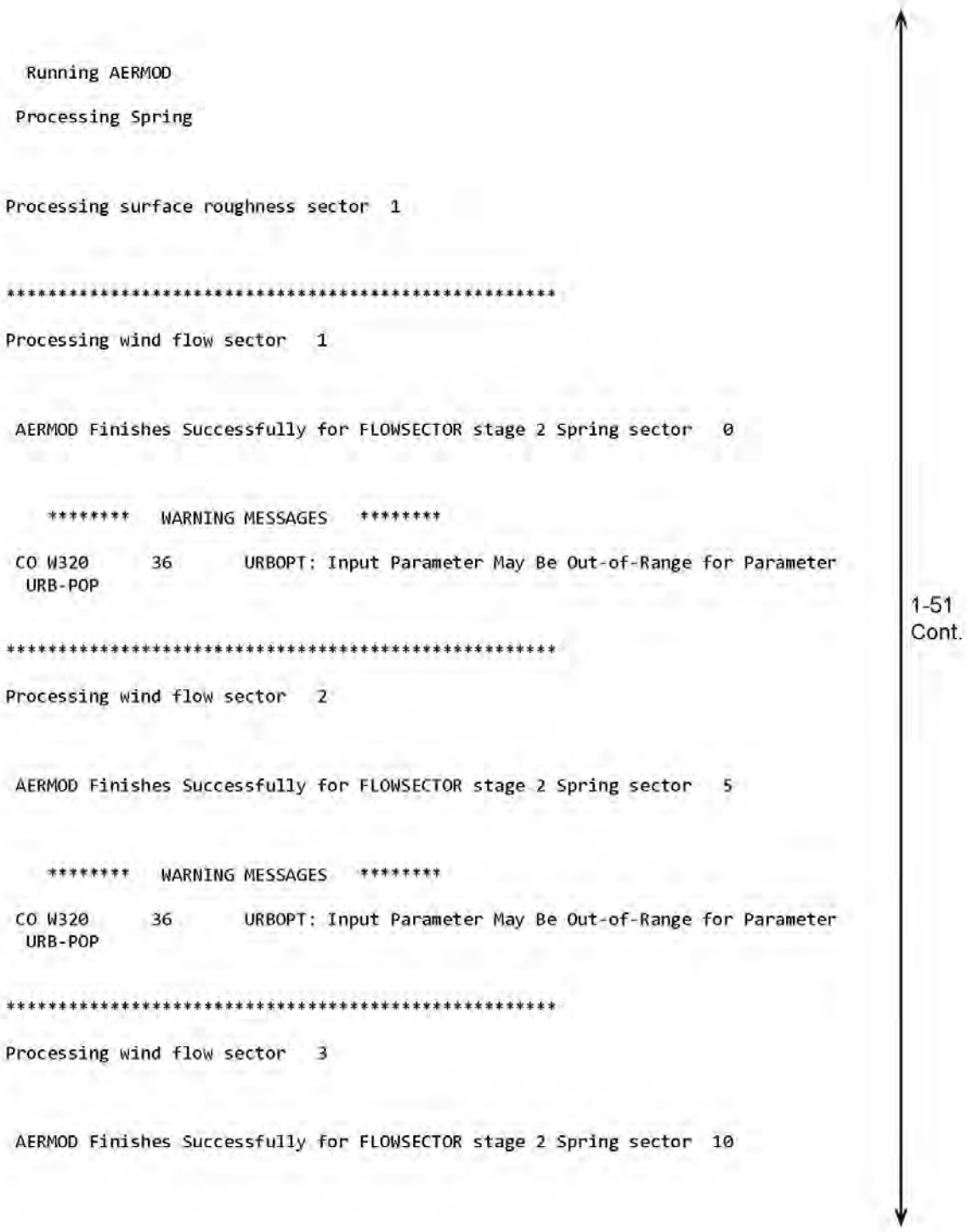
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 **********************************************
```

1-51
Cont.



```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

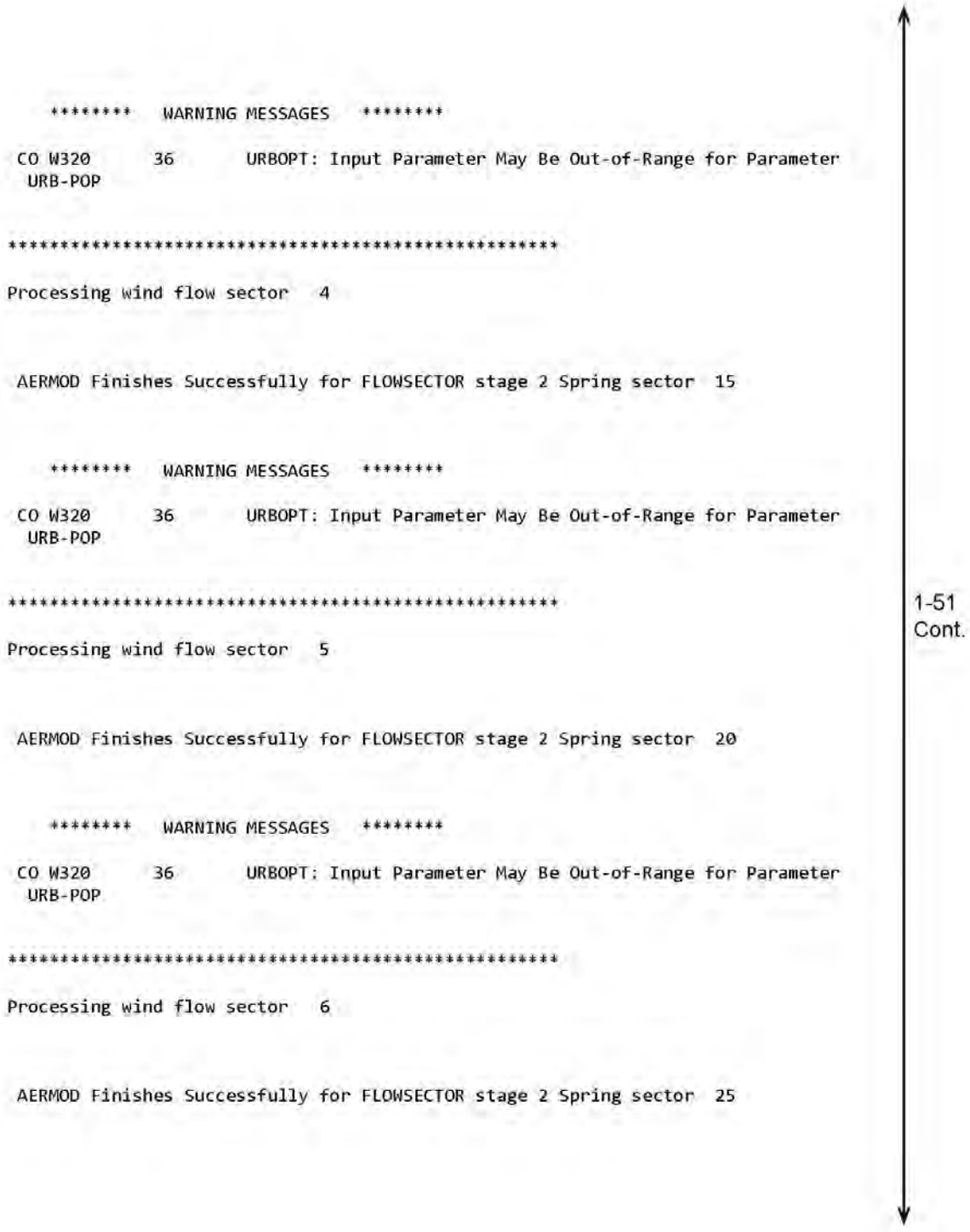
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

1-51
Cont.

```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

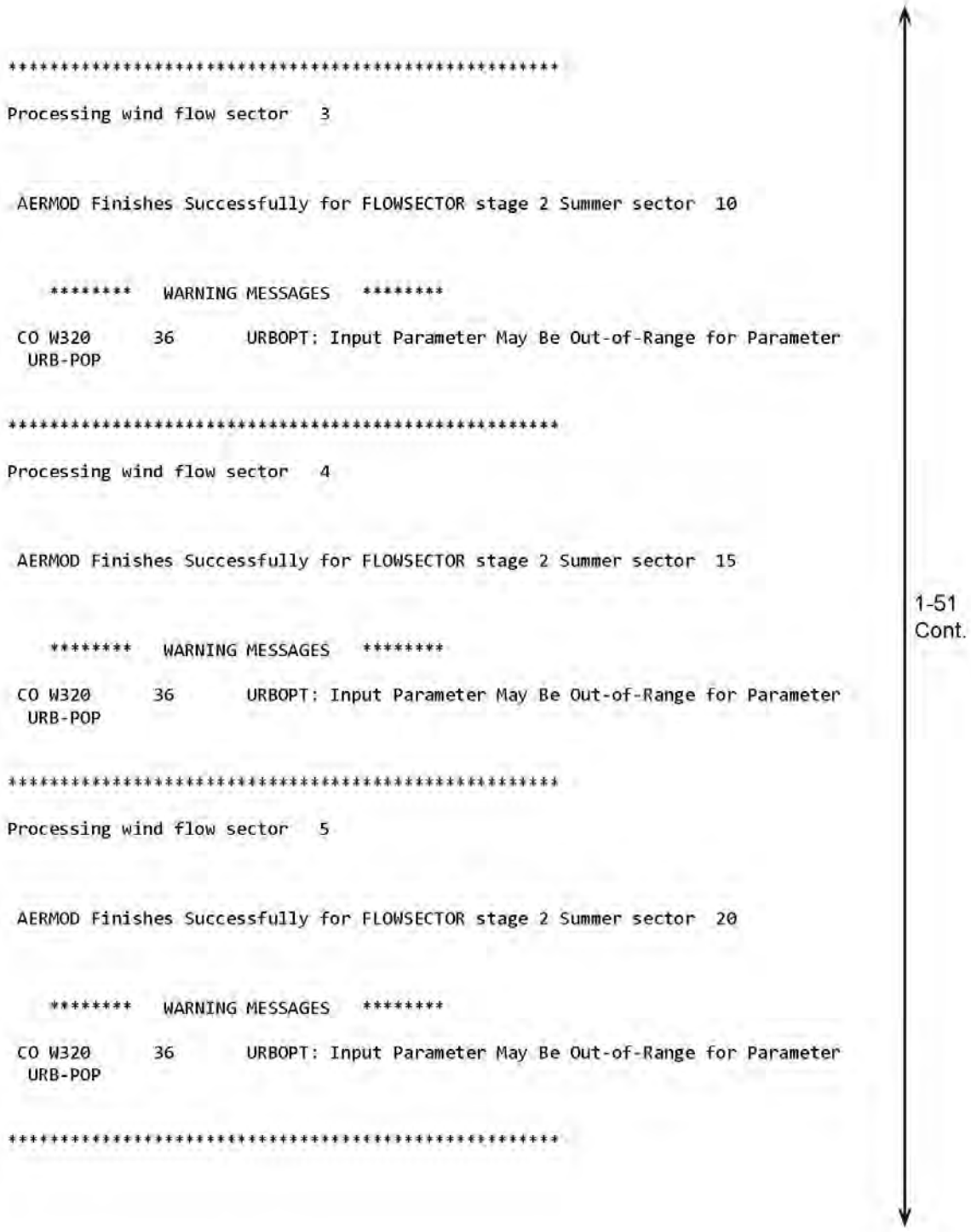
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

1-51
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

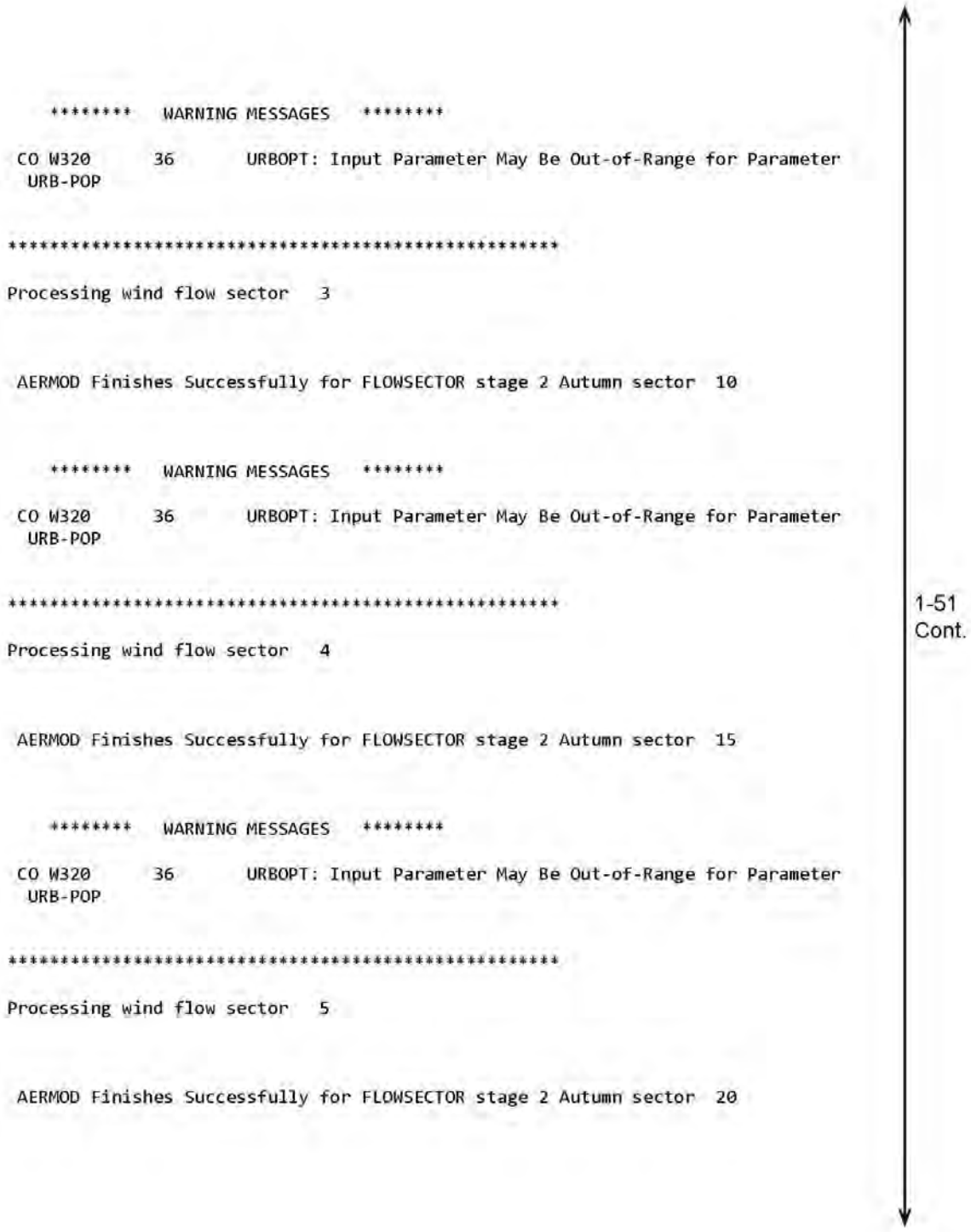
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

1-51 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

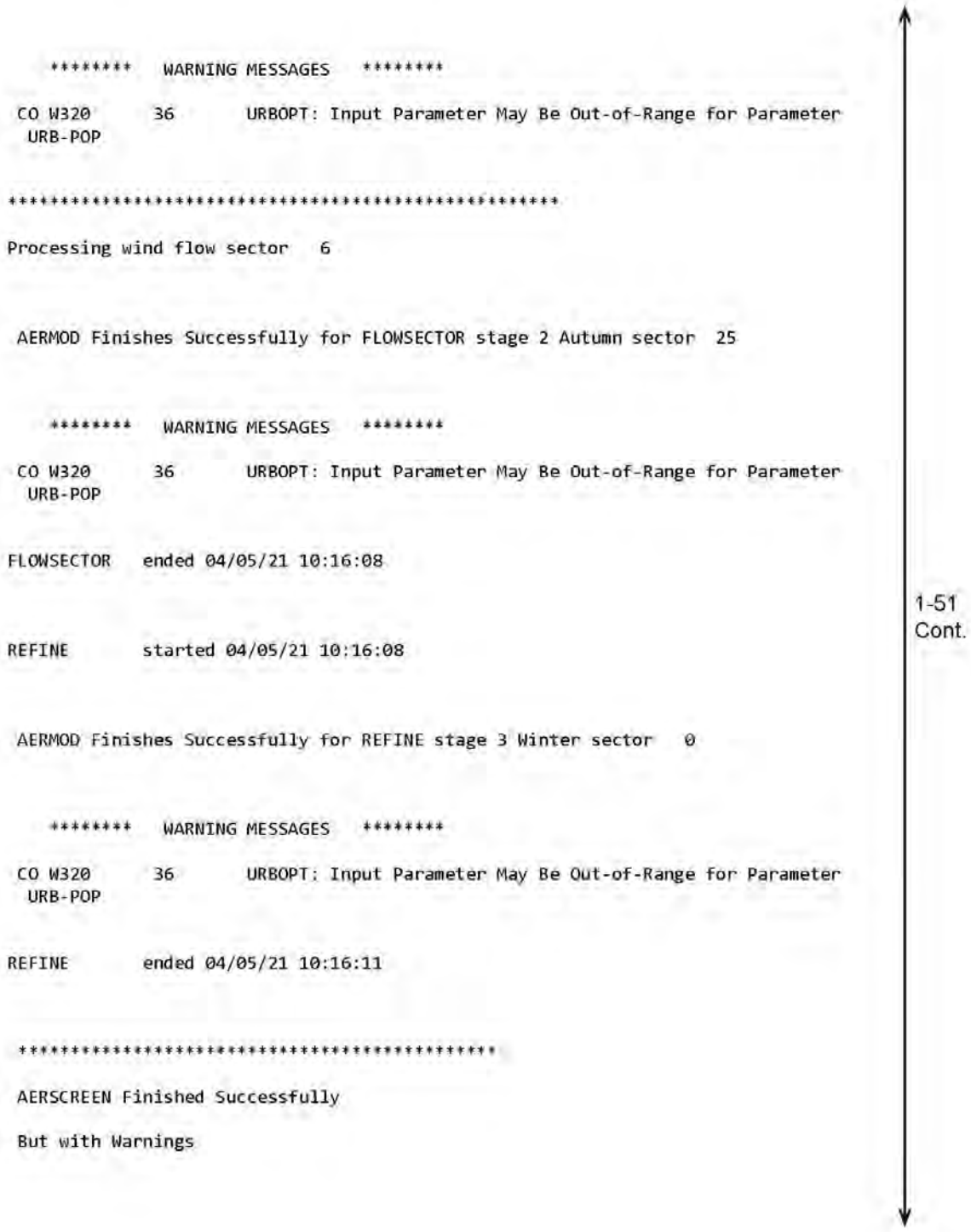
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

REFINE       ended 04/05/21 10:16:11


 ***********************************************

 AERSCREEN Finished Successfully

 But with Warnings
```

1-51 Cont.

```
Check log file for details
**********************************************

Ending date and time  04/05/21 10:16:14
```

1-51
Cont.

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.

```
310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
```

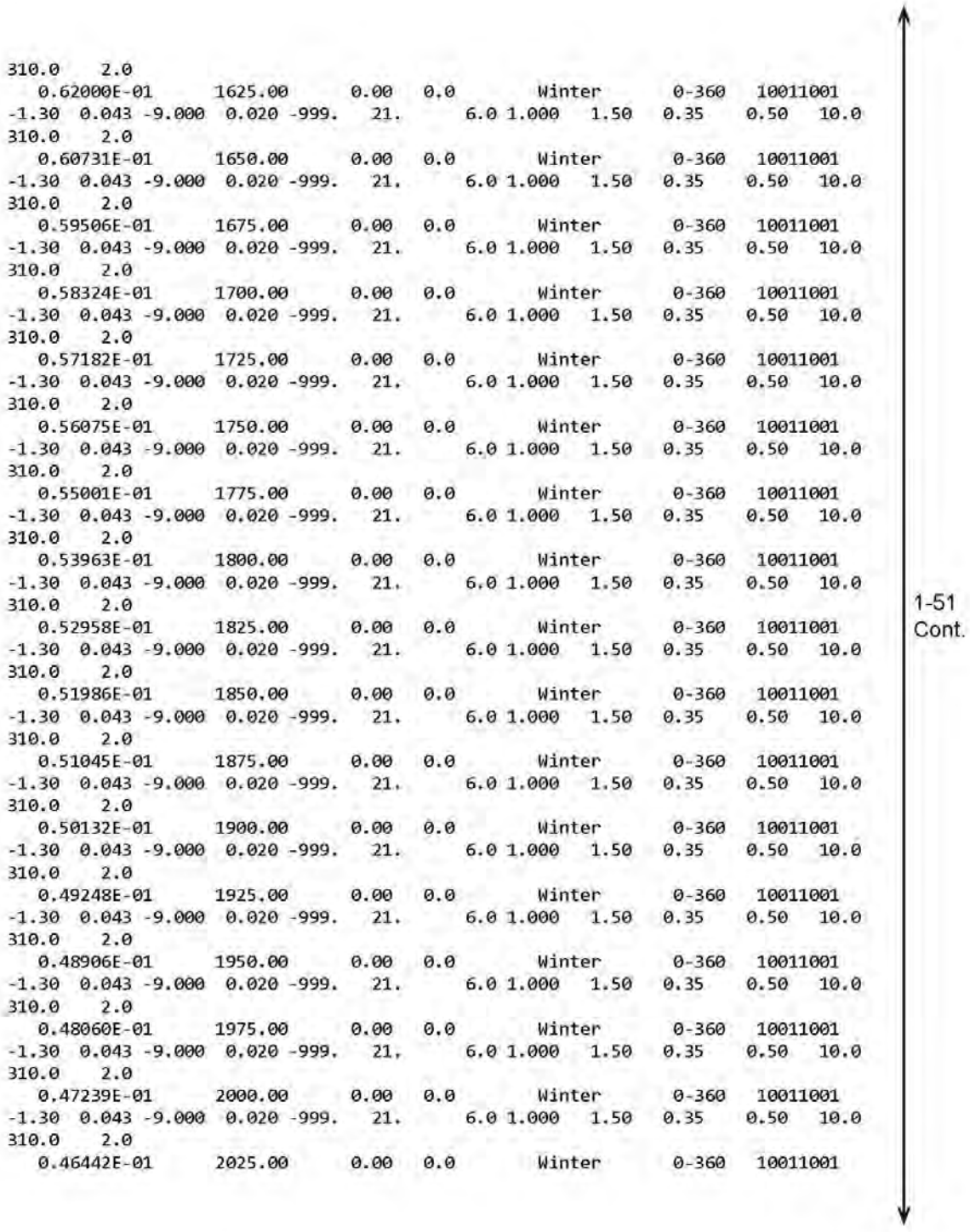
1-51 Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

```
   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



```
310.0    2.0
   0.62000E-01      1625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46442E-01      2025.00      0.00   0.0        Winter       0-360   10011001
```

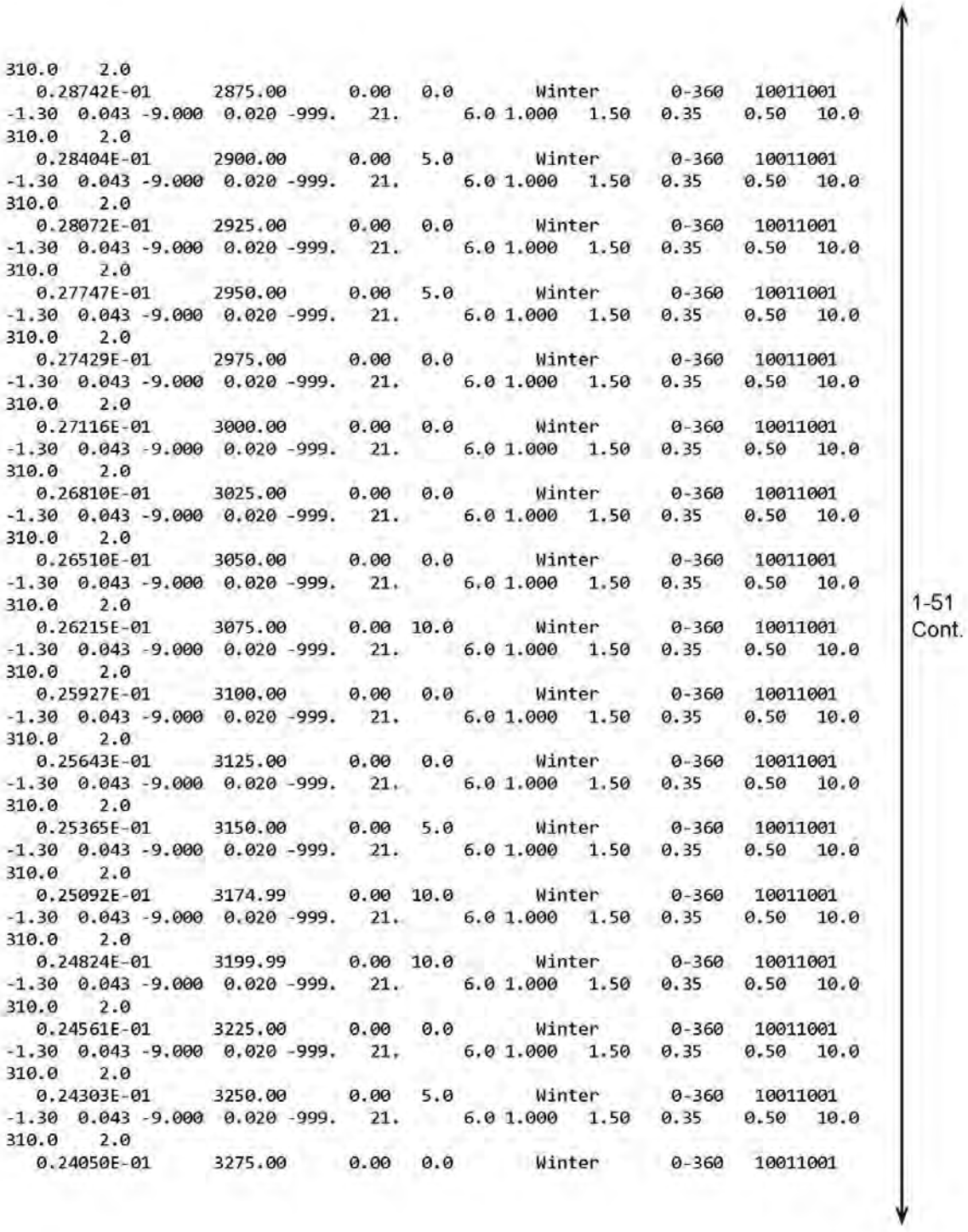
1-51
Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45668E-01      2050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

```
   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.

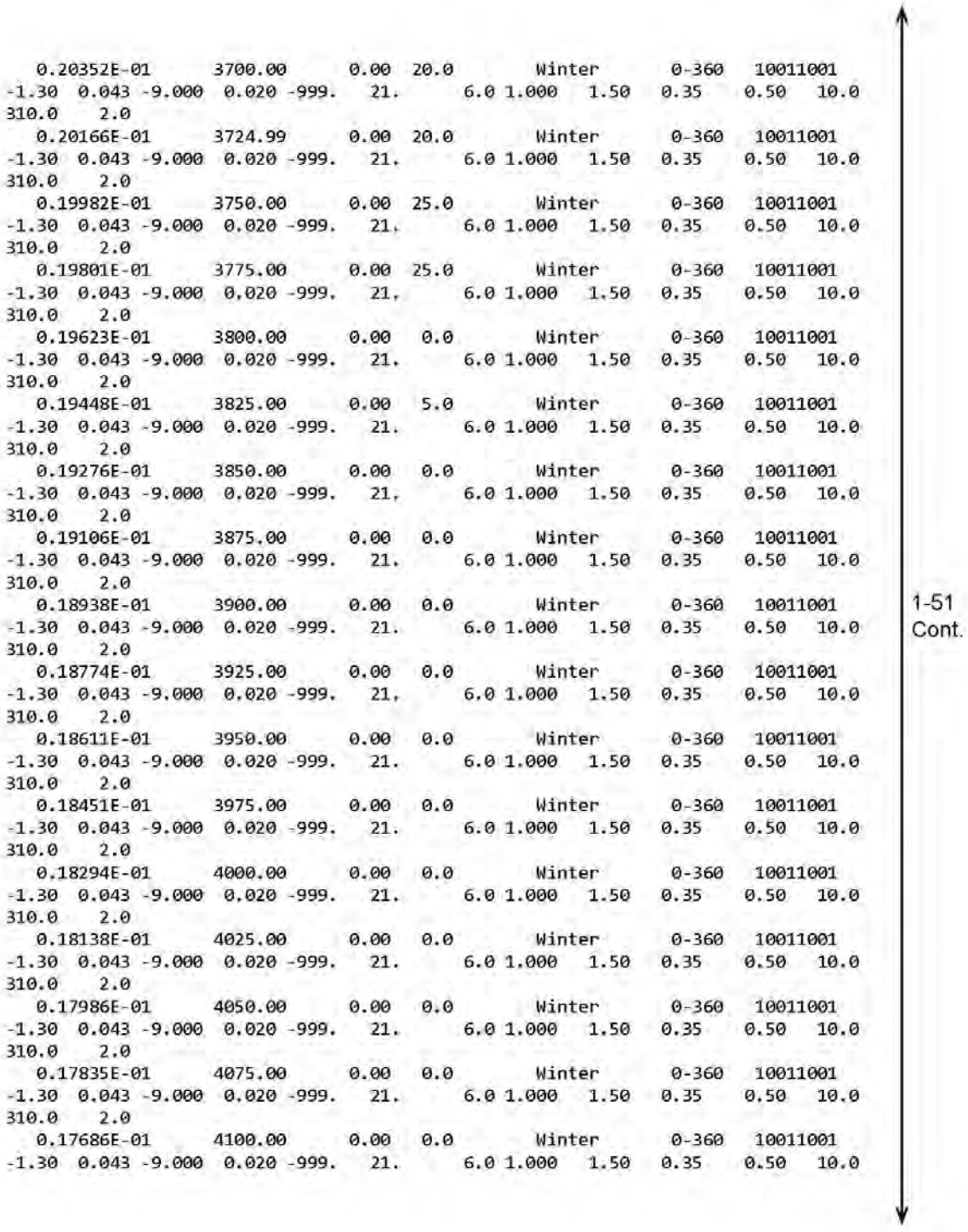


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310.0    2.0
   0.28742E-01      2875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter      0-360   10011001
```

1-51 Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

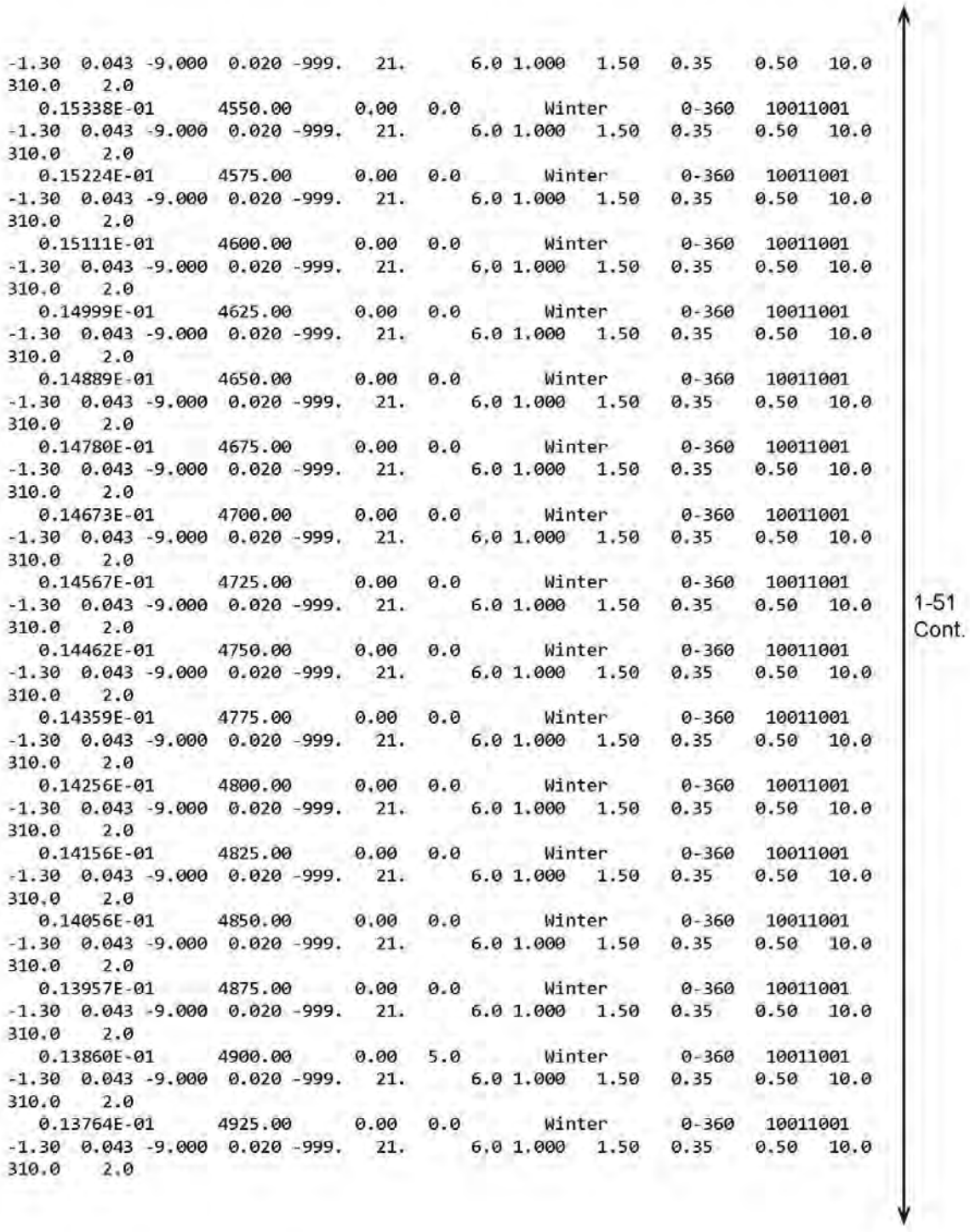


```
   0.20352E-01      3700.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.17540E-01      4125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

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Attachment E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

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Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

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Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost. *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

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Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association, Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

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Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

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In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Mentor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

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Attachment F

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:
California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:
Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

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- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

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- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

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public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

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principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

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Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

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Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

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1-52 Cont.

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1-52 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

EXHIBIT B

MITCHELL M. TSAI
ATTORNEY AT LAW

Mitchell Tsai <mitch@mitchtsailaw.com>

COMMENT LETTER: Pacific Coast Commons Specific Plan Project [SCH No.: 2020050508]

Leon Ramsey, Jr. <leon@mitchtsailaw.com> Mon, Apr 12, 2021 at 6:27 PM
To: psamaras@elsegundo.org
Cc: Mitchell Tsai <mitch@mitchtsailaw.com>, Greg Sonstein <greg@mitchtsailaw.com>

Good evening,

Please see attached regarding the above-referenced project and confirm receipt of this email and its attachment.

Thank you,

Leon Ramsey Jr.
Paralegal

Mitchell M. Tsai, Attorney At Law
155 South El Molino Avenue
Suite 104
Pasadena, CA 91101
Office: (626) 381-9248
Phone: (626) 389-8320
Fax: (626) 389-5414
Email: leon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

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Response to Comment Letter 1

Southwest Regional Council of Carpenters
(via Mitchell M. Tsai, Attorney at Law)
December 8, 2021

1-1 In summary, this comment includes an introductory statement and a general summary of the proposed Project's description.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-2 This comment requests the City to provide notice to the commenter of all notices referring or related to the proposed Project.

The commenter's request will be granted in accordance with the California Public Records Act (Government Code §§6250-6270); California Environmental Quality Act (CEQA) (Public Resource Code §21000 et seq); and Planning and Zoning Law (Government Code §§65000-65010), as cited in the letter. Additionally, in accordance with CEQA Guidelines Section 15094, the Lead Agency (the City of El Segundo) shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the Project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-3 In summary, this comment states the City should require the Project applicant to provide additional community benefits such as local hire project labor agreement to construct the proposed Project. Furthermore, the comment cites Comment 1-26 for more discussion.

Please refer to Response to Comment 1-26.

This comment requests that the City consider utilizing "skilled and trained workforce policies and requirements". This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing economic benefits and benefits to greenhouse gas, air quality, and transportation impacts. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

Additionally, the comment requests that the City require the Project to be built to standards exceeding the 2019 California Green Building Code (CalGreen) to mitigate environmental impacts. Draft EIR Sections 4.4, Energy and 4.6, Greenhouse Gas Emissions, determined impacts would be less than significant and no mitigation was required. The proposed Project would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency (Draft EIR page 4.4-14). Moreover, Table 4.6-8, Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies, demonstrates that the proposed

Project would be consistent with the City's Municipal Code and CalGreen requirements (Draft EIR page 4.6-43). Given this, the proposed Project currently meets required standards and no change or addition is required to the Draft EIR's environmental analysis. However, this comment is acknowledged and will be taken into consideration by the City's decision markers.

1-4 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations.

The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq.* The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-5 In summary, this comment states that significant revisions to Chapter 3, Changes to the Draft EIR, of the Final EIR were made, thus, requiring recirculation of the EIR due to changes to transportation and cumulative impacts analyses with the addition of three additional related projects.

Chapter 2, Responses to Comments, of the Final EIR addressed concerns associated with cumulative impact analyses. As discussed in Topical Response No. 1 – Cumulative Impacts (starting on Final EIR page 2-2), the City added three reasonably foreseeable projects shown and incorporated in Table 2-2, Additional Related Projects. Topical Response No. 1 determined the additions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures, as further demonstrated in Topical Response No. 1. Given that these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact, pursuant to CEQA Guidelines Section 15088.5, recirculation of the Draft EIR is not required.

Regarding the commenter's assertion about the Final EIR's transportation analysis, Topical Response No. 1 concluded the addition of three related projects would not change the Draft EIR's determination. Appendix A, Revised Future Analysis, of the Final EIR was included to support this conclusion. For example, the addition of three related projects would not change the proposed Project's proximity to public transit and the Project (and other related projects) would cumulatively contribute to transit ridership maintained by Metro and LADOT, which would result in less than significant impacts. Additionally, the Final EIR demonstrated the addition of three related projects would not result in a cumulatively significant impact related to vehicle miles traveled (VMT). As further described in Chapter 2 of the Final EIR, the Project's VMT would fall below SCAG's efficiency-based threshold and the Project site is located within an urbanized area served by public transit. Therefore, the Project's contribution to cumulative VMT would not be cumulatively considerable.

Finally, the comment notes changes to the Draft EIR have been made to the Project's trip generation, traffic volume, and level of service (LOS) analyses. As detailed in Chapter 2, Responses to Comments, of the Final EIR, discussion of the changes in the LOS analysis were made for informational purposes related to the applicability of the City's General Plan policies. However, automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As such, the City's LOS

policy is not applicable under CEQA per Senate Bill (SB) 743. No change or addition to the EIR's environmental analyses are required.

1-6 In summary, this comment states the Southwest Regional Council of Carpenters submitted comments to the Draft EIR on April 12, 2021. However, an administrative error occurred. As such, the comment letter was not included in Final EIR Chapter 2, Responses to Comments.

The City acknowledges the receipt of the pre-dated comment letter, which is included as Comments 1-8 through 1-25. Please see Responses to Comments 1-8 through 1-25 for responses to the letter.

1-7 In summary, this comment states opposition to the proposed Project and requests revisions and recirculation of the Draft EIR.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

Responses 1-8 through 1-25 are for "Exhibit A, April 12, 2021 SWRCC Letter to Paul Samaras"

1-8 Please refer to Response to Comment 1-1.

1-9 Please refer to Response to Comment 1-2.

1-10 Please refer to Response to Comment 1-3.

1-11 In summary, this comment states a summary of the qualifications of Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D and refers to their comments regarding the Draft EIR's greenhouse gas emissions analyses, which are attached to the primary comment letter.

The comment does not express any environmental comments or concerns related to the analysis in the Draft EIR. The aforementioned comments are included as Comments 1-26 and 1-28 through 1-51. As such, please see Responses to Comments 1-26 and 1-28 through 1-51, for more discussion.

1-12 Please refer to Response to Comment 1-4.

1-13 Please refer to Response to Comment 1-5.

1-14 In summary, this comment recommends that the City adopt mitigation measures to mitigate public health risks related to COVID-19 during construction of the proposed Project.

The potential for Project construction to cause COVID-19 to spread through worker exposure is not an impact on the environment under CEQA, rather it is a public health concern under the purview of federal, state, and local public health agencies. CEQA requires the consideration of significant changes in the environment caused by a proposed project; therefore, an existing adverse environmental condition that a project does not create or exacerbate is not responsible for mitigating that adverse condition. Implementation of the proposed Project would not create or exacerbate an existing environmental hazard or an existing public health hazard, and therefore, no mitigation is required. Compliance with existing mandates from federal, state, and local public health agencies, including California Occupational Safety and Health Administration's (Cal/OSHA) *COVID-19 Prevention Emergency Temporary Standards* (ETS) are specifically intended to

address workplace health and safety (OSHSB 2021). Policy mandates from public health agencies are consistently updated to address rapidly changing circumstances and provide the most appropriate and methods for protecting worker safety. For instance, the most recent Order from the County of Los Angeles Department of Public Health requires that by January 17, 2022, mandates that employers must provide their employees who work indoors and in close contact with other workers or the public, and require them to wear, a well-fitting medical grade mask, surgical mask, or higher-level respirator, such as an N95 filtering facepiece respirator or KN95, at all times while indoors at the worksite or facility (LACDPH 2022). In addition to mandatory measures set forth by the County of Los Angeles Department of Public Health related to masking in the workplace and Cal/OSHA's *COVID-19 Prevention Emergency Temporary* Standards (ETS), there are other federal OSHA standards that apply to protecting workers from infection include: requirements for personal protective equipment (PPE) (29 CFR part 1910, Subpart I (e.g., 1910.132 and 133)), respiratory protection (29 CFR 1910.134), sanitation (29 CFR 1910.141), and OSHA's requirements for employee access to medical and exposure records (29 CFR 1910.1020). Employers are also required by the General Duty Clause, Section 5(a)(1) of the OSH Act, to provide a safe and healthful workplace free from recognized hazards that are causing or likely to cause death or serious physical harm (OSHA 2021).

Therefore, compliance with mandatory federal, state, and local public health agency regulations would ensure adequate and appropriate protections for workplace safety and the proposed Project would not create or exacerbate an existing environmental or public health hazard. There is no aspect of the proposed Project that would prevent or interfere with the United Brotherhood of Carpenters providing the Carpenter union members with additional trainings related to COVID-19. No changes to the project description or environmental analyses included in the Draft EIR are required.

1-15 In summary, this comment states the Draft EIR defers details within specific mitigation measures, as detailed below.

In summary, this comment states MM-CUL-1 does not include details of the Worker Environmental Awareness Program (WEAP) to reduce potential impacts to archeological resources. As described in Draft EIR Section 4.3, Cultural Resources, mitigation measure MM-CUL-1 includes numerous requirements that must be included in the training program, which include: (1) inform workers about sensitivity of the Project area, (2) provide specific details on the kinds of archaeological materials that may be identified during construction, (3) explain the importance of and legal basis for the protection of significant archaeological resources, (4) provide actions to be taken in the event of a discovery of cultural resources (see MM CUL-2), (5) define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource, and (6) each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, which must include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor. Contrary to the commenter's assertion, these required components of the WEAP are detailed and include measurable performance standards for accomplishing the objectives of the WEAP. Additionally, the development of the WEAP must be conducted by a qualified archaeologist that meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, and must ultimately be prepared to the satisfaction of the City. Thus, no change to the Draft EIR is required nor does MM-CUL-1 defer critical details necessary to reduce impacts.

In summary, this comment states MM-GEO-1 does not include details of the Paleontological Resources Impact Mitigation Program (PRIMP) to reduce potential impacts to paleontological resources. As described

in Draft EIR Section 4.5, Geology and Soils, mitigation measure MM-GEO-1 includes numerous requirements that must be included in the program, which include: (1) must be consistent with the Society of Vertebrate Paleontology (SVP) (2010) guidelines, (2) must provide requirements for preconstruction meeting attendance and worker environmental awareness training, (3) must provide procedures for adequate paleontological monitoring and discoveries treatment, (4) must provide paleontological methods [including sediment sampling for microvertebrate fossils], reporting, and collections management, (5) must require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities [including augering] in previously undisturbed, Pleistocene Sand Dune deposits, and (6) in the event that paleontological resources (e.g., fossils) are unearthed during grading, must require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources. Contrary to the commenter's assertion, these required components of the PRIMP are detailed and include measurable performance standards for accomplishing the objectives of the PRIMP. Additionally, the development of the PRIMP must be conducted by a qualified paleontologist that meets SVP guidelines and must ultimately be prepared to the satisfaction of the City. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-1 does not include any specific performance standards for removal or a plan for review. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-1 includes language to ensure abatement procedures for the removal of specified materials are in compliance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project activities. Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-1. As such, mitigation measure MM-HAZ-1 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-2's proposed Hazardous Materials Contingency Plan (HMCP) does not include a plan or performance standards to mitigate soil vapor to less than significant levels. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-2 includes numerous requirements that must be included in the plan, which include: (1) must include training procedures for identification of contamination, (2) must describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations, (3) must manage and dispose of any contaminated soils in accordance with local and state regulations, and (4) must include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. MM-HAZ-2 includes language to ensure the development of the proposed HMCP is in accordance with all applicable state and local regulations. Moreover, the MM-HAZ-2 states contaminated soils shall be managed and disposed of in accordance with local and state regulations. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project

activities. For example, in the event of asbestos removal, Project activities would be required to comply with the National Emission Standards for Hazardous Air Pollutants (Title 40 of the United States Code (USC), Chapter 1, Subchapter C, Part 61, Subpart M) and the Toxic Substances Control Act of 1976 (Title 15 USC, Chapter 53, Subchapter I, Section 2601 et seq.). Regarding the implementation of the proposed HMCP, Project activities would be required to comply with the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code, Division 20, Chapter 6.11, Sections 25404–25404.9). Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-2. As such, mitigation measure MM-HAZ-2 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

1-16 In summary, this comment states that the Draft EIR does not support its findings with substantial evidence.

This comment does not express any environmental comments or concerns related to the analyses in the Draft EIR. Instead, as shown in Comments 1-17 through 1-20, concerns related to greenhouse gas emissions, air quality, transportation, and hazards and hazardous materials are identified as specific examples of the commenter's concern. Please see Responses to Comments 1-17 through 1-20 for more discussion.

1-17 In summary, the comment begins with an overview of caselaw related to greenhouse gas (GHG) emissions and asserts the Draft EIR did not support its findings on GHG impacts, utilized an incorrect quantitative analysis of GHG emissions, incorrectly relied upon an outdated quantitative GHG threshold, did not identify a potentially significant GHG impact; did not consider performance-based standards under California Air Resources Board's (CARB's) 2017 Scoping Plan or performance-based standards under Southern California Association of Governments' (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) plan, and did not consider all feasible mitigation to reduce GHG emissions.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-29 through 1-49 below. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-29 through 1-49 below.

1-18 In summary, the comment asserts the Draft EIR's Air Quality analysis is not supported by substantial evidence.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-30 through 1-42 below correspond to each of the bulleted items listed in the comment. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-30 through 1-42 below.

1-19 In summary, this comment states that the VMT analysis does not accurately reflect total VMT as home-based VMT analysis does not includes trips made from the other uses on the Project site, such as retail and hotel.

In the absence of VMT guidance from the City of El Segundo, State CEQA guidance from the Governor's Office of Planning and Research (OPR) was used. This document provides suggestions to lead agencies regarding methodologies to analyze VMT associated with a project. For residential projects, OPR recommends that a proposed project exceeding a level of 15% below existing daily household VMT per capita may indicate a significant transportation impact. Household VMT per capita for PCC was determined by using the Southern California Association of Government's (SCAG) 2016 Regional Transportation Plan (RTP) travel demand model. The SCAG travel demand model identifies trip purposes as Home-Based Work (HBW) and Home-Based Other (HBO), where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. Therefore, all trips produced or attracted to the residential use have been included in the VMT analysis for the project and provides an accurate estimate of the project related VMT per capita or resident.

While this is a mixed-use project with retail uses, the State's guidance does not require VMT analysis for local-serving retail land uses on the grounds that they do not increase VMT and defines local serving as less than 50,000 square feet. Since the proposed commercial components of the Project total 11,252 square feet, (i.e., less than 50,000 square feet) the VMT analysis properly focused on the proposed residential components of the Project. The hotel uses are already an existing use on the Project site and therefore, were not included in the analysis.

This comment also includes a footnote referring to the City of Santa Clarita VMT Guidelines. The Santa Clarita guidelines are intended to provide guidance for office, retail, and residential projects and thus discusses all of the different trip types. The Santa Clarita guidelines follows the OPR guidance in screening local serving retail projects with less than 50,000 square feet from VMT analysis as local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. The guidelines also provides thresholds for each project type as outlined in the OPR guidance. Although Santa Clarita's local CEQA guidelines are in no way applicable to the City of El Segundo, it can be noted for purposes of this response that the analysis done in this EIR is consistent with the Santa Clarita guidelines. No change to the Draft EIR is required.

1-20 In summary, this comment states that additional investigation is required to characterize contamination on the Project site associated with nearby contaminated sites, including the adjacent gas station and regional tetrachloroethylene (PCE) and trichloroethylene (TCE) contamination.

With regards to the PCE and TCE contamination: As noted in the second paragraph of Draft EIR page 4.7-5, groundwater flow is west-southwest, making the PCE contamination plume downgradient from the Project site. The known and suspected contamination sources listed as part of the investigation are also downgradient of the Project site. Investigations on nearby properties, conducted between 2016 and 2018, further evidence the regional PCE and TCE contamination observed southwest of the subject property has not impacted the area of the Project site (see Appendix F of the Draft EIR).

Furthermore, a soil vapor investigation was conducted at 650 and 700 N Pacific Coast Highway, less than 200 feet northeast of the Project site, did not identify PCE or TCE contamination in soil vapor above current (2019) Environmental Screening Levels (ESLs) (City of El Segundo 2021). As such, there are no identified sources of PCE or TCE on, adjacent to, or upgradient of the Project site, there is no evidence of contamination upgradient of the Project site, and there is no evidence that the contamination plume has impacted the Project site. The Phase I ESA determined that there were no conditions that would require further analysis. Therefore, there is no evidence of impacts to future occupants.

With regards to the gas station, it is noted that contamination may be present due to operational violations, but contamination has not been identified during multiple former investigations. Out of an abundance of precaution, MM-HAZ-2 was proposed to mitigate the most likely potential contamination which may be identified during construction. Should any contamination be identified, it would be removed, the release would be reported in accordance with environmental regulatory rules and regulations (California Code of Regulations Title 19, Section 2631), and confirmation sampling would be conducted to confirm removal. These actions would further remove potential impacts to future occupants during operation of the proposed Project. No changes or additions to the project description or analyses included in the Draft EIR are required.

1-21 In summary, this comment states the Draft EIR's Project Objectives are narrow and affect the consideration of reasonable alternatives, specifically related to Project Objectives 1 and 5.

Each project objective was prepared in accordance with Section 15124(b) of the State CEQA Guidelines. Project Objective 1 is outlined in Draft EIR Section 3.5, Project Objectives, and states the following, "Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses" (Draft EIR page 3-18). Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Alternative development scenarios are not unduly constrained by the retention of the existing hotels, as additional residential and commercial uses could occur in multiple configurations. Further, the commenter's potentially preferred scenario of not maintaining the existing hotels would not be beneficial from an environmental perspective (i.e., would increase demolition and construction-related impacts to the environment).

With regard to Objective 5, the comment notes the objective calls for "increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses." Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is also consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Eliminating underutilized surface parking lots to allow for a densification of land use intensity and a diversity of land uses that share parking facilities to minimize parking and encourage alternative modes of transportation is specifically supportive of many City General Plan policies and objectives as outlined in Table 4.9-1 in Section 4.9, Land Use and Planning, and SCAG RTP/SCS goals as outlined in Table 4.6-6 in Section 4.6, Greenhouse Gas Emissions of the Draft EIR.

Importantly, both of these Objectives allow for numerous potential alternative development scenarios that involve both additional residential and commercial uses in multiple configurations. The retention of the existing hotels and redevelopment of underutilized surface parking are objectives of the Project Applicant and would not limit consideration of a reasonable range of alternatives. Further, CEQA Guidelines Section 15126.6(c) states: "the range alternatives to the proposed project shall include those that could feasibly accomplish ***most of the basic objectives*** of the project and could avoid or substantially lessen one or more of the significant effects." (emphasis added). Therefore, contrary to the commenter's assertion, these two Project Objectives would not "curtail any meaningful analysis or consideration of Project alternatives that substantially reduce the Project's environmental impacts." No changes to the Draft EIR are required.

1-22 In summary, this comment cites provisions of the California Government Code and case law for background on State planning and zoning law.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-23 In summary, this comment states the Draft EIR does not demonstrate consistency with the Southern California Association of Governments (SCAG) Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), in accordance with SB 375, and cites Comments 1-28 through 1-51 for examples.

Draft EIR Section 4.9, Land Use and Planning discusses regional regulations such as the SCAG RTP/SCS within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR page 4.9-4). Moreover, under Section 4.9.4, Impact Analysis, and Table 4.6-6, Project Consistency with the Connect SoCal (SCAG 2020-2045 RTP/SCS) within Section 4.6, Greenhouse Gas Emissions, of the Draft EIR analyzes the proposed Project's consistency with each goal identified within the SCAG RTP/SCS (Draft EIR pages 4.9-11 through 4.9-12 and 4.6-33 through 4.6-37). However, this particular comment does not identify the aforementioned specific examples related to the analysis in the Draft EIR. Additionally, please see Responses to Comments 1-26 and 1-28 through 1-51, below, for more discussion.

1-24 In summary, this comment states the Draft EIR does not demonstrate consistency with State Housing Element law and cites provisions of the California Government Code and case law for background.

Draft EIR Section 4.9, Land Use and Planning discusses the City's General Plan and zoning regulations within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR pages 4.9-5 through 4.9-8). Moreover, under Section 4.9.4, Impact Analysis, Table 4.9-1, General Plan Consistency Analysis, outlines the applicable policies of the General Plan and analyzes the proposed Project's consistency with each applicable provision (Draft EIR pages 4.9-12 through 4.9-33). Applicable goals and policies of the City's Housing Element are identified and subsequent Project consistency analyses are detailed under Table 4.9-1 on Draft EIR pages 4.9-20 and 4.9-21. The comment does not identify specific examples of inconsistency within the Draft EIR's consistency analysis.

Additionally, the comment asserts the Draft EIR does not analyze consistency with the latest Regional Housing Needs Allocation (RHNA) and states the Project as proposed does not include affordable housing units. Moreover, the comment states the Draft EIR's provision for a future development agreement should be included within the Draft EIR's Project Description.

Section 4.11, Population and Housing, of the Draft EIR details Housing Element law and the City's 5th and 6th Cycle RHNA allocation. Chapter 3, Changes to the Draft EIR, of the Final EIR revised the City's fair share allocation for the 2021-2029 RHNA planning period. As such, the comment correctly states the City's 6th Cycle RHNA allocation. However, the comment incorrectly asserts Draft EIR page 4.11-6 as the latest RHNA allocation. At the time of drafting the Draft EIR (February 2021), the City's 5th Cycle RHNA allocation was identified and discussed since this RHNA planning period ended in October 2021. In anticipation of the 6th Cycle, the Draft EIR includes Table 4.11-7, SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology (Draft EIR page 4.11-10) and analyzes the Project's contribution to the current planning period in Section 4.11.4, Impact Analysis (Draft EIR page 4.11-17).

Lastly, as described in Chapter 3, Project Description, of the Draft EIR, the Project proposes 263 new housing units. Section 3.3.8, Development Agreement, further states (as the comment indicates) that the Project would provide benefits including some provision of affordable housing in return for a proposed Development Agreement between the City and the Applicant. Moreover, the Draft EIR states "[t]he full benefits will be negotiated between the parties but will not create any environmental impacts"

(Draft EIR page 3-17). As shown above, the Draft EIR adequately analyzes Project consistency with the City's Housing Element and demonstrates the addition of 263 new units would contribute to the City's RHNA allocation for the 6th Cycle (which started in October 2021). Furthermore, the affordable housing provision is outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." No changes to the Draft EIR's project description or environmental analyses are required. For informational purposes only, the Development Agreement (proposed at the time of drafting these Responses to Additional Comments) is comprised of a total of 32 affordable housing units (12% of the total housing units), including 1 very-low income unit and 14 low income units within PCC South, and 2 very-low income units and 15 low income units in PCC North.

1-25 In summary, this comment requests for the Project's denial and to revise and recirculate the EIR to address the aforementioned concerns.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Response 1-26 is for "Exhibit A of A, March 8, 2021 SWAPE Letter to Mitchell M. Tsai"

1-26 In summary, the commenter states that by implementing a local hire provision requiring 10-mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project was anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[1] On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years consistent with SCAQMD guidance, which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

[1] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Response 1-27 is for "Exhibits B and C of A, Curriculum Vitae for Paul Rosenfeld and Matt Hagemann"

1-27 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

Responses 1-28 to 1-50 are for "Exhibit D of A, SWAPE Letter to Greg Sonstein"

1-28 In summary, the comment states that the Draft EIR fails to adequately evaluate the Project's air quality, health risk, and GHG impacts.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-29 In summary, the comment states that changes to the default modeling inputs in the CalEEMod modeling were incorrect and questions the estimated GHG emissions quantified in the Draft EIR and underlying assumptions included in the model.

As specifically identified in the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis" (CAPCOA 2017). As such, the changes to the default CalEEMod assumptions for the project emissions modeling were appropriate based on applicant input and project-specific information.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Project-specific information was applied to the CalEEMod model where appropriate and based on information obtained from the Project applicant regarding site-specific characteristics of the site and Project components. The Project applicant and their contractor(s) represent 'experts' in estimating construction activities for the Project based on their experience with similar projects and their need to estimate construction activities, such as duration of construction and equipment needed, for budgeting. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b)). Because assumptions provided the Project applicant and their team represent an expert opinion supported by facts, these assumptions constitute substantial evidence under CEQA that can be used to more accurately estimate project-generated emissions.

Regarding operations, Project-specific data was used from the transportation analysis including the Project's trip generation rates for each land use type. The emissions estimates also assume compliance with regulations (state or local) are also taken into account for certain input variables such as compliance with building energy standards and utility renewable energy standards, as adopted by the State of California, some of which are not currently programmed into the model by default since many laws have been updated since the release of the model. Therefore, the use of Project-specific data in CalEEMod is appropriate and fully in line with the CalEEMod User's Guide and the Draft EIR's analysis is based on substantial evidence and is adequate as presented. No revisions to the Draft EIR are required.

Regarding the commenter's question about CalEEMod input consistency with the Draft EIR, please refer to Response to Comment 1-30.

1-30 In summary, the comment states that Appendix C-1 contains model inputs were not consistent with information disclosed in the Draft EIR, specifically that the CalEEMod land use inputs were not consistent with the project description land use metrics.

The minor discrepancy in the modeled inputs have been adjusted for the purpose of responding to this comment and are presented below. As shown, adjustments to CalEEMod have been conducted, which include revisions to the square footage as well as updates to the model. The Draft EIR CalEEMod inputs assumed 314,659 square feet of residential space, 11,000 square feet of commercial/retail space, and 763 parking spaces. The revised CalEEMod inputs assume 327,021 square feet of residential development, 11,252 square feet of commercial/retail uses, and 792 parking spaces.

At the time that the Project's Notice of Preparation (NOP) was released and the time that the analysis was prepared, the version of the CalEEMod was Version 2016.3.2 was the most appropriate and available model to use for the analysis. CalEEMod Version 2020.4.0 was released in June 2021. As with previous updates of CalEEMod, CalEEMod 2020.4.0 includes updates per current industry values and bug fixes. The key changes incorporated into CalEEMod 2020.4.0 were incorporating the CARB EMFAC 2017 update, including the Institute of Transportation Engineers 10th edition trip rates released in 2017, and incorporation of 2019 Title 24 Standards. The results of this re-run of CalEEMod to incorporate the minor discrepancies in the data inputs and the updated CalEEMod are shown below, in comparison to the results shown in the Draft EIR. As shown, the changes in the CalEEMod outputs are negligible when compared to the outputs in the Draft EIR and the significance thresholds. As such, the negligible changes in modeling results shown below are not substantive, do not change the analysis presented in the Draft EIR, do not result in new information, and do not require any revisions to the significance conclusions in the Draft EIR.

A portion of Table 4.2-9 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the estimated maximum daily construction emissions generated during construction of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Maximum Construction Emissions	VOCs	NOx	CO	SOx	PM10	PM2.5
	Pounds per Day					
Draft EIR Maximum Daily Emissions	49.34	41.60	27.18	0.08	4.52	2.61
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	No	No	No	No	No	No
Updated Maximum Daily Emissions	49.05	41.22	27.73	0.07	4.52	2.62
Difference	(0.29)	(0.38)	0.55	(0.01)	0.00	0.01
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-10 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the maximum daily area, energy, and mobile source emissions associated with operation (Year 2025) of the proposed Project as assessed in the Draft EIR as well as the emissions estimated in the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Total Operational Emissions	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Draft EIR Project Total	11.47	19.12	53.79	0.15	10.52	3.25
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No
Updated Project Total	14.54	10.56	69.92	0.13	10.55	3.24
Difference	3.07	(8.56)	16.13	(0.02)	0.03	(0.01)
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-11 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the localized significance thresholds for construction activities of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Draft EIR Project Total	40.50	21.15	2.80	2.44
SCAQMD LST	91	664	5	3
LST exceeded?	No	No	No	No
Updated Construction Emissions	27.52	18.24	1.58	1.23

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Difference	(12.98)	(2.91)	(1.58)	(1.21)
LST exceeded?	**No**	**No**	**No**	**No**

Notes:
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-3 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the construction GHG emissions for construction activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-3. Estimated Annual Construction Greenhouse Gas Emissions

Total Construction Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	**1,969.95**	**0.28**	**0**	**1,977.08**
Updated Construction Emissions	**1,851.36**	**0.26**	**0**	**1,877.17**
Difference	(118.59)	(0.02)	0	(99.91)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-4 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the operational GHG emissions (including the amortized construction emissions) for operational activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-4. Estimated Annual Operational Greenhouse Gas Emissions

Total Operational Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	2,435.45	1.17	0.02	2,920.96
Updated Operational Emissions	**2,443.28**	**1.20**	**0.02**	**2,563.72**
Difference	7.83	0.03	0	(357.24)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

The proposed Project's construction health risk assessment (HRA) used the estimated annual construction exhaust PM_{10} emissions as a surrogate for diesel particulate matter (DPM), generated during construction of the Project. As presented in Additional Data for Draft EIR Table 4.2-9 above, the revised estimations of construction emissions indicate that PM_{10} emissions would not change compared to what was estimated in the Draft EIR. Therefore, the results of the HRA for the Project

would remain unchanged and the Project would result in a less than significant impact after implementation of mitigation measure MM-AQ-1.

As discussed in Section 4.4, Energy, of the Draft EIR, fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon. Furthermore, fuel consumption from mobile trips, during both construction and operations, was also estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. As presented in Additional Data for Draft EIR Tables 4.6-3 and 4.6-4 above, the revised CO_2 emissions generated during both construction and operations are expected to negligibly change compared to the CO_2 emissions estimated in the Draft EIR. Therefore, the petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful and impacts would remain less than significant impact.

1-31 In summary, the comment states that the Draft EIR did not include the total amount of demolition haul trips required for the Project and claims that the default number of demolition hauling trips was underestimated by 431 trips.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Haul truck trips during the demolition phase was based on demolition and earthwork quantities provided by the Project's applicant. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. In order to estimate the number of haul trucks from pavement removal, CalRecycle's Construction/Demolition and Inert Debris Tools and Resources rate of 2,400 pounds per cubic yard of debris for asphalt was utilized. Assuming a depth of 4 inches and an area of approximately 3.01 acres of pavement to be removed would result in a volume of approximately 1,939 tons of debris. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 one-way haul trips during the demolition subphase of Phase 2/3. The commenter states that the model should have included 178,660-square-feet of demolition, which is an incorrect assumption. CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips

required for the demotion phase, since the commenter states the total demolition of building material would be 178,660-square-feet. Notably, pavement debris in CalEEMod is expressed as tons of debris, not square footage of the area. Therefore, no changes to the Draft EIR are required.

1-32 In summary, the comment states that the Draft EIR incorrectly estimates the grading acreage.

The Project's total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information. As discussed in Section 3.1, Project Description of the Draft EIR, the total site includes 6.23 acres, which includes the developed hotel properties. As such, 3.88 acres would be subject to grading/construction activities for Phases 1 and 2/3. Contrary to the commenter's assertion, the text included from the CalEEMod User Guide does not demonstrate an insufficiency regarding the analysis presented in the Draft EIR. The total net acreage to be graded of 3.88 acres, as provided by the proposed Project applicant, was used to determine the total area to be graded during each grading phase of the proposed Project. The text emphasized by the commenter appears to expressly condone the use of the total area to be graded as a means of determining the amount of grading needed on the site. Furthermore, each grading phase (Phase 1 and 2/3) is assumed to occur over two months, with multiple pieces of construction equipment working within each of the sites for the duration of the proposed Project's construction. Two-month grading period for each phase with multiple pieces of equipment working within the site, represents a reasonable, if not conservative, approach to analysis for grading a total of 3.88 acres. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-33 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material moisture content contained in the model.

The default values in CalEEMod model for the road dust (e.g., material silt content, material moisture content, and mean vehicle speed) are statewide averages used in the EPA's AP-42 methods for calculating fugitive dust emissions from paved and unpaved roads. Users are able to override the defaults in CalEEMod if data specific to the project is known. Furthermore, local jurisdictions can also provide guidance to users as to what default properly reflects known regional road dust parameters. The proposed Project site is underlain by quaternary Dune Sand deposits, Appendix E of the Draft EIR. It was determined that the proposed Project site is likely to be underlain by similar subsurface sandy materials with a thin cap of artificial fill. Overall, the underlying soils are likely to be comprised of Dune Sand deposits, which has a high concentration of sand that gives them a gritty feel, with varying amount of silt and clay materials that should be slightly moist to moist and loose to very dense. Density is anticipated to increase with depth. The proposed Project would be required to comply with the provisions in SCAQMD Rule 403 to prevent, reduce or mitigate fugitive dust emissions from each grading site. SCAQMD Rule 403 restricts visible fugitive dust to the project property line, restricts the PM10 emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, the proposed Project will utilize one or more of the best available control measures (identified in the tables 1 and 2 of the rule), which may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering of all active sites periodically, maintaining moisture content of exposed soils, using chemical stabilizers and/or ceasing all activities during periods of high wind. Furthermore, the geotechnical due-diligence report indicated that the maximum moisture content of soils sampled was approximately 16.9%. In addition, the percentage of silt in CalEEMod was adjusted based on the UC Davis Soil Resource Laboratory for the Project area. The interactive tool allows for the identification of U.S. Department of Agriculture-National

Cooperative Soil Survey (USDA-NCSS) soil survey data for locations throughout the State. Soils within the Project area would be comprised of approximately 3.7% clay and 93% sand, with the remainder being silt. Therefore, the model was updated based on site specific information the applied moisture content of exposed soils and the excavation materials silt characteristics provided included in the geotechnical due-diligence report by the proposed Project applicant in order to reduce fugitive dust emissions during all graining and earthwork activities per SCAQMD Rule 403. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-34 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material silt content contained in the model.

Please see Responses to Comment 1-33.

1-35 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the haul trips contained in the model. The number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.

The Project's demolition and total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information provided by the proposed Project applicant. Overall, the proposed Project would result in the grading of 3.88 acres. Construction worker estimates and vendor truck trips by construction phase were based on information provided by the Project applicant. Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. Grading is estimated to involve 17,700 cubic yards of soil for export, which would be required for Phase 2. Per information provided by the applicant, the Project was assumed to use haul trucks with a capacity of 20 cubic yards during grading/excavation activities. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 and 1,720 one-way haul trips during the demolition and grading subphases of Phase 2/3. The commenter states that the model should have included at least 178,660-square-feet of demolition, which is an incorrect assumption (refer to Response to Comment 1-31). CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips required for the demotion phase, since the commenter states the total demolition of building material would be 178,660 square feet. Therefore, no changes to the Draft EIR are required.

1-36 In summary, the comment states that the Draft EIR fails to mention or justify the changes to the construction related architectural coating areas.

The CalEEMod model assumed the default architectural exterior and interior square footages as presented in Appendix C-1 of the Draft EIR. CalEEMod however assumes that the Project's total square footage (325,659 square feet of buildings and 317,850 square feet of parking area) would undergo application of architectural coatings for both Phases 1 and Phases 2/3 concurrently, thus overestimating emissions of volatile organic compounds (VOCs). Therefore, in order to correctly

estimate the application of architectural coatings for both Phase 1 and Phases 2/3, the default exterior and interior square footages were utilized in the model which was reallocated based on the specific development undertaken during Phase 1 and Phases 2/3. As previously discussed, Phase 1 would include development of 3,273 SF of retail and 187 parking spaces; Phase 2 would include development of 120 dwelling units (146,550 SF), 2,056 square feet of retail and 3,700 square feet of restaurant, and 336 parking spaces; and Phase 3 would include development of 143 dwelling units (176,039 SF), 2,223 square feet of retail, and 240 parking spaces. Thus, the interior and exterior architectural square footages used in CalEEMod reflect the specific land use quantities inputted in the land use section of CalEEMod but adjusted for the specific construction phases (Phase 1 and Phases 2/3). Therefore, no changes to the Draft EIR are required.

1-37 In summary, the comment states that the air quality and GHG emissions modeling underestimates the number of weekday and Sunday trips during operations.

The proposed Project's trip generation from Section 4.13, Transportation of the Draft EIR, indicated that the overall trips generated from operations would be 2,517 weekday trips. The CalEEMod data was based on 2,507 trips and has been updated for the purpose of this response, as demonstrated in Response to Comment 1-29, which reflects that the proposed Project would generate approximately 2,517 trips. The air quality and GHG emission calculations modeling were revised as presented in Tables 4.2-10 and Table 4.6-4. Furthermore, the commenters assertion that weekday and Sunday trips were underestimated are incorrect. The Saturday and Sunday trip generation rates were adjusted based on the default proportions allocated in CalEEMod, based on the weekday trip generation rates presented in Table 4.13-1 of Section 4.13, Transportation. As presented in Table 4.2-10 and 4.6-4, the proposed Project-generated criteria air pollutant and GHG emissions would minimally change compared to the output presented in the Draft EIR, assuming the same trip generation from Section 4.13, Transportation. Details of the updated emission calculations are provided in Appendix A to this document.

1-38 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default energy use values, and the model may underestimate the Project's energy-source operational emissions.

Page 4.2-28 of Section 4.2 discusses that the input parameters were adjusted in good faith in compliance with the 2019 Title 24 standards since CalEEMod Version 2016.3.2 assumes compliance with the 2016 Title 24 standards. The 2019 Title 24 standards are the currently applicable building energy efficiency standards that became effective on January 1, 2020. As discussed in Section 4.2, Air Quality (page 4.2-28), the California Energy Commission (CEC) Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings, are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively. The first-year savings for multi-family buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the 2016 standards, the multi-family, savings are 2% of electricity, 8% of demand and 5% of gas. Furthermore, the 2022 Title 24 standards are under development. The 2022 standards focus on four key areas in new construction: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic system and battery storage standards; and, strengthening ventilation standards to improve indoor air quality. In August 2021, the CEC adopted the 2022 standards; but, before those standards can become effective,

they must be approved by the California Building Standards Commission. If approved, the 2022 Title 24 standards will go into effect on January 1, 2023. Therefore, the Project would likely need to meet the more stringent 2022 standards. Therefore, no changes to the Draft EIR are required.

1-39 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default wastewater treatment system percentages. The model assumes that the Project's wastewater would be treated 100% aerobically. The commenter states that the use of 100% aerobic wastewater treatment percentages in the model is incorrect.

As shown on Page 44, Appendix A, Calculation Details for CalEEMod solids produced from aerobic processes are digested in anaerobic digesters; thus, anaerobic facilities are assumed in the CalEEMod aerobic wastewater treatment process (CAPCOA 2017). Furthermore, the wastewater treatment system assumptions are used by CalEEMod to quantify the Project's GHG emissions associated with wastewater treatment. Therefore, no changes to the Draft EIR are required.

1-40 In summary, the comment states that the air quality emissions modeling included these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated.

The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions which was reflected in the modeling's "mitigated" output which would result in a 55% reduction in fugitive dust emissions. As discussed in Section 4.2, Air Quality, of the Draft EIR (page 4.2-14), the Project would be required to comply with all applicable SCAQMD Rules and Regulations, including, but not limited to, Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 403 (Fugitive Dust). Compliance with these rules would minimize fugitive dust generated during Project construction to the maximum extent practical. Therefore, no changes to the Draft EIR are required.

1-41 In summary, the comment states that the CalEEMod operational mitigation measures included in the model are incorrect and may underestimate the Project's operational emissions.

In order to capture the traffic reductions based on the Project's site-specific location, the report on Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures was utilized. It is primarily focused on the quantification of project-level mitigation of GHG emissions associated with land use, transportation, energy use, and other related project areas. The Project would, improve the pedestrian network, this measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive; improve transit access, the proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro C Line (formerly Green Line) and multiple bus lines. The Metro C Line is a light rail line running between Redondo Beach and Norwalk, with the closest station approximately 0.51-mile east of the Project site. There are two Metro bus lines, one Beach Cities bus line, and two Los Angeles Department of Transportation (LADOT) Commuter Express lines that run in the vicinity of the Specific Plan area (Metro Line 232; Metro Line 625; Beach Cities Line 109; LADOT Commuter Express 438; and LADOT Commuter Express 574); and would be located in an area with high destination accessibility, the Project site is located within an urbanized portion of the County of Los Angeles with access to housing and employment.

The commenter also states that the water reduction measures applied in CalEEMod was incorrect. The 20x2020 Water Conservation Plan sets forth a statewide road map to maximize the state's urban water efficiency and conservation opportunities between 2009 and 2020, and beyond. It aims to set in motion a range of activities designed to achieve the 20% per capita reduction in urban water demand by 2020. These activities include improving an understanding of the variation in water use across California, promoting legislative initiatives that incentivize water agencies to promote water conservation, and creating evaluation and enforcement mechanisms to assure regional and statewide goals are met. Furthermore, the Project would be required to meet the California Green Building Standards Code, also called the "CALGreen Code." As mandated by law, California buildings must reduce the maximum flow of water by 20% on all plumbing fittings and fixtures. Therefore, a 20% reduction in water usage was applied in CalEEMod in compliance with the CALGreen Code and state water reduction goals.

This commenter also states that the Draft EIR's GHG analysis incorrectly assumes reductions associated with solid waste emissions. The Draft EIR's assumption that the Project would reduce the amount of solid waste that would be landfilled by 50% was based on mandatory compliance with AB 939, AB 341, and AB 1826 (as discussed in Section 4.6, Greenhouse Gas Emissions). The Project would also provide storage areas for recyclables and green waste, as well as food waste storage. Therefore, the Project would comply with AB 939, AB 341, and AB 1826 would ensure that the anticipated solid waste reductions are realized. Therefore, no changes to the Draft EIR are required.

1-42 In summary, the comment states that the Draft EIR diesel particulate matter health risk emissions are inadequately evaluated and their screening-level construction HRA indicates a potentially significant impact.

Regarding the commenter's assertion the construction HRA relies upon a flawed air model, and as discussed in Response to Comments 1-29 through 1-35, the CalEEMod User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis". As such, the changes to the default CalEEMod assumptions for project emissions modeling were appropriate based on applicant input and Project-specific information.

The commenter also states that the Draft EIR failed to evaluate the Project's operational health risk impacts. The Project would not result in a long-term source of TAC emissions. No residual TAC emissions and corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the Project. Additionally, CARB has published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities." The *Air Quality and Land Use Handbook* is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The enumerated facilities or sources include the following:

- High-traffic freeways and roads
- Distribution centers
- Rail yards
- Ports

- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities.

The Project would not include any of the previously listed land uses and would not expose sensitive receptors to TAC emissions from these sources.

Regarding the commenter's assertion that health risk impacts from Project operation should also be evaluated, a 30-year exposure duration vastly exceeds the 6-month requirement set forth by Office of Environmental Health Hazard Assessment (OEHHA). As discussed in the construction HRA (Appendix C-2 of the Draft EIR), the construction HRA was performed in accordance with the OEHHA approved the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). SCAQMD requires that all HRAs prepared for CEQA documents follow SCAQMD policies in conjunction with the 2015 Risk Assessment Guidelines Manual. For the purposes of the construction HRA, given the less-than-lifetime exposure period, and the higher breathing rates and sensitivity of children to construction-generated TACs, the cancer risk calculation assumes that the exposure would affect children early in their lives. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy and occur for 34 months, over the duration of construction activities.

Regarding the commenter's assertion of the incorrect application of construction-related mitigation and failure to adequately analyze health risks associated with DPM, the commenter uses a screening model, known as AERSCREEN, to evaluate health risk impacts from diesel emissions during construction of the proposed Project. While the AERSCREEN model is an acceptable model by the U.S. Environmental Protection Agency's (EPA) and SCAQMD, it is a screening model. As a screening model, it overestimates impacts with the general understanding that if AERSCREEN does not show impacts, then impacts would also not occur if a more detailed analysis is conducted using a more refined model. AERSCREEN is a simplified model in that it does not consider meteorological data or topographical data. AERSCREEN assumes calm wind conditions at all times and a stable atmosphere (i.e., no atmospheric mixing). AERSCREEN also has simplified emissions input fields such that it typically overestimates emission impacts from varying construction activities.

In addition, the SCAQMD does not have guidance requiring that construction and operational health risk be evaluated together. Based on an email from Michael Krause, Planning and Rule Manager with SCAQMD, who is an expert, a project's construction and operational health risks need to be evaluated separately. Thus, the construction HRA is analyzed in accordance with industry guidance and an operational HRA is not necessary.

Further, the comment states that the commenter prepared a screening-level health risk assessment using changed CalEEMod inputs with the assumption that health risks should be combined for construction and operation of the Project. The commenter has not provided any substantive comments that would alter model inputs or the findings of the emissions calculations in the Draft EIR. Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors to a much greater degree than AERSCREEN, which

better represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis was modeled to assume a construction start date of October 2021, which represented the earliest date of construction at the time the analysis was prepared, anticipating when air quality and GHG assessments would be initiated.[2] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024) (USEPA 2016).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

1-43 The commenter states that the Draft EIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion is incorrect.

Please see the following Responses to Comments:

1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model; Please refer to Responses to Comments 1-29 through 1-41.

2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; Please refer to Response to Comment 1-45.

[2] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; Please refer to Response to Comment 1-46.

4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; Please refer to Response to Comment 1-47.

5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS; Please refer to Response to Comment 1-48.

1-44 The commenter states that the modeling underestimates the Project's emissions, and the Draft EIR's quantitative GHG analysis should not be relied upon to determine Project significance.

Please see Responses to Comments 1-29 through 1-41.

1-45 The commenter states that the Draft EIR incorrectly applies the GHG threshold of 3,000 MT CO2e per year.

Regarding the commenters assertion that the Draft EIR used an outdated quantitative GHG threshold, the South Coast Air Quality Management District (SCAQMD) formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year threshold for industrial uses and stationary projects would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population for project level analyses and 6.6 MT CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Based on the supporting analysis outlined in SCAQMD's draft GHG guidance and meeting notes, this 3,000 MT CO_2e per year level would capture 90% of GHG emissions from new residential or commercial projects in the region (SCAQMD 2008). This type of market capture analysis captures a substantial fraction of the GHG emissions from future development to accommodate for future population and job growth and excludes small development projects that would contribute a relatively small fraction of the cumulative statewide GHG emissions.

Therefore, the Draft EIR relies on use of the 3,000 MT CO_2e per year threshold because it has been recommended by SCAQMD and SCAQMD is an expert agency in the region. Furthermore, the SCAQMD provides substantial evidence that the thresholds are consistent with policy goals and 2050 GHG emissions reduction targets set by the State. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions form the above-described uses, consistent with Executive Order (EO) S-3-05 target of reducing GHGs to 80% below 1990 levels by 2050. No changes to the Draft EIR are required.

1-46 The commenter states that the Draft EIR would result in potentially significant GHG emissions exceeding the 2030 "Substantial Progress" threshold of 660 MT CO_2e per service population per year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e per service population per year.

Overall, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific quantitative thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). State CEQA Guidelines Section 15064.4 states that a lead agency shall make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use, or (2) rely on a qualitative analysis or performance based standards. The City appropriately applied their discretion to apply a numeric GHG threshold recommended by the SCAQMD and is not required to apply alternative thresholds as recommended by the commenter. Regarding the commenters assertion that the Project would result in significant GHG emissions, as presented in Table 4.6-4 of Section 4.6, Greenhouse Gas of the Draft EIR, GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year, with the Project resulting in approximately 2,921 MT CO_2e per year. Response to Comments 29 through 49 discusses the adequacy of the utilized CalEEMod input parameters.

1-47 In summary, the comment states that their modeling indicates that the Project's VMT would exceeds the CARB 2017 Scoping Plan projections for 2010, 2025, and 2030.

CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve 2030 and 2050 GHG emission reduction targets, decrease health risk, and reduce petroleum consumption from the transportation sector. CARB developed a scenario-based modeling system that was used to identify foreseeable emission reductions associated with existing mobile-source regulations, and to explore different combinations

of further advancements in technologies, fuels, and transportation system efficiencies. This modeling usefully relates VMT and GHG metrics to each other, and can be a useful source of information for planners considering projects using one or the other of these metrics. Specifically, in support of the Mobile Source Strategy, CARB developed two scenarios using the model that are particularly relevant with respect to GHG emissions from the transportation sector. Notably, the baseline scenario represents the mobile-source GHG emissions reductions associated with existing mobile-source controls, regulations, foreseeable deployment of technology, and current projections of VMT included in the existing RTP/SCSs adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375. Furthermore, the Cleaner Technologies and Fuels (CTF) scenario evaluates what level of additional deployment of cleaner vehicle technologies and fuels combined with slower growth in VMT would be necessary to achieve state air quality targets and climate goals of 40% reduction in GHG emissions from 1990 levels by 2030 and 80% by 2050. The existing total VMT per capita (2015-2018 average) was 24.6 and the existing light-duty VMT per capita (2015-2018 average) was 22.2.

As presented in Section 4.13, Transportation, the daily household VMT per capita for the Project -was determined by using the SCAG 2016 RTP/SCS travel demand model (SCAG 2016). The SCAG travel demand model identifies trip purposes as Home-Based Work and Home-Based Other, where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. The other trip type, Non-Home-Based, is produced and attracted by nonresidential land uses. The average trip length and vehicle trips for all Home-Based Work and Home-Based Other productions are used to calculate the daily household VMT per capita for residential uses.

Residential is already an existing land use in the Transportation Analysis Zones (TAZ) located in the City in which the Project is located, and the model therefore includes residential trips and average trip lengths. It is assumed that the Project's residential trips would have the same characteristics as the existing residential trips in the zone. The VMT per capita assumed for the Project site was therefore based on the vehicle trips and average trip lengths for the TAZ in which the Project is located from the SCAG model, which indicates a daily household VMT per capita of 10.9 for all home-based production trips within the TAZ, which is 23% below the City's VMT of 14.2. As such, the proposed Project's daily household VMT would not conflict with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 State climate goals. Therefore, no changes to the Draft EIR are required and impacts would remain less than significant.

1-48 In summary, the comment states that the Draft EIR does not consider performance-based goals under SCAG's RTP/SCS and SB 375 (e.g., per capita emission targets or VMT per capita benchmarks).

State CEQA Guidelines Section 15064.4 states that a lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. As discussed in the Draft EIR, the City has not adopted quantitative project-level significance thresholds for assessing impacts related to GHG emissions applicable to the proposed Project, therefore, the SCAQMD threshold of 3,000 MT CO_2e was used to assess the Project's GHG emissions as discussed above.

As discussed in Section 4.13, Transportation of the Draft EIR, as the City has not yet adopted new transportation impact study guidelines including the VMT metric and significance criteria in compliance with Senate Bill (SB) 743 guidelines, the impact thresholds used for this Project are based on the Governor's Office of Planning and Research (OPR) guidelines. The proposed Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita, and the Project was determined to have a less-than-significant VMT impact. Given the less than significant VMT impact, the GHG emissions from per capita VMT associated with the Project are assumed to be consistent with the VMT goals of the 2017 Scoping Plan and SCAG's 2020-2045 RTP/SCS. Furthermore, Impact GHG 4.6b evaluates the consistency of the Project with plans adopted for the purpose of reducing GHG emissions separate from the quantitative analysis. The Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within 2017 Scoping Plan, Assembly Bill (AB) 32, EO S-3-05 and B-30-15, and SCAG's 2020-2045 RTP/SCS. The Specific Plan allows land use designations which creates a mix of land uses that are within walking distance of one another, and introduces retail uses along the Pacific Coast Highway (PCH) to provide streets that are attractive to pedestrians. The Project would promote healthy, walkable communities. Therefore, if the Project would not conflict with these plans, the City would be able to achieve its GHG reduction goals, and, therefore, these plans can be used at a Project level to show that a project would not have a significant cumulative effect on the environment as it relates to GHG impacts.

As the substantial evidence provided on pages 4.6-29 through 4.6-46 of Section 4.6, Greenhouse Gas Emissions, of the Draft EIR shows, the Project would be consistent with the applicable provisions of these plans. Therefore, the Draft EIR properly concludes, based on substantial evidence, that the Project's GHG impacts are less than significant and mitigation measures are not required.

1-49 In summary, the comment states that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further, thus, the Project should incorporate the mitigation measures provided.

Please see Responses to Comment 1-42.

Additionally, it is important to note, CEQA does not require adoption of every imaginable feasible mitigation measure. CEQA's requirement applies only to feasible mitigation that will "substantially lessen" a project's significant effects. (Public Resources Code, § 21002.) As explained by one court: A lead agency's "duty to condition project approval on incorporation of feasible mitigation measures only exists when such measures would [avoid or] 'substantially lessen' a significant environmental effect." (San Franciscans for Reasonable Growth v. City and County of San Francisco (1989) 209 Cal.App.3d 1502, 1519.) "Thus, the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention or proposed in the project EIR." (Ibid.) Rather, an EIR should focus on mitigation measures that are feasible, practical, and effective. (Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal.App.4th 342, 365.). Furthermore, as presented in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions, the proposed Project would not result in significant impacts requiring the need for additional mitigation.

1-50 In summary, this comment provides a generic disclaimer about the comment letter. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Responses 1-51 through 1-52 are for "Attachments A through F of Exhibit D of A"

1-51 The commenter provided their own health risk, air quality, and GHG calculations to determine significance of the Project due to construction and operations. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-52 In summary, this comment provides the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No further response is required.

Response 1-53 is for "Exhibit B, April 12, 2021 SWRCC Letter"

1-53 This comment represents a copy of an email from the commenter to the City dated April 12, 2021 with a reference to an attachment. The City assumes the attachment is in reference to the aforementioned comments. No further response is provided.

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Comment Letter 2

LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
rebecca@lozeaudrury.com

Via Email

December 9, 2021

Chair Ryan Baldino and
Honorable Members of the Planning
Commission
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

Paul Samaras, AICP
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245
psamaras@elsegundo.org

Re: Comment on Final Environmental Impact Report, Pacific Coast Commons Specific Plan (SCH# 2020050508)

Dear Chair Baldino, Honorable Members of the Planning Commission, and Mr. Samaras:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Final Environmental Impact Report ("FEIR") prepared for the Project known as Pacific Coast Commons Specific Plan, aka SCH# 2020050508, including all actions related or referring to the proposed demolition of existing surface parking lots and construction of a new mixed use development located at 401-575 N. Pacific Coast Highway (PCH) and the parking lot on 600-block of PCH in the City of El Segundo ("Project").

After reviewing the FEIR, we conclude that the FEIR fails as an informational document, fails to adequately analyze the Project's environmental impacts, and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Planning Division address these shortcomings in a revised environmental impact report ("REIR") and recirculate the REIR prior to considering approvals for the Project.

This comment has been prepared with the assistance of Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH (Exhibit A). Mr. Offermann's comments are incorporated herein by reference.

2-1

I. PROJECT DESCRIPTION

2-2

The Specific Plan area for this Project consists of eight parcels which total 6.385 gross acres. Current developments onsite include the Fairfield Inn and Suites Hotel and the

Aloft Hotel, as well as surface parking lots. The Project would redevelop existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel and would create five new land use districts. The site is bounded by Los Angeles International Airport to the north and residential communities to the east and south.

The Specific Plan allows for the following: (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/ townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures that would contain approximately 792 parking stalls. Construction activities would last approximately 34 months.

2-2 Cont.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.* Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal. App. 4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *see also, Berkeley Jets*, 91 Cal.App.4th at pp. 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or

2-3

significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code § 21081; 14 Cal.Code Regs. § 15092(b)(2)(A) & (B). The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 732.

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal. App. 4th at p. 1355 (emphasis added) (quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391 409, fn. 12). As the court stated in *Berkeley Jets*:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

2-3 Cont.

More recently, the California Supreme Court has emphasized that:

> When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.

Sierra Club v. Cty. of Fresno (2018) 6 Cal.5th 502, 510 (2018), citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405. "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, "a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient, i.e., whether the EIR comports with its intended function of including 'detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'" 6 Cal.5th at 516, citing *Bakersfield Citizens for*

Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1197. "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." 6 Cal.5th at 516. Whether a discussion of a potential impact is sufficient "presents a mixed question of law and fact. As such, it is generally subject to independent review. However, underlying factual determinations—including, for example, an agency's decision as to which methodologies to employ for analyzing an environmental effect—may warrant deference." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. As the Court emphasized:

> [W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

Sierra Club v. Cty. of Fresno, 6 Cal.5th at 514. We find that the FEIR prepared by the City here is inadequate for the reasons set forth below.

2-3 Cont.

III. DISCUSSION

A. There is Substantial Evidence that the Project Will Have a Significant Health Risk Impact from its Indoor Air Quality Impacts.

Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (Exhibit A). Mr. Offermann concludes that it is likely that the Project will expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and curriculum vitae are attached as Exhibit A.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "[t]he primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." Ex. A, p. 2-3.

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Formaldehyde is a known human carcinogen. Mr. Offermann states that future residents of the Project would be exposed to a 120 in one million risk, assuming all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. *Id.* at 4. As for commercial employees, he estimates an exposure level of 17.7 in one million. *Id.* at 5. These potential exposure level exceeds the South Coast Air Quality Management District's ("SCAQMD") CEQA significance threshold for airborne cancer risk of 10 per million.

Mr. Offermann concludes that these significant environmental impacts should be analyzed in the EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id.* Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the applicant use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins in the buildings' interiors. *Id.* at 12.

Mr. Offermann also notes that because of the Project's close proximity to roads with moderate to high traffic and to air traffic from the nearby Los Angeles International Airport, the project is sound impacted. It will therefore require a "mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors," so as to allow occupants the discretion to control exterior noise. *Id.* at 11.

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Cont.

The City has a duty to investigate issues relating to a project's potential environmental impacts, especially those issues raised by an expert's comments. *See Cty. Sanitation Dist. No. 2 v. Cty. of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98 ("under CEQA, the lead agency bears a burden to investigate potential environmental impacts"). In addition to assessing the Project's potential health impacts to residents and employees, Mr. Offermann identifies the investigatory path that the City should be following in developing an EIR to more precisely evaluate the Project's future formaldehyde emissions and establishing mitigation measures that reduce the cancer risk below the SCAQMD level. Such an analysis would be similar in form to the air quality modeling and traffic modeling typically conducted as part of a CEQA review.

The failure to address the project's formaldehyde emissions is contrary to the California Supreme Court's decision in *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA*"). At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. *CBIA*, 62 Cal.4th at 800-801. However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. *Id.* at 801 ("CEQA calls upon an agency to evaluate

existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." *Id.* at 800 (emphasis added).

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. Residents and commercial employees will be users of the Project. Rather than excusing the City from addressing the impacts of carcinogens emitted into the indoor air from the project, the Supreme Court in *CBIA* expressly finds that this type of effect by the project on the environment and a "project's users" must be addressed in the CEQA process.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings*, either directly or indirectly.'" *CBIA*, 62 Cal.4th at 800 (emphasis in original). Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." *Id.*, citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d). It goes without saying that the future residents and employees of the Project are human beings and the health and safety of those residents and workers is as important to CEQA's safeguards as that of other nearby residents currently living near the project site.

The City's EIR must disclose and mitigate the potential environmental impacts to future users of the building.

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B. There is Substantial Evidence that the Project will have Significant Adverse Air Quality, Health Risk, and Greenhouse Gas Impacts

1. The DEIR Relied on Unsubstantiated Input Parameters to Estimate Project Emissions and Thus the Project May Result in Significant Air Quality Impacts.

The Southwest Regional Council of Carpenters submitted a public comment on April 12, 2021 which was supported by the comments of expert environmental consulting firm SWAPE. (Exhibit B). Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the DEIR's analysis of the Project's impacts on air quality, health risk, and greenhouse gases. SAFER joins the Carpenters' comment and SWAPE's comment, the latter of which is incorporated by reference herein.

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SWAPE found that the DEIR incorrectly estimated the Project's construction and operational emissions and therefore cannot be relied upon to determine the significance of the Project's impacts on local and regional air quality. The DEIR relies on emissions calculated from the California Emissions Estimator Version CalEEMod.2016.3.2 ("CalEEMod"). DEIR, p. 4.2-1. This model, which is used to generate a project's construction and operational emissions, relies on recommended default values based on site specific information related to a number of factors. SWAPE comment, p. 1. CEQA requires any changes to the default values to be justified by substantial evidence. *Id.* at 1-2.

SWAPE reviewed the DEIR's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the DEIR. *Id.* at 2. As a result, the DEIR's air quality analysis cannot be relied upon to determine the Project's emissions.

Specifically, SWAPE found that the following values used in the DEIR's air quality analysis were either inconsistent with information provided in the DEIR or otherwise unjustified:

1. Underestimated Land Use Sizes. SWAPE comment, p. 2.
2. Failure to Model All Required Demolition. *Id.* at p. 3-4.
3. Unsubstantiated Changes to Acres of Grading Values. *Id.* at 4-5.
4. Unsubstantiated Changes to Material Moisture Content Bulldozing Values. *Id.* at 5-6.
5. Unsubstantiated Changes to Material Silt Content Values. *Id.* at 6-7.
6. Unsubstantiated Changes to Hauling Trip Numbers. *Id.* at 7-8.
7. Unsubstantiated Changes to Architectural and Area Coating Areas. *Id.* at 8-9.
8. Underestimated Operational Vehicle Trip Rates. *Id.* at 10-11.
9. Unsubstantiated Changes to Energy Use Values. *Id.* at 11.
10. Unsubstantiated Changes to Wastewater Treatment System Percentages. *Id.* at 12.
11. Incorrect Application of Construction-Related Mitigation Measures. *Id.* at 13-14.
12. Incorrect Application of Mobile-Related Operational Mitigation Measures. *Id.* at 14-15.

As a result of these errors in the DEIR, the Project's construction and operational emissions were underestimated and cannot be relied upon to determine the significance of the Project's air quality impacts.

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2. There is Substantial Evidence that the Project May Have a Significant Health Impact as a Result of Diesel Particulate Emissions.

One of the primary emissions of concern regarding health effects for land development projects is diesel particulate matter ("DPM"), which can be released during Project construction and operation. DPM consists of fine particles with a diameter less than 2.5 micrometers including a subgroup of ultrafine particles (with a diameter less than 0.1

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micrometers). Diesel exhaust also contains a variety of harmful gases and cancer-causing substances. Exposure to DPM is a recognized health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. According to the California Air Resources Board ("CARB"), DPM exposure may lead to the following adverse health effects: aggravated asthma; chronic bronchitis; increased respiratory and cardiovascular hospitalizations; decreased lung function in children; lung cancer; and premature deaths for those with heart or lung disease.[1]

The DEIR concluded that the mitigated excess cancer risk posed by the Project to nearby sensitive receptors would not exceed the SCAQMD significance threshold of 10 in one million, and that the Project would result in a less-than-significant operational health risk impact. SWAPE comment, p. 15; DEIR, p. 4.2-38. SWAPE identifies four main reasons for why the DEIR's evaluation of health risk impacts and less-than-significant conclusion is incorrect.

First, the DEIR's construction HRA is incorrect due to its reliance on an exhaust PM_{10} estimate from a flawed air model. SWAPE comment, p. 16. The DEIR's HRA uses an underestimated DPM concentration, and therefore underestimates the Project's cancer risk and cannot be relied upon to determine impacts of the Project. *Id.*

Second, the DEIR did not evaluate the Project's toxic air contaminants (TACs) and associated health risk impacts. *Id.* The Traffic Impact Analysis indicates the generation of an estimated 2,517 average daily vehicle trips, but the DEIR fails to discuss potential TACs associated with Project operation or indicate the levels at which pollutants would trigger adverse health effects. *Id.* In failing to connect TAC emissions to potential health risks to nearby receptors, the Project fails to meet the CEQA requirement that projects correlate increases in project-generated emissions to adverse impacts on human health caused by those emissions. *See Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 510.

Third, the California Department of Justice recommends the preparation of a quantitative HRA pursuant to the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines. OEHHA released its most recent guidance document in 2015 describing which types of projects warrant preparation of an HRA. *See* "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/hotspots2015.html. The OEHHA document recommends that if a project is expected to last over 6 months, the exposure should be evaluated throughout the project using a 30-year exposure duration to estimate individual cancer risks. SWAPE letter, p. 16. Based on its extensive experience, SWAPE reasonably assumes that the

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[1] *See* CARB Resources - Overview: Diesel Exhaust & Health, available at https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health).

Project will last at least 30 years, and therefore recommends that health risk impacts from the project be evaluated. *Id.* A Revised EIR is therefore required to analyze these impacts.

Fourth, the FEIR fails to evaluate the "*cumulative* lifetime cancer risk to nearby, existing receptors as a result of Project *construction and operation together*." SWAPE comment, p. 17 (emphasis in original). A Revised EIR should be prepared to quantify the cumulative excess cancer risk posed by the Project's construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million. *Id.*

SWAPE prepared a screening-level HRA to evaluate potential impacts from Project construction using AERSCREEN, a screening-level air quality dispersion model. SWAPE comment, p. 17. SWAPE applied a sensitive receptor distance of 125 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance utilizing age sensitivity factors. *Id.* at 17-19. SWAPE found that the excess cancer risks at a sensitive receptor located approximately 125 meters away over the course of Project construction and operation is **approximately 79 in one million**. *Id.* at 19. This risk appreciably exceeds SCAQMD's threshold of 10 in one million.

SWAPE's analysis constitutes substantial evidence that the Project may have a significant health impact as a result of diesel particulate emissions. SWAPE recommends that an updated EIR be prepared which includes "a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation." *Id.*

2-6 Cont.

3. The DEIR Failed to Adequately Analyze the Project's Greenhouse Gas Impacts and Thus the Project May Result in Significant Greenhouse Gas Emissions.

The DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 metric tons of carbon dioxide equivalent per year ("MT CO2e/year"). The DEIR also relies on the Project's consistency with the City of El Segundo Climate Action Plan, SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32 to conclude the Project would have less-than-significant GHG impacts. SWAPE comment, p. 20; DEIR, p. 4.6-29 – 4.6-48. However, SWAPE states that the DEIR's conclusion about a less-than-significant greenhouse gas impact is incorrect for several reasons:

1. The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
2. The DEIR's quantitative GHG analysis relies upon an outdated threshold;
3. The DEIR's unsubstantiated air model indicates a potentially significant impact;
4. The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and

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5. The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

SWAPE comment, p. 20-27. SWAPE's analysis demonstrates potentially significant health risk and GHG impacts from the project that necessitate mitigation, and it proposes several feasible mitigation measures from CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* to reduce these impacts. *Id.* at 27. In addition to implementing these measures, the Revised EIR should include an updated air quality, health risk, and GHG analysis.

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I. CONCLUSION

For the foregoing reasons, SAFER believes that the EIR is wholly inadequate. SAFER urges the Planning Commission to refrain from recommending certification of the FEIR or recommending approval of the Project in order to allow staff additional time to address the concerns raised herein. Thank you for considering our comments and please include this letter in the record of proceedings for this project.

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Sincerely,

Rebecca Davis

EXHIBIT A

IEE INDOOR ENVIRONMENTAL ENGINEERING IEE
1448 Pine Street, Suite 103 San Francisco, California 94109
Telephone: (415) 567-7700
E-mail: offermann@IEE-SF.com
http://www.iee-sf.com

Date: November 12, 2021

To: Rebecca Davis
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, California 94612

From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: Pacific Coast Commons Project, El Segundo, CA
(IEE File Reference: P-4516)

Pages: 19

Indoor Air Quality Impacts

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Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

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Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and

particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Pacific Coast Commons Project, El Segundo, CA the buildings consist of residential and commercial spaces.

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The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

The employees of the commercial spaces are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the commercial spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

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Assuming that the employees of commercial spaces work 8 hours per day and inhale 20 m^3 of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor

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concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

2-9 Cont.

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m²-h) and the area (m²) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., µg/m²-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 µg/m²-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 µg/m²-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

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If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m³) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m³/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m³)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m³/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section

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3.10.2 "Calculation of Estimated Building Concentrations" of the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

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Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The Pacific Coast Commons Project is close to roads with moderate to high traffic (e.g., Pacific Coast Highway, E. Mariposa Avenue, E. Holly Avenue, Indiana Street, etc.) as well as air traffic from Los Angeles International Airport, and thus the Project site is a sound impacted site.

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According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), The future plus project traffic noise levels reported in Table 4.10-6 range from 55.4 dBA to 70.2 dBA CNEL.

As a result of the anticipated high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

An air quality analyses should to be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour

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standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

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Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

2-9 Cont.

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OEHHA - Office of Environmental Health Hazard Assessment. 2017b. All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels. Available at: http://oehha.ca.gov/air/allrels.html

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Offermann, F. J. and A. T. Hodgson. 2011. Emission Rates of Volatile Organic Compounds in New Homes. Proceedings Indoor Air 2011 (12th International Conference on Indoor Air Quality and Climate 2011), June 5-10, 2011, Austin, TX.

Singer, B.C, Chan, W.R, Kim, Y., Offermann, F.J., and Walker I.S. 2020. Indoor Air Quality in California Homes with Code-Required Mechanical Ventilation. Indoor Air, Vol 30, Issue 5, 885-899.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California"*. In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality*" when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,

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Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA

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cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Francis (Bud) J. Offermann III PE, CIH

Indoor Environmental Engineering
1448 Pine Street, Suite 103, San Francisco, CA 94109
Phone: 415-567-7700
Email: Offermann@iee-sf.com
http://www.iee-sf.com

Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers: ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.

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Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.

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Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
  - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
  - Chairman of EHC Research Subcommittee
  - Member of Man Made Mineral Fiber Position Paper Subcommittee
  - Member of the IAQ Position Paper Committee
  - Member of the Legionella Position Paper Committee
  - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
  - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
  - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
  - Member of Research Subcommittee

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American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
  - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)

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American Industrial Hygiene Association (AIHA)

Cal-OSHA Indoor Air Quality Advisory Committee

International Society of Indoor Air Quality and Climate (ISIAQ)

- Co-Chairman of Task Force on HVAC Hygiene

U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)

Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering

Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.

Models for Predicting Air Quality, Indoor Air'90, Toronto, Canada, August, 1990.

Microbes in Building Materials and Systems, Indoor Air '93, Helsinki, Finland, July, 1993.

Microorganisms in Indoor Air Assessment and Evaluation of Health Effects and Probable Causes, Walnut Creek, CA, February 27, 1997.

Controlling Microbial Moisture Problems in Buildings, Walnut Creek, CA, February 27, 1997.

Scientific Advisory Committee, Roomvent 98, 6th International Conference on Air Distribution in Rooms, KTH, Stockholm, Sweden, June 14-17, 1998.

Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Microbial Growth in Materials, Healthy Buildings 2000, Espoo, Finland, August, 2000.

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Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.

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Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

PEER-REVIEWED PUBLICATIONS :

F.J.Offermann, C.D.Hollowell, and G.D.Roseme, "Low-Infiltration Housing in Rochester, New York: A Study of Air Exchange Rates and Indoor Air Quality," *Environment International*, *8*, pp. 435-445, 1982.

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"Using the EPA BASE Study for IAQ Investigation / Communication", Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

"Ventilation," Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

"Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

"Closing Session Summary: 'Building Investigations' and 'Building Design & Construction', Healthy Buildings 2000, Espoo, Finland, August 2000.

"Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care", BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

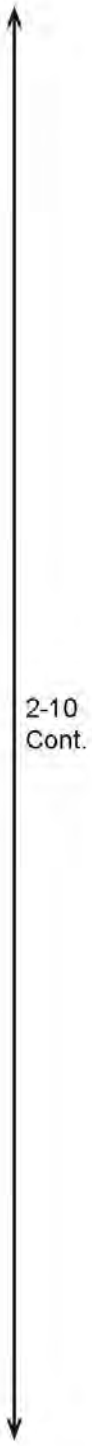
"Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad," University of California Berkeley, September 18, 2001.

"Mold Contamination: Recognition and What To Do and Not Do", Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

"Investigative Tools of the IAQ Trade", Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

"Finding Hidden Mold: Case Studies in IAQ Investigations", AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

"Assessing and Mitigating Fungal Contamination in Buildings", Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.



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"Use of External Containments During Fungal Mitigation", Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004, San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

"Mold Remediation: The National QUEST for Uniformity Symposium", Invited Speaker, Orlando, Florida, November 3-5, 2003.

"Mold and Moisture Control", Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

"Advanced Perspectives In Mold Prevention & Control Symposium", Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

"Building Sciences: Understanding and Controlling Moisture in Buildings", American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

"Indoor Air Quality Diagnostics and Healthy Building Design", University of California Berkeley, Berkeley, CA, March 2, 2005.

"Improving IAQ = Reduced Tenant Complaints", Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

"Defining Safe Building Air", Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

"Update on USGBC LEED and Air Filtration", Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

"Ventilation and Indoor air Quality in New California Homes", National Center of Healthy Housing, October 20, 2008.

"Indoor Air Quality in New Homes", California Energy and Air Quality Conference, October 29, 2008.

"Mechanical Outdoor air Ventilation Systems and IAQ in New Homes", ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

"Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

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"Ten Ways to Improve Your Air Quality", Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

"New Developments in Ventilation and Indoor Air Quality in Residential Buildings", Westcon meeting, Alameda, CA, March 17, 2010.

"Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ", ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

"Measured IAQ in Homes", ACI Home Performance Conference, Austin, TX, April 21, 2010.

"Respiration: IEQ and Ventilation", AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

"IAQ Considerations for Net Zero Energy Buildings (NZEB)", Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

"Energy Conservation and Health in Buildings", Berkeley High SchoolGreen Career Week, Berkeley, CA, April 12, 2011.

"What Pollutants are Really There ?", ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

"Energy Conservation and Health in Residences Workshop", Indoor Air 2011, Austin, TX, June 6, 2011.

"Assessing IAQ and Improving Health in Residences", US EPA Weatherization Plus Health, September 7, 2011.

"Ventilation: What a Long Strange Trip It's Been", Westcon, May 21, 2014.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Indoor Air 2014, Hong Kong, July, 2014.

"Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

"Chemical Emissions from E-Cigarettes", IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

"Chemical Emissions and Health Hazards Associated with E-Cigarettes", Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

"Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM", Harris Martin's Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.

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"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure", FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

"Creating Healthy Homes, Schools, and Workplaces", Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

"Diagnosing IAQ Problems and Designing Healthy Buildings", University of California Berkeley, Berkeley, CA, October 6, 2015.

"Diagnosing Ventilation and IAQ Problems in Commercial Buildings", BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

"A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products", AIHce2016, May, 21-26, 2016.

"Admissibility of Scientific Testimony", Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

"Indoor Air Quality and Ventilation", ASHRAE Redwood Empire, Napa, CA, December 1, 2016.

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EXHIBIT B

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

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Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

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The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips,

reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

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The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particular matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants, Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert

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on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

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[2] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449–450).

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B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

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C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.

[3] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

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- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.

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- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[4]

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The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

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Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

(DEIR, ES-10~16.)

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E. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an

impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

2-11 Cont.

1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project's GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency "should explain the limitations of the particular model or methodology selected for use." CEQA Guidelines § 15064.4(c).

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAPs should include the following features:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

2-11 Cont.

Collectively, the above-listed CAP features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

2-11 Cont.

(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT.

2-11 Cont.

The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

2-11 Cont.

F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

2-11 Cont.

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal. App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 3d 531, 540.

General plan consistency is "the linchpin of California's land use and development laws; it is the principle which infused the concept of planned growth with the force of law." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

2-11 Cont.

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

2-11 Cont.

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

The DEIR should be revised and recirculated with an affordable housing component.

2-11 Cont.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

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Cont.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

2-12

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

2-12 Cont.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

2

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added).[12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin

Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

2-12 Cont.

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

2-12 Cont.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

4

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

2-12 Cont.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

2-13

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

2-13 Cont.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofiller. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*. 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

2-13 Cont.

Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting.* Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII. Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution.* Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

2-13 Cont.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

2-13 Cont.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

2-13 Cont.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

2-13 Cont.

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case; No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

2-13 Cont.

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

2-13 Cont.

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

2-13
Cont.

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

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Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 – 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989 – 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 - 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

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- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

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- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

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- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

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Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

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Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

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Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

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Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater. An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

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EXHIBIT D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

April 12, 2021

Greg Sonstein, Esq.
Mitchell M. Tsai, Attorney at Law
155 South El Molino Avenue Suite 104
Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site. 2-14

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

2-14 Cont.

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

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[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

3

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

2-14 Cont.

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

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[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

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[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

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Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

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Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

2-14 Cont.

As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

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These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

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Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

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[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

2-14 Cont.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

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First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

2-14 Cont.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

2-14 Cont.

[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

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concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

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[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

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[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

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(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

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2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

2-14 Cont.

[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

2-14 Cont.

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

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DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

2-14 Cont.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

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i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

2-14 Cont.

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

2-14 Cont.

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

2-14 Cont.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones

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Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

2-14 Cont.

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• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

2-14 Cont.

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• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

2-14 Cont.

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Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

2-14 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

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Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

2-14 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

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ii.	The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
iii.	The Certification Statement signed and printed on the contractor's letterhead.
b.	The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes:
i.	Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
ii.	Any problems with the equipment or emission controls.
iii.	Certified copies of fuel deliveries for the time period that identify:
1.	Source of supply
2.	Quantity of fuel
3.	Quality of fuel, including sulfur content (percent by weight)

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

2-14 Cont.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

2-14 Cont.

Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
Total Emissions From Passenger and Light Duty Vehicles		
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) (Calc: (L1*L2))
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) (Calc: (L3 converted into lbs) / (365 days))
5	674	Service Population (618 residents + 56 long-term jobs)
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) (Calc: (L4/L5))
Daily VMT Per Capita From Passenger and Light Duty Vehicles		
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles (Calc: (L9/365))
11	674	Service Population (618 residents + 56 long-term jobs)
12	24.14	Daily VMT Per Capita ((Calc: L10/L11))

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

2-14 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

2-14 Cont.

Attachment C

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Pacific Coast Commons Specific Plan Project

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	782.00	Space	0.00	318,800.00	0
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	4,957.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.25	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	262.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.86	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.91
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NO_x	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7437	1.6700e-003	0.3952	0.0526	0.4477	0.1637	0.0485	0.2122	0.0000	150.2960	150.2960	0.0039	0.0000	151.1444
2022	1.3593	2.3980	2.6885	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1323	532.1323	0.0866	0.0000	534.2970
2023	0.3692	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	932.8981	932.8981	0.1113	0.0000	935.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3423
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**932.8981**	**932.8981**	**0.1113**	**0.0000**	**935.6806**

2-14 Cont.

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1622	0.7436	1.6700e-003	0.0552	0.0526	0.0877	0.0337	0.0485	0.0722	0.0000	150.2959	150.2959	0.0039	0.0000	151.1442
2022	1.3593	2.9090	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0970	0.0963	0.1061	0.0000	592.1320	592.1320	0.0966	0.0000	594.2956
2023	0.3502	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	852.6977	852.6977	0.1113	0.0000	855.6802
2024	1.3711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3397	0.0765	0.0443	0.1208	0.0000	493.9749	493.9749	0.0547	0.0000	495.3431
Maximum	1.3593	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	852.6977	852.6977	0.1113	0.0000	855.6802

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.6789	0.6789
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6786	1.6786
6	1-1-2023	3-31-2023	0.9521	0.9521
7	4-1-2023	6-30-2023	0.8759	0.8759
8	7-1-2023	9-30-2023	0.7219	0.7219

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9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6806	0.6806
11	4-1-2024	6-30-2024	1.1803	1.1803
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.5788	1.5788

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0277	3,791.432 4

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0277	3,791.432 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

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Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	9	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

2-14 Cont.

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3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1839
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.5900e-003	0.0293	9.0000e-005	3.2200e-003	7.0000e-005	3.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5000e-003**	**0.0000**	**28.3521**

2-14 Cont.

.2 Demolition - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6800e-003	0.0000	6.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6800e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.5000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1580	15.1580	7.0400e-003	0.0000	15.1699
Vendor	8.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	3.9000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.5800e-003	0.0293	8.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.9300e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0219**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0909	0.0000	0.0909	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0909**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0011	2.7600e-003	5.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.5000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0809	0.0000	0.0809	0.0995	0.0000	0.0995	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0995**	**0.0123**	**0.0118**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.0000e-004	0.0000	2.8121
Worker	3.8200e-003	2.9800e-003	0.0521	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0340**	**1.3000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3800e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3460e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0254**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2198	0.1684	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2198**	**0.1684**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3600e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7445
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

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3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-003	0.3694	0.0653	7.3000e-004	0.0104	4.5000e-004	0.0109	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.5500e-003	0.0000	70.8929
Worker	0.0458	0.0329	0.3765	1.1900e-003	0.1264	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.0994	107.0994	2.7100e-003	0.0000	107.1712
Total	0.0536	0.4023	0.4418	1.9200e-003	0.1368	1.4300e-003	0.1402	0.0394	1.3300e-003	0.0407	0.0000	178.8835	178.8835	7.2600e-003	0.0000	178.9639

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9318**	**225.9318**	**0.0541**	**0.0000**	**227.2850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6000e-003	0.2684	0.0663	7.3000e-004	0.0104	4.9000e-004	0.0109	6.3200e-003	4.7000e-004	6.7900e-003	0.0000	70.7041	70.7041	4.3500e-003	0.0000	70.8928
Worker	0.0458	0.0539	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3089**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1482**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5875**	**178.5875**	**7.0600e-003**	**0.0000**	**178.7639**

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3500e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7200e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	7.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

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3.6 Paving - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4158
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	3.6500e-003	7.0000e-005	3.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0986**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0389	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0389**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0986**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0208	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0208**	**0.0000**	**71.8831**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lbs/day										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2500e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	10.6277	10.6277	4.4000e-004	0.0000	10.6387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.5000e-004	5.4900e-003	6.0000e-005	5.5500e-003	3.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.5700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.1000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0319**	**2.9000e-004**	**0.0321**	**0.0100**	**2.7000e-004**	**0.0180**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0152	4.4800e-003	6.0000e-005	1.3900e-003	2.6000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.6000e-004	0.0000	5.1705
Worker	4.8800e-003	5.3200e-003	0.0382	1.3000e-004	0.0145	1.0000e-004	0.0146	3.9500e-003	9.0000e-005	3.9400e-002	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0205**	**0.0426**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.2000e-004**	**0.0000**	**16.8863**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0162	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.9000e-004	0.0000	5.1709
Worker	4.6600e-003	3.2200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.1000e-003**	**0.0195**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.6000e-004**	**0.0000**	**16.8863**

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3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1690
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0183	3.0000e-004	0.0186	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	8.9800e-003	0.0000	75.4125
Vendor	8.4000e-004	0.0230	8.5100e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0897	3.3000e-004	0.0969	2.5000e-004	0.0971	2.7900e-003	2.4000e-004	0.0100	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1549**	**0.0709**	**0.0150**	**0.0859**	**0.0000**	**54.7272**	**54.7272**	**0.0177**	**0.0000**	**55.1697**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.8000e-004	0.0163	3.0000e-004	0.0166	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.0900e-005	0.0000	75.4125
Vendor	8.4000e-004	0.0250	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0497	3.3000e-004	0.0369	2.6000e-004	0.0371	9.7900e-003	2.4000e-004	0.0100	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2917**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	**0.1195**	**1.0933**	**1.2345**	**2.0500e-003**		**0.0532**	**0.0532**		**0.0500**	**0.0500**	**0.0000**	**176.1716**	**176.1716**	**0.0419**	**0.0000**	**177.2193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0824	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.6900e-003	0.0000	107.1718
Worker	0.0040	0.0574	0.0764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	**0.0931**	**0.3722**	**0.7689**	**3.3400e-003**	**0.2769**	**2.1300e-003**	**0.2810**	**0.0747**	**1.9700e-003**	**0.0767**	**0.0000**	**309.2681**	**309.2681**	**0.0107**	**0.0000**	**309.5343**

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3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	**0.1195**	**1.0933**	**1.2345**	**2.0500e-003**		**0.0532**	**0.0532**		**0.0500**	**0.0500**	**0.0000**	**176.1714**	**176.1714**	**0.0419**	**0.0000**	**177.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.6800e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	**0.0931**	**0.3722**	**0.7689**	**3.3400e-003**	**0.2769**	**2.1300e-003**	**0.2810**	**0.0727**	**1.9700e-003**	**0.0767**	**0.0000**	**309.2681**	**309.2681**	**0.0107**	**0.0000**	**309.5343**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8692	1.4600e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	**0.0809**	**0.7394**	**0.8692**	**1.4600e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5170**	**127.5170**	**0.0302**	**0.0000**	**128.2709**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.4000e-004	0.0206	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1782	77.1782	4.1800e-003	0.0000	77.2831
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

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3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0809	0.7394	0.8850	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	**0.0809**	**0.7394**	**0.8850**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5169**	**127.5169**	**0.0302**	**0.0000**	**128.2707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4300e-003	0.2273	0.0650	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2751
Worker	0.0576	0.0378	0.4565	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	7.9000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.9000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.0000e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	7.9000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0189	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1426	4.9000e-004	0.0956	4.6000e-004	0.0570	0.0160	4.3000e-004	0.0164	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1587**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4695	5.4695	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4695**	**5.4695**	**3.1000e-004**	**0.0000**	**5.4972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0169	2.1000e-004	5.4300e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0566	4.0000e-004	0.0570	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2886
Total	**0.0197**	**0.0711**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4290**

2-14 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.94	1,204.49	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,680	1,352,680
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	308.60	171.62	554,221	554,221
Total	2,516.61	3,039.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.80	8.40	6.90	9.50	72.50	18.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0294	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0294	7.1000e-003	800.3011
NaturalGas Mitigated	0.0216	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0216	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0054e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.0248e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	9.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7807
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0054e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.0248e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	9.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7807
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

2-14 Cont.

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.856456e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	82512	21.0301	7.6000e-004	1.9000e-004	21.1055
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.856456e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	82512	21.0301	7.6000e-004	1.9000e-004	21.1055
Total		797.4761	0.0284	7.1000e-003	800.3011

2-14 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

2-14 Cont.

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5108	0.6283	0.0156	121.9697
Unmitigated	101.5108	0.6283	0.0156	121.9697

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560349 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

2-14 Cont.

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560349 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2501	0.0000	94.3242
Unmitigated	38.0730	2.2501	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.86	24.5574	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9682	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5592	0.0920	0.0000	3.8573
Total		**38.0730**	**2.2501**	**0.0000**	**94.3242**

2-14 Cont.

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8418
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.87	1.5989	0.0920	0.0000	3.9573
Total		38.0730	2.2501	0.0000	94.3742

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	216,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	9,952.00	0
Apartments Mid Rise	263.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	19.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

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tblVehicleTrips	SU_TR	5.98	5.04
tblVehicleTrips	SU_TR	181.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	26.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0877	19.5366	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5366**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0877	19.5366	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5366**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	12.5742	22.8867	67.6728	0.2109	15.5725	0.6456	16.2161	4.1658	0.6367	4.8025	0.0000	24,554.21 61	24,554.21 61	0.9549	0.1159	24,612.63 09

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	12.5742	22.8867	67.6728	0.2109	15.5725	0.6456	16.2161	4.1658	0.6367	4.8025	0.0000	24,554.21 61	24,554.21 61	0.9549	0.1159	24,612.63 09

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

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Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

2-14 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1403	4.6911	1.0364	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,503.775 6	1,503.775 6	0.1070		1,506.451 4
Vendor	0.0557	1.9875	0.4527	5.1000e-003	0.1289	3.8400e-003	0.1327	0.0368	3.6700e-003	0.0405		544.9769	544.9769	0.0309		545.7508
Worker	0.3377	0.2190	3.0138	8.8900e-003	0.8842	5.5800e-003	0.8898	0.2372	5.0800e-003	0.2422		885.3227	885.3227	0.0238		885.9182
Total	0.5336	7.0976	4.5018	0.0288	1.3600	0.0256	1.3856	0.3666	0.0242	0.3908		3,034.576 1	3,034.576 1	0.1638		3,038.678 8

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0386		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0386	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

2-14 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1403	4.8911	1.0354	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.775 5	1,603.775 5	0.1070		1,606.451 4
Vendor	0.0667	1.9075	0.4627	5.1000e-003	0.1260	3.8400e-003	0.1318	0.0368	3.6700e-003	0.0406		544.6769	544.6769	0.0330		545.7009
Worker	0.3377	0.2190	3.0136	6.8900e-003	0.8042	6.5800e-003	0.8008	0.2372	6.0800e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.5336	7.0176	4.5038	0.0288	1.2680	0.0256	1.2856	0.3666	0.0242	0.3908		3,034.576 1	3,034.576 1	0.1638		3,038.670 6

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0184	1.8400e-003	0.0203		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0738
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1667	5.6300e-003	0.1723		826.1401	826.1401	0.0314		826.9244

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1703		826.1401	826.1401	0.0314		826.9244

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 5

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2190	3.0138	8.6800e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0236		886.5192
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9582**	**8.5000e-003**	**0.9667**	**0.2556**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.369 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0270	0.9538	0.2263	2.5500e-003	0.0548	1.9200e-003	0.0568	0.0184	1.8400e-003	0.0203		272.4385	272.4385	0.0105		272.6505
Worker	0.3377	0.2190	3.0136	8.8900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0298		886.5182
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9502**	**8.5000e-003**	**0.9577**	**0.2556**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.360 7**

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9063	0.2139	2.5300e-003	0.0640	1.8600e-003	0.0657	0.0164	1.7800e-003	0.0182		270.0591	270.0591	0.0159		270.4568
Worker	0.3168	0.1978	2.7760	8.6700e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3429	1.1037	3.0007	0.0111	0.9482	8.2400e-003	0.9563	0.2536	7.4600e-003	0.2611		1,124.238 3	1,124.238 3	0.0374		1,125.173 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0251	0.9053	0.2139	2.5300e-003	0.0640	1.6800e-003	0.0657	0.0164	1.5500e-003	0.0180		270.0891	270.0891	0.0159		270.4858
Worker	0.3178	0.1979	2.7868	8.5700e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		864.1791	864.1791	0.0215		864.7174
Total	0.3429	1.1032	3.0007	0.0111	0.9582	0.0080	0.9663	0.2536	7.4400e-003	0.2611		1,134,268.3	1,134,268.3	0.0374		1,135,173.2

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554,333.6	2,554,333.6	0.6120		2,569,632.2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554,333.6	2,554,333.6	0.6120		2,569,632.2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.8900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.078 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0783	2.7160	0.6417	7.5800e-003	0.1920	4.9800e-003	0.1970	0.0563	4.7700e-003	0.0601		810.1774	810.1774	0.0479		811.3673
Worker	0.4751	0.2988	4.1802	0.0125	1.3413	9.6900e-003	1.3509	0.3557	8.9300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	0.5534	3.0120	4.8219	0.0201	1.5333	0.0146	1.5479	0.4119	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9853	0.2139	2.5300e-003	0.0640	1.6800e-003	0.0657	0.0164	1.5500e-003	0.0200		270.8591	270.8591	0.0159		271.4566
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	0.1845	1.0843	1.6073	6.8200e-003	0.5111	4.8800e-003	0.5160	0.1370	4.5300e-003	0.1415		697.1487	697.1487	0.0266		697.8153

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0261	0.9053	0.2139	2.5300e-003	0.0648	1.8600e-003	0.0667	0.0184	1.5900e-003	0.0200		270.0691	270.0691	0.0159		270.4660
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**5.0600e-003**	**0.5169**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1587**	**697.1587**	**0.0266**		**698.1145**

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4089	1.9136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	**49.0421**	**1.4089**	**1.9136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0103**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.9107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	5.3900e-003	0.8896	0.2372	4.9600e-003	0.2422		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.3200e-003**	**1.0319**	**0.2740**	**8.7400e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0522	1.6187	0.4278	6.0600e-003	0.1288	3.3300e-003	0.1321	0.0368	3.1800e-003	0.0400		540.1183	540.1183	0.0317		540.9115
Worker	0.3168	0.1978	2.7866	8.5700e-003	0.6942	5.2600e-003	0.6995	0.2372	4.8600e-003	0.2420		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0065**	**3.2146**	**0.0136**	**1.0229**	**8.5900e-003**	**1.0319**	**0.2740**	**8.0400e-003**	**0.2821**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**2.0836**	**0.9975**	**3.0812**	**0.3170**	**0.9280**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0488		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 3	1,047.470 3	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4741**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1266**		**2,839.596 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0369		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4844**	**19.6434**	**0.0369**	**2.0836**	**0.9975**	**3.0812**	**0.3170**	**0.9280**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0441	1.4619	0.4663	7.0100e-003	0.1689	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0464		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2589	3.9000e-003	0.2591	0.0737	3.9400e-003	0.0776		1,047.470 9	1,047.470 9	0.0553		1,048.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4541**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1260**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2143	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2143**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3699	0.3954	4.9000e-003	0.1299	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4693	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0351		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0351	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0389	1.3683	0.3864	4.4000e-003	0.1260	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2595	3.9604	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	0.4857	1.6278	4.3468	0.0173	1.4673	0.0169	1.4802	0.3926	0.0161	0.4026		1,757.251 5	1,757.251 6	0.0568		1,758.671 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.9291		2,895.918 7

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2306	7.6512	2.4404	0.0357	0.0841	0.0142	0.0983	0.0223	0.0136	0.0359		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0389	1.3695	0.3754	4.9000e-003	0.0200	1.5400e-003	0.0215	0.0055	1.4700e-003	0.0070		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3680	5.1471	0.0165	1.7684	0.0125	1.7809	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0388		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9729**	**0.0581**	**1.8805**	**0.0282**	**2.0207**	**0.7534**	**0.0265**	**0.7799**		**6,151.470 9**	**6,151.470 9**	**0.3196**		**6,159.459 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2306	7.6512	2.4404	0.0367	0.8841	0.0142	0.8983	0.2429	0.0136	0.2565		3,983.047 2	3,983.047 2	0.2630		3,989.373 3
Vendor	0.0389	1.3689	0.3654	4.8000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3580	5.1471	0.0165	1.7884	0.0125	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9529**	**0.0581**	**2.8005**	**0.0282**	**2.8287**	**0.7539**	**0.0265**	**0.7799**		**6,151.470 8**	**6,151.470 8**	**0.3196**		**6,159.459 6**

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,565.209 9	2,565.209 9	0.6079		2,570.406 1
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,565.209 9**	**2,565.209 9**	**0.6079**		**2,570.406 1**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1166	4.1088	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2337	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 6
Worker	1.1169	0.6713	9.6509	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2337	4.7779	10.8092	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1566		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0864	1.1230	0.0146	0.3940	4.5700e-003	0.3986	0.1106	4.3700e-003	0.1149		1,566.509 7	1,566.509 7	0.0917		1,567.552 8
Worker	1.0570	0.8119	9.0161	0.0299	3.3533	0.0230	3.3763	0.8993	0.0212	0.9206		2,982.626 8	2,982.626 8	0.0899		2,984.295 7
Total	1.1714	4.8982	10.1392	0.0445	3.7473	0.0276	3.7749	0.9099	0.0256	1.0354		4,549.136 5	4,549.136 5	0.1815		4,551.848 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4439	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4439	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1144	4.0954	1.1230	0.0146	0.3848	4.5700e-003	0.3893	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.6119	9.0151	0.0299	3.3639	0.0230	3.3763	0.8993	0.0212	0.9106		2,982.626 8	2,982.626 8	0.0988		2,984.295 7
Total	**1.1714**	**4.7082**	**10.1382**	**0.0445**	**3.7373**	**0.0276**	**3.7649**	**0.9999**	**0.0256**	**1.0254**		**4,548.136 5**	**4,548.136 5**	**0.1805**		**4,551.848 3**

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3655	0.3743	4.8700e-003	0.1260	1.5300e-003	0.1295	0.0359	1.4800e-003	0.0383		521.8365	521.8365	0.0272		522.5175
Worker	0.2819	0.1531	2.4040	7.9800e-003	0.8942	6.1800e-003	0.9004	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5286**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.203 7**	**1,317.203 7**	**0.0450**		**1,318.329 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0381	1.3665	0.3743	4.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4800e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.6456	0.4694	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2004	7.9688	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1800	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.6456	0.4694	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2004	7.9688	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01
Unmitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	96	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

2-14 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

2-14 Cont.

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	623A03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4853
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	280.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2800e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0185	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

6.0 Area Detail

6.1 Mitigation Measures Area

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Health	0.4601	3.3314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6695	0.2805	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**8.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6768					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6685	0.2505	21.7005	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	219,900.00	0
Other Asphalt Surfaces	12.89	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,952.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

Construction Off-road Equipment Mitigation - See SWAPE comment regarding construction-related mitigation measures.

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblConstructionPhase	NumDays	230.00	105.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	28.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,962.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	180.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	299.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.06	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	8.66	5.18
tblVehicleTrips	WD_TR	127.16	178.80
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0656	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0696	3.9608	0.6411	4.5196	1.0502	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	52.5051	41.5977	26.2624	0.0859	19.5356	2.0506	20.8126	10.3233	1.8866	11.9839	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9

2-14 Cont.

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0656	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0696	3.9608	0.6411	4.5196	1.0502	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	52.5051	41.5977	26.2624	0.0859	19.5356	2.0506	20.8126	10.3233	1.8866	11.9839	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1519	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.5499	4.1919	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0350	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	3/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	2/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

2-14 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

2-14 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	8	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

2-14 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	Tons/yr										MT/yr					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1280	3.9800e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1003	529.1004	0.0364		529.9664
Worker	0.3680	0.2398	2.7688	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5710	7.0905	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931.745 6	2,931.745 6	0.1691		2,935.973 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

2-14 Cont.

3.2 Demolition - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9015	0.5066	4.9600e-003	0.1230	3.5800e-003	0.1320	0.0339	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2399	2.7083	8.3100e-003	0.8842	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		826.8343	826.8343	0.0222		829.0894
Total	**0.5711**	**7.0905**	**4.3263**	**0.0278**	**1.3680**	**0.0259**	**1.3860**	**0.3666**	**0.0246**	**0.3912**		**2,931.745 6**	**2,931.745 6**	**0.1691**		**2,935.973 6**

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.457 3**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9597	0.2553	2.4800e-003	0.0640	1.3900e-003	0.0650	0.0164	1.3000e-003	0.0209		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.8927	5.2000e-003	0.5639	4.1100e-003	0.5630	0.1492	3.7900e-003	0.1529		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1096	1.9480	7.6880e-003	0.6279	5.4990e-003	0.6280	0.1657	5.0890e-003	0.1737		782.3841	782.3841	0.0316		783.1736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.6882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.6882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9597	0.2533	2.4000e-003	0.0548	1.9000e-003	0.0568	0.0184	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.9339	517.9339	0.0139		518.1809
Total	**0.2599**	**1.1096**	**1.9460**	**7.6000e-003**	**0.6229**	**6.0000e-003**	**0.6290**	**0.1667**	**5.6900e-003**	**0.1723**		**782.3841**	**782.3841**	**0.0316**		**783.1736**

3.4 Grading - Phase 1 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										tons/yr					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.6575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.6575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	**0.3982**	**1.1985**	**2.9616**	**0.0108**	**0.9582**	**8.5600e-003**	**0.9668**	**0.2536**	**7.9800e-003**	**0.2635**		**1,093.084 5**	**1,093.084 5**	**0.0399**		**1,094.082 1**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9268		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9268**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0293	0.9507	0.2533	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.8000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7065	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.3982	1.1905	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2536	7.8600e-003	0.2615		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

3.4 Grading - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9269		2,895.268 4

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0225	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4988	8.0100e-003	0.8942	6.8900e-003	0.9008	0.2372	5.8900e-003	0.2430		798.8292	798.8292	0.0201		799.3306
Total	**0.3745**	**1.1182**	**2.7393**	**0.0105**	**0.9582**	**8.6100e-003**	**0.9663**	**0.2556**	**7.5300e-003**	**0.2631**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 4**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.0551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	**1.9486**	**20.0551**	**15.2737**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9269**		**2,895.260 4**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											tons/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0075	0.8017	0.2395	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0181		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4596	6.0100e-003	0.8042	5.3900e-003	0.8096	0.2372	5.2500e-003	0.2430		799.8292	799.8292	0.0201		799.3305
Total	**0.3745**	**1.1182**	**2.7393**	**0.0105**	**0.8682**	**0.1100e-003**	**0.8753**	**0.2536**	**7.5300e-003**	**0.2631**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 4**

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											tons/yr				
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.333 6**	**2,554.333 6**	**0.6120**		**2,569.632 2**

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0024	2.7062	0.7105	7.3600e-003	0.1900	5.1600e-003	0.1972	0.0550	4.9300e-003	0.0602		786.5027	786.5027	0.0511		787.6798
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	9.5500e-003	1.3509	0.3557	8.6300e-003	0.3645		1,198.243 8	1,198.243 8	0.0301		1,198.995 8
Total	0.5229	3.0309	4.4602	0.0194	1.5313	0.0148	1.5481	0.4110	0.0139	0.4248		1,984.826 5	1,984.826 5	0.0812		1,986.855 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0259		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0259		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0824	2.7052	0.7195	7.3600e-003	0.1920	5.1500e-003	0.1972	0.0553	4.9300e-003	0.0602		786.5927	786.5927	0.0511		787.8698
Worker	0.5205	0.3249	3.7487	0.0120	1.3413	9.5900e-003	1.3509	0.3567	8.8300e-003	0.3646		1,199.243 0	1,199.243 0	0.0301		1,199.995 0
Total	0.6029	3.0299	4.4682	0.0194	1.5333	0.0148	1.5481	0.4119	0.0138	0.4249		1,984.826 5	1,984.826 5	0.0812		1,986.865 5

3.6 Paving - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2395	2.4500e-003	0.0548	1.7200e-003	0.0567	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6189
Worker	0.1735	0.1083	1.2409	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6853
Total	**0.2010**	**1.0100**	**1.4094**	**6.4600e-003**	**0.5111**	**4.9200e-003**	**0.5160**	**0.1370**	**4.5800e-003**	**0.1416**		**661.6088**	**661.6088**	**0.0271**		**662.2052**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

2-14 Cont.

3.6 Paving - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0164	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1795	0.1068	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4501	0.1186	2.9400e-003	0.1215		399.4145	399.4145	0.0100		399.6653
Total	0.2070	1.0100	1.4884	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	49.0421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8034	0.4790	4.9100e-003	0.1299	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3986	524.3986	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		799.8292	799.8292	0.0201		799.3305
Total	0.4019	2.0219	2.9700	0.0129	1.0222	9.8300e-003	1.0321	0.2740	9.1800e-003	0.2832		1,323.217 7	1,323.217 7	0.0541		1,324.570 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	49.0421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0550	1.8034	0.4790	4.9100e-003	0.1299	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3986	524.3986	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3900e-003	0.8896	0.2372	5.0000e-003	0.2423		798.8292	798.8292	0.0201		799.3305
Total	0.4019	2.0219	2.9698	0.0129	1.0222	7.8300e-003	1.0321	0.2740	7.2900e-003	0.2824		1,323.217 7	1,323.217 7	0.0541		1,324.570 4

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0386		0.9975	0.9975		0.9200	0.9200		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0386	2.0936	0.9975	3.0912	0.3170	0.9200	1.2450		3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0494	1.4687	0.4506	6.8000e-003	0.1689	2.7300e-003	0.1717	0.0463	2.6800e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7202	0.8471	9.5100e-003	0.2560	3.2300e-003	0.2592	0.0737	3.0900e-003	0.0768		1,017.446 6	1,017.446 6	0.0580		1,018.920 9
Worker	0.4091	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8640
Total	0.5365	4.4337	4.2176	0.0260	1.5427	0.0138	1.5565	0.4164	0.0129	0.4293		2,725.643 2	2,725.643 2	0.1306		2,728.932 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6438	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4044	19.6438	0.0388	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	1.4687	0.4505	6.6800e-003	0.1589	2.7800e-003	0.1717	0.0463	2.6600e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0920	2.7262	0.8471	9.5100e-003	0.2590	3.2300e-003	0.2622	0.0737	3.0900e-003	0.0768		1,017.446 8	1,017.446 8	0.0599		1,018.940 9
Worker	0.4091	0.2448	2.8709	9.6400e-003	1.1179	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5465**	**4.4397**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4164**	**0.0129**	**0.4293**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.952 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3681	0.4795	4.7600e-003	0.1260	1.5100e-003	0.1275	0.0359	1.5400e-003	0.0374		506.7233	506.7233	0.0295		509.4604
Worker	0.4808	0.2938	3.4559	0.0116	1.3413	9.3400e-003	1.3507	0.3567	8.6000e-003	0.3653		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	0.5319	1.6538	3.8795	0.0163	1.4693	0.0110	1.4803	0.3926	0.0101	0.4027		1,662.279 0	1,662.279 0	0.0566		1,663.693 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.8995	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.8995	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3801	0.4285	3.7600e-003	0.1269	1.6100e-003	0.1286	0.0389	1.5400e-003	0.0404		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2936	3.4569	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.955 7	1,153.955 7	0.0271		1,154.633 2
Total	0.5319	1.6738	3.8795	0.0153	1.4683	0.0110	1.4793	0.3926	0.0101	0.4027		1,662.679 0	1,662.679 0	0.0566		1,663.693 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.0291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.0291		2,895.918 2

2-14 Cont.

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2374	7.6871	2.5078	0.0360	0.0841	0.0146	0.0986	0.0233	0.0139	0.0372		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1200	1.5100e-003	0.1295	0.0309	1.5400e-003	0.0324		508.7233	508.7233	0.0295		509.4604
Worker	0.8545	0.3917	4.6079	0.0154	1.7584	0.0125	1.8028	0.4743	0.0115	0.4859		1,538.074 3	1,539.074 3	0.0361		1,538.977 6
Total	**0.9329**	**9.4389**	**7.5392**	**0.0562**	**2.0885**	**0.0286**	**2.0791**	**0.7534**	**0.0269**	**0.7804**		**5,956.065 8**	**5,956.065 8**	**0.3274**		**5,964.249 7**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.0291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.0291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3374	7.6871	2.8678	0.0350	0.8941	0.0146	0.9088	0.2423	0.0139	0.2562		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4236	4.7600e-003	0.1280	1.5100e-003	0.1295	0.0369	1.5400e-003	0.0384		509.7233	509.7233	0.0285		509.4604
Worker	0.6545	0.3317	4.8079	0.0164	1.7984	0.0125	1.8009	0.4743	0.0115	0.4858		1,536.074 3	1,536.074 3	0.0361		1,538.977 6
Total	1.0329	9.4789	7.5992	0.0662	2.8205	0.0286	2.8391	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0800	1.3705	0.0147	0.3640	4.6400e-003	0.3686	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0096		1,526.409 3
Worker	1.2272	0.7344	8.6396	0.0269	3.3533	0.0234	3.3767	0.8693	0.0215	0.8908		2,883.889 3	2,883.889 3	0.0679		2,885.583 0
Total	1.3502	4.8146	9.9105	0.0432	3.7173	0.0282	3.7455	0.9799	0.0261	1.0060		4,410.059 2	4,410.059 2	0.1562		4,413.964 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1231	4.0803	1.2705	0.0143	0.3946	4.8400e-003	0.3995	0.1105	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0885		1,528.381 1
Worker	1.2272	0.7944	8.6998	0.0289	3.3533	0.0294	3.3787	0.8993	0.0215	0.9208		2,883.889 3	2,883.889 3	0.0579		2,885.333 0
Total	1.3502	4.8746	9.9185	0.0432	3.7479	0.0342	3.7782	0.9098	0.0261	1.0360		4,410.059 2	4,410.059 2	0.1463		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1284	4.0714	1.2342	0.0142	0.3940	4.7700e-003	0.3988	0.1106	1.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0970		1,523.154 1
Worker	1.1849	0.8650	8.0553	0.0280	3.3533	0.0238	3.3763	0.8893	0.0212	0.9105		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0422	3.7473	0.0278	3.7751	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1590		4,313.572 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1204	4.0714	1.2342	0.0142	0.3840	4.7700e-003	0.3888	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0870		1,523.154 1
Worker	1.1849	0.6890	8.0583	0.0280	2.3533	0.0230	2.3763	0.6895	0.0212	0.7106		2,788.867 8	2,788.867 8	0.0920		2,790.418 3
Total	**1.2053**	**4.7603**	**9.2925**	**0.0422**	**2.7373**	**0.0278**	**2.7651**	**0.9999**	**0.0258**	**1.0256**		**4,309.846 8**	**4,309.846 8**	**0.1790**		**4,313.577 4**

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	4.7400e-003	0.1200	1.5800e-003	0.1295	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0280		507.7180
Worker	0.3108	0.1784	2.1491	7.4600e-003	0.8842	6.1500e-003	0.9004	0.2372	5.6600e-003	0.2429		743.6880	743.6880	0.0165		744.1115
Total	**0.3508**	**1.5355**	**2.5605**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.681 1**	**1,250.681 1**	**0.0445**		**1,251.829 6**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6256	0.0226		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6256**	**0.0226**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

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3.12 Paving - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0401	1.3571	0.4114	8.7400e-003	0.1260	1.5900e-003	0.1276	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0250		507.7180
Worker	0.3106	0.1784	2.1481	7.4600e-003	0.8942	6.1800e-003	0.9004	0.2372	5.6800e-003	0.2428		743.6980	743.6980	0.0195		744.1135
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.691 1**	**1,250.691 1**	**0.0455**		**1,251.829 6**

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.0101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.0052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.0052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7865	41.3513	0.1665	15.5725	0.1253	15.6978	4.1648	0.1163	4.2811		17,222.03 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7865	41.3513	0.1665	15.5726	0.1253	15.6979	4.1650	0.1163	4.2813		17,222.03 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,736	6,508,736

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	96	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0890	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0890	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day											lb/day				
Apartments Mid Rise	5234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4863
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	3807.76	0.0305	0.2753	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7049	4.7049	9.0000e-005	9.0000e-005	4.7339
Total		0.1195	1.0890	0.5574	6.5100e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

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Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.623 5	5,018.623 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1500e-003		0.1205	0.1205		0.1205	0.1205		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,019.823 5	5,019.823 5	0.0962	0.0920	5,049.647 9
Landscaping	0.6505	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0078		40.1950
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,059.071 6	5,059.071 6	0.1041	0.0920	5,089.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

2-14 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

2-14 Cont.

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

```
Anemometer Height:   10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type:    Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON



AERSCREEN output file:

2021.04.05_PacificCoastCommons_Operation.out



*** AERSCREEN Run is Ready to Begin



No terrain used, AERMAP will not be run

**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

2-14 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

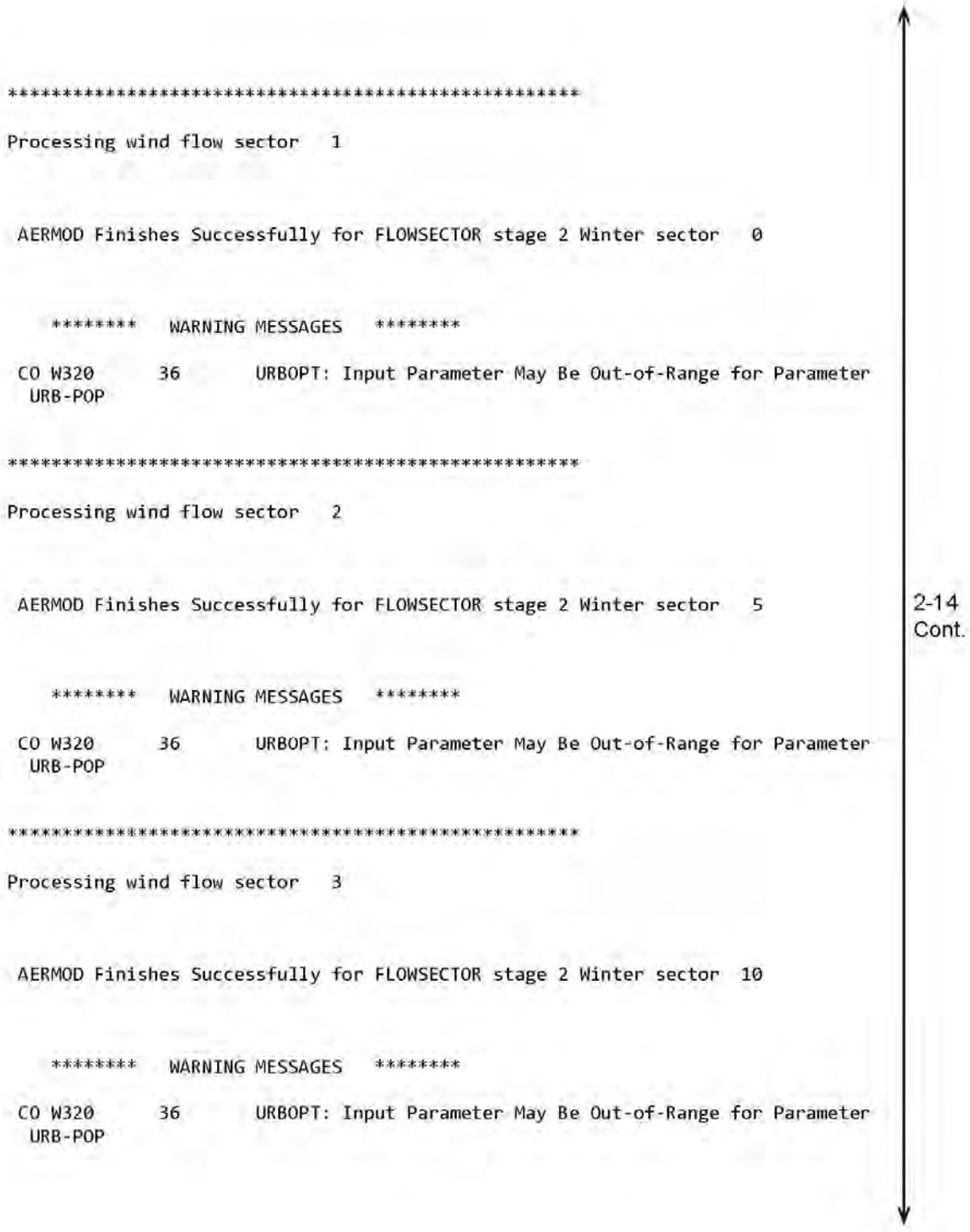
FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD

 Processing Winter

Processing surface roughness sector  1
```

2-14 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

2-14 Cont.

```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

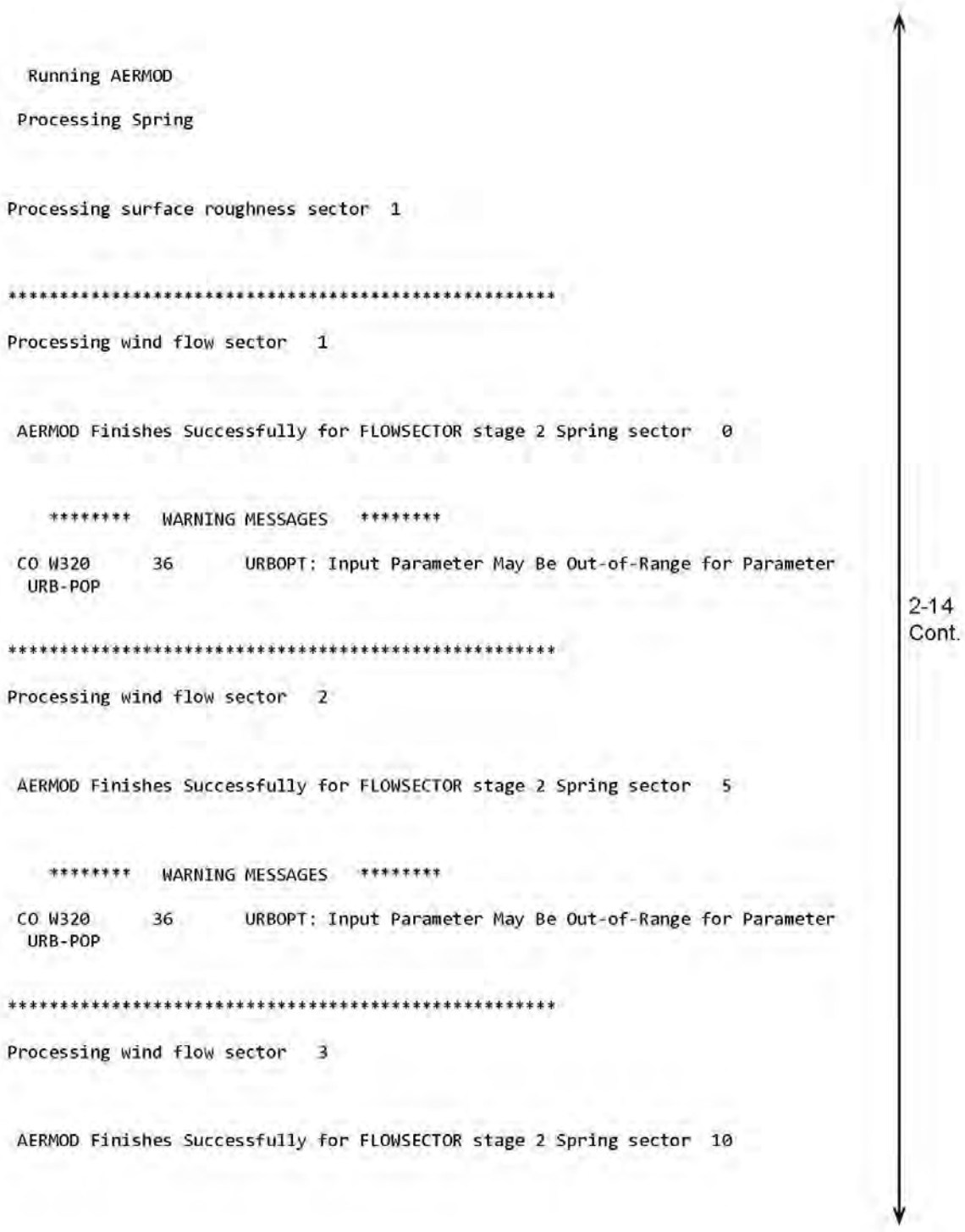
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
**************************************************
```

2-14 Cont.



```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


**********************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**********************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

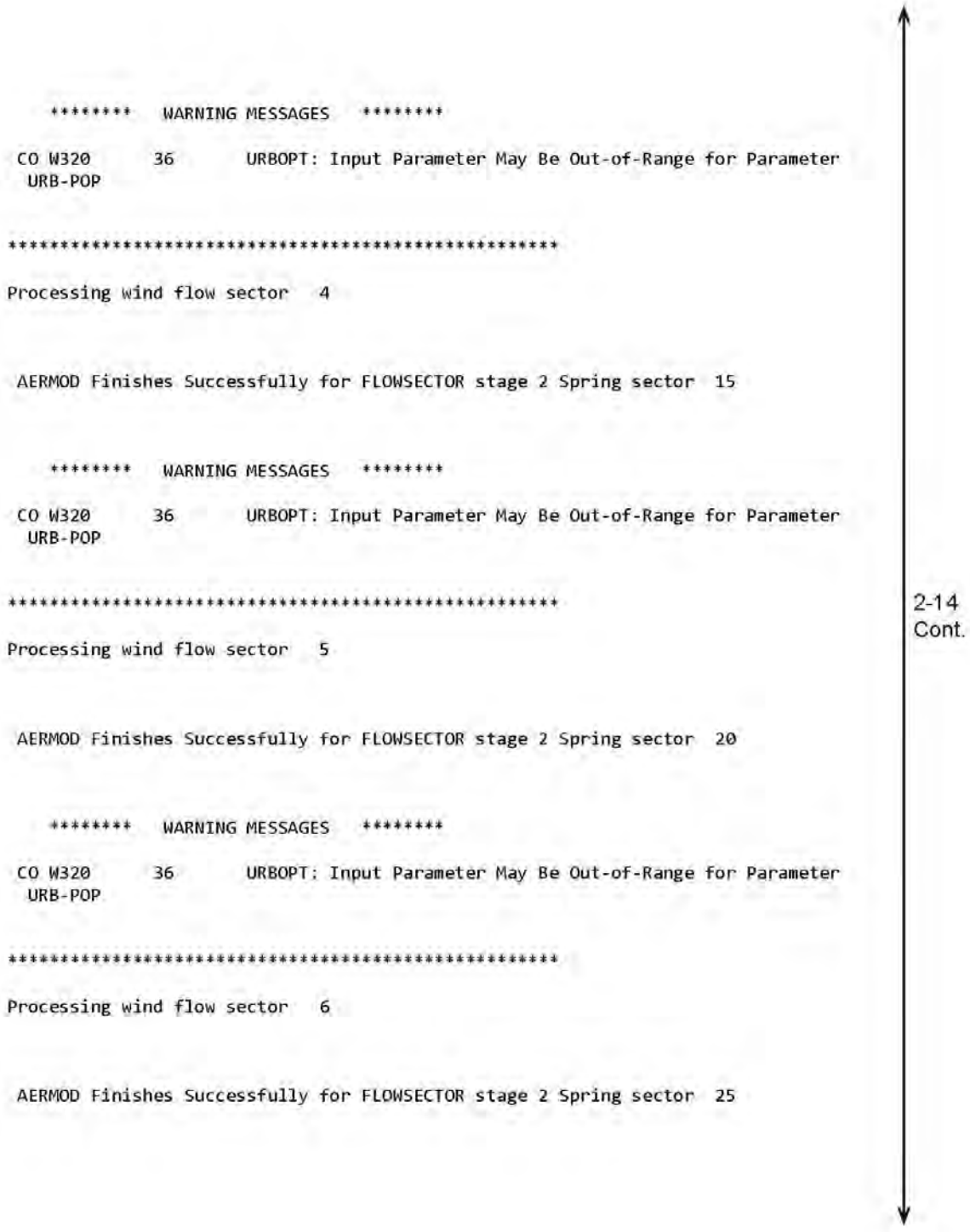
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**********************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

***************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

***************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

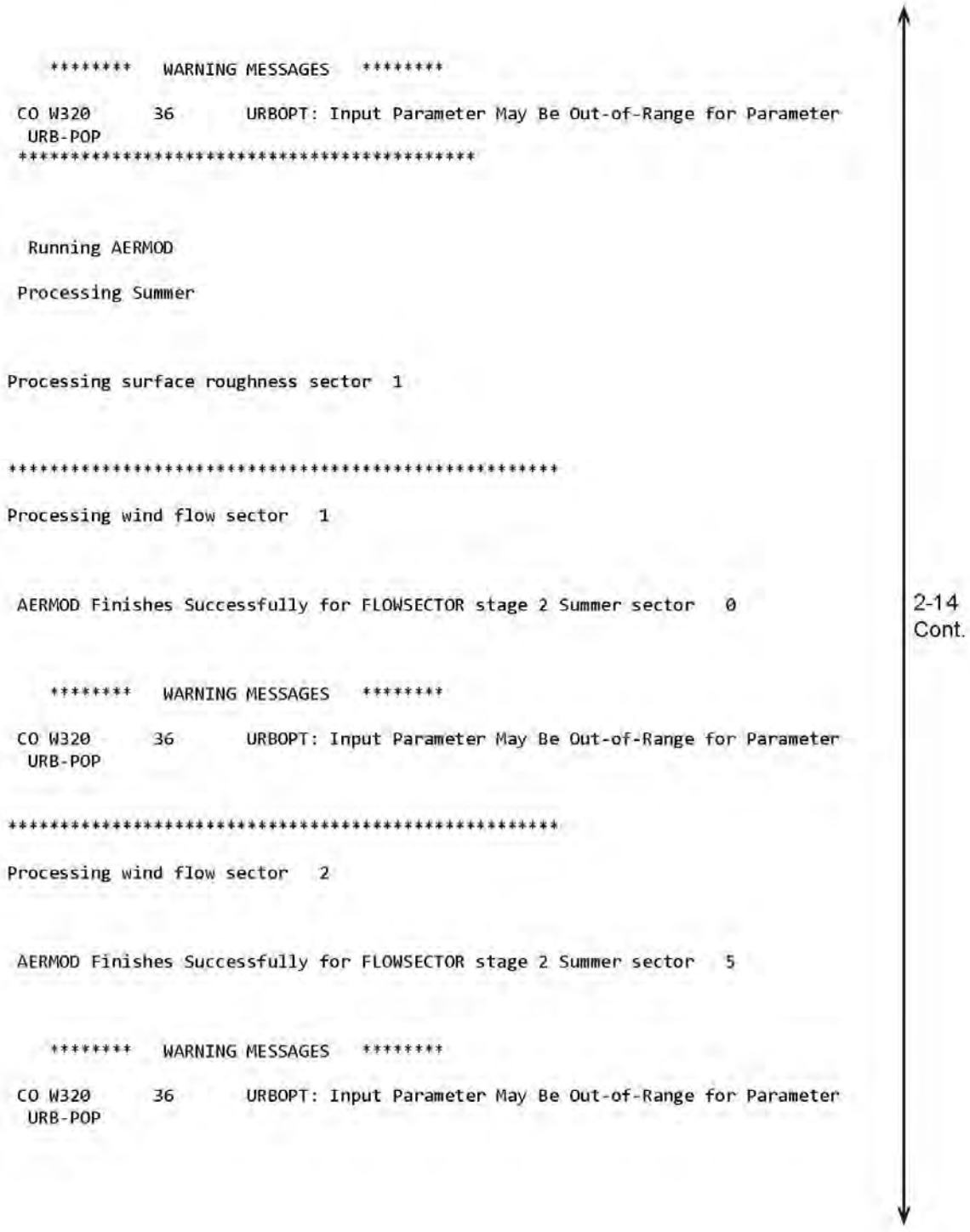
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

***************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

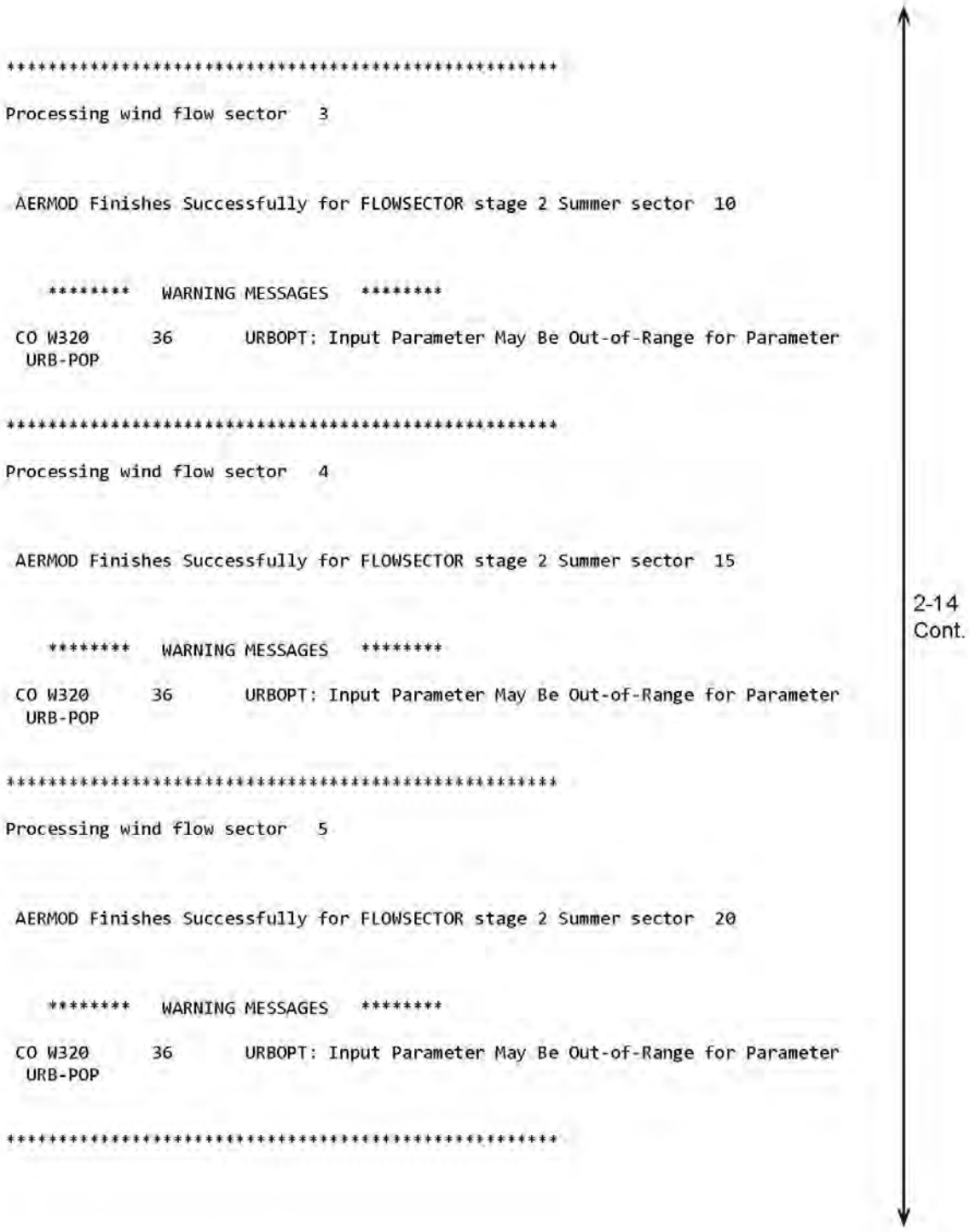
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

2-14 Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

2-14
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

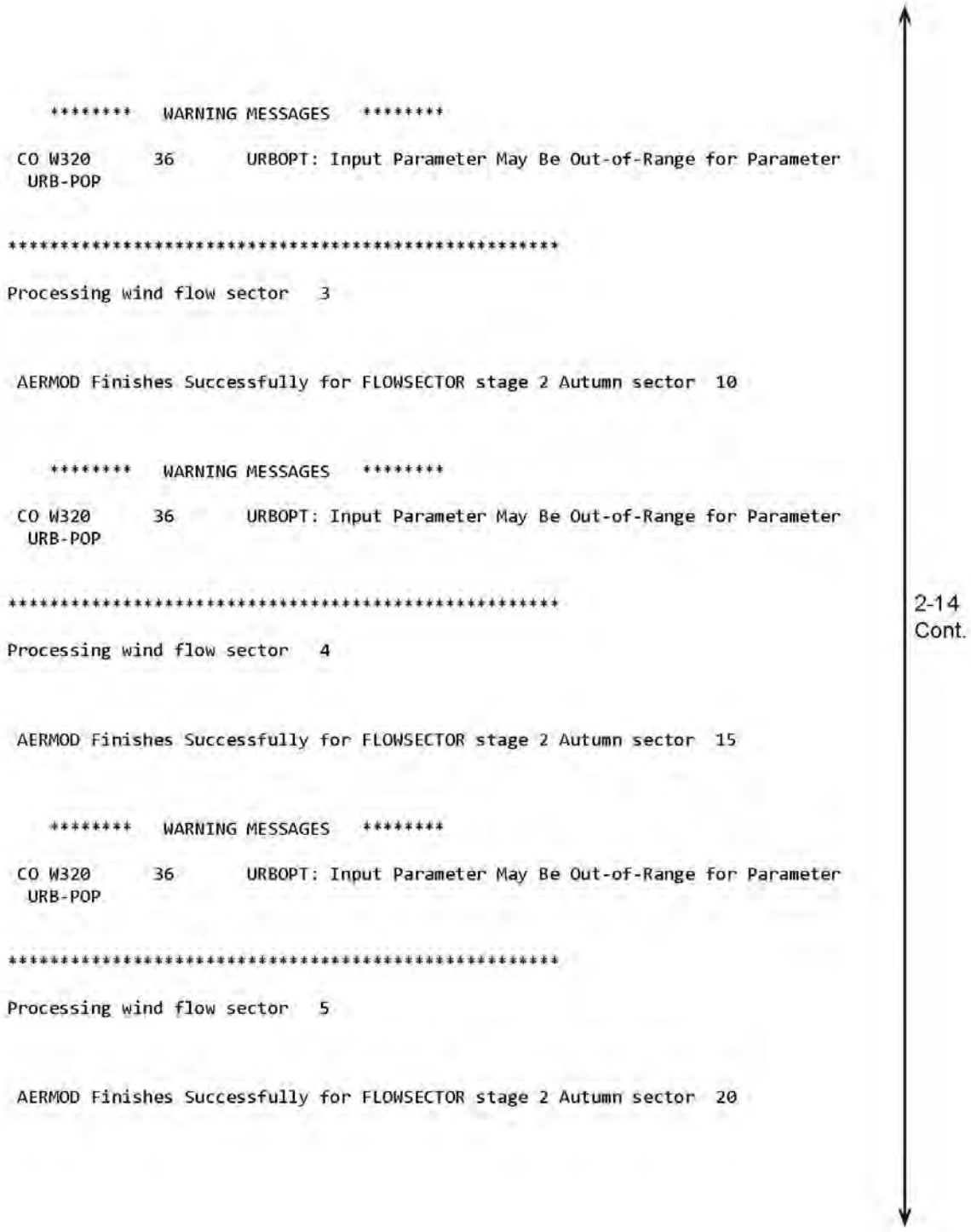
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

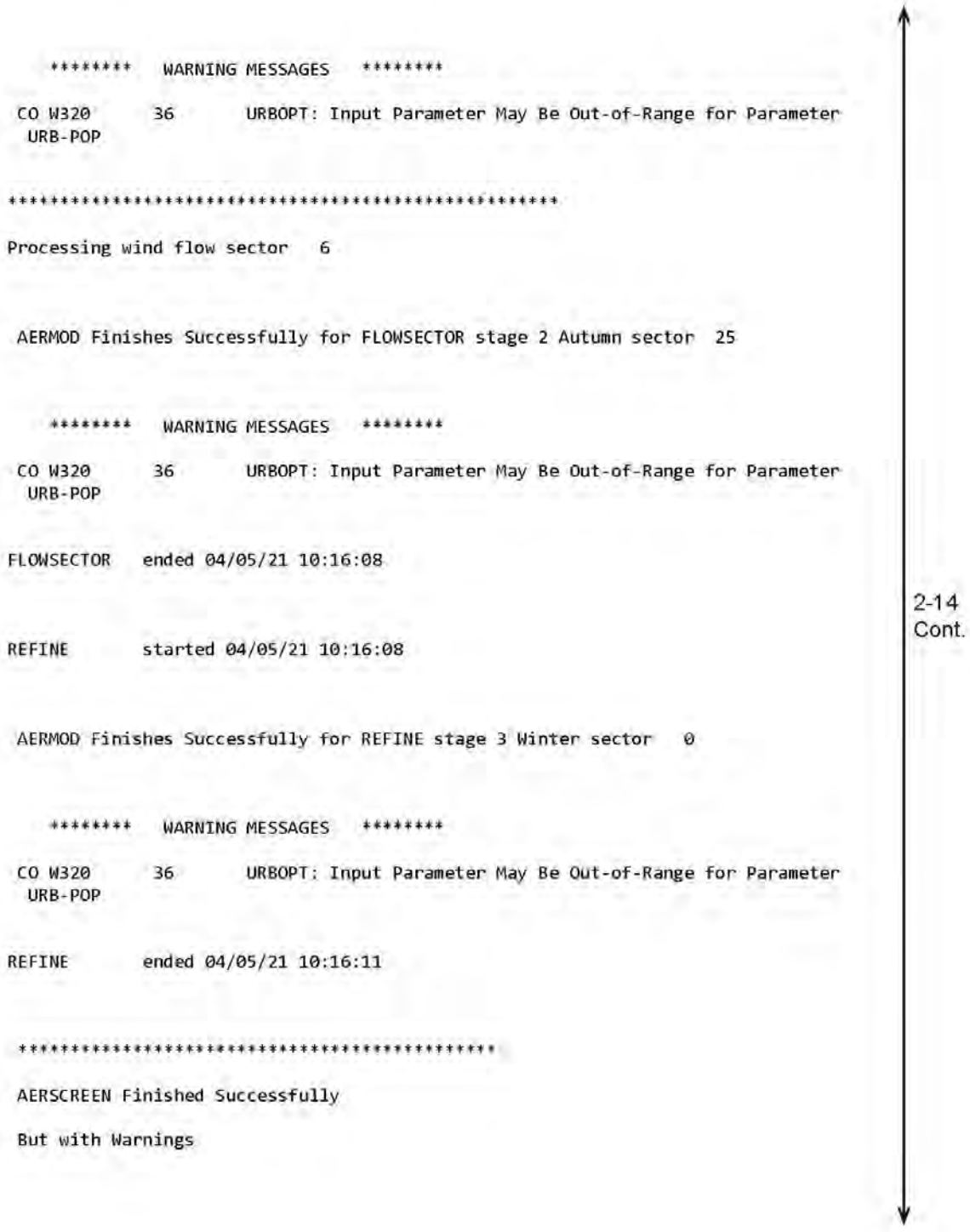
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**********************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

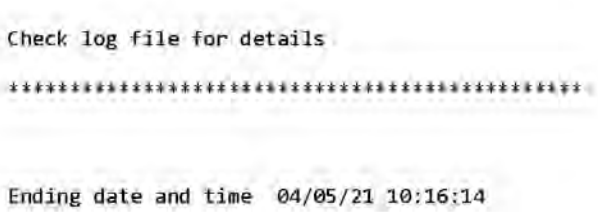
REFINE       ended 04/05/21 10:16:11


 ***********************************************

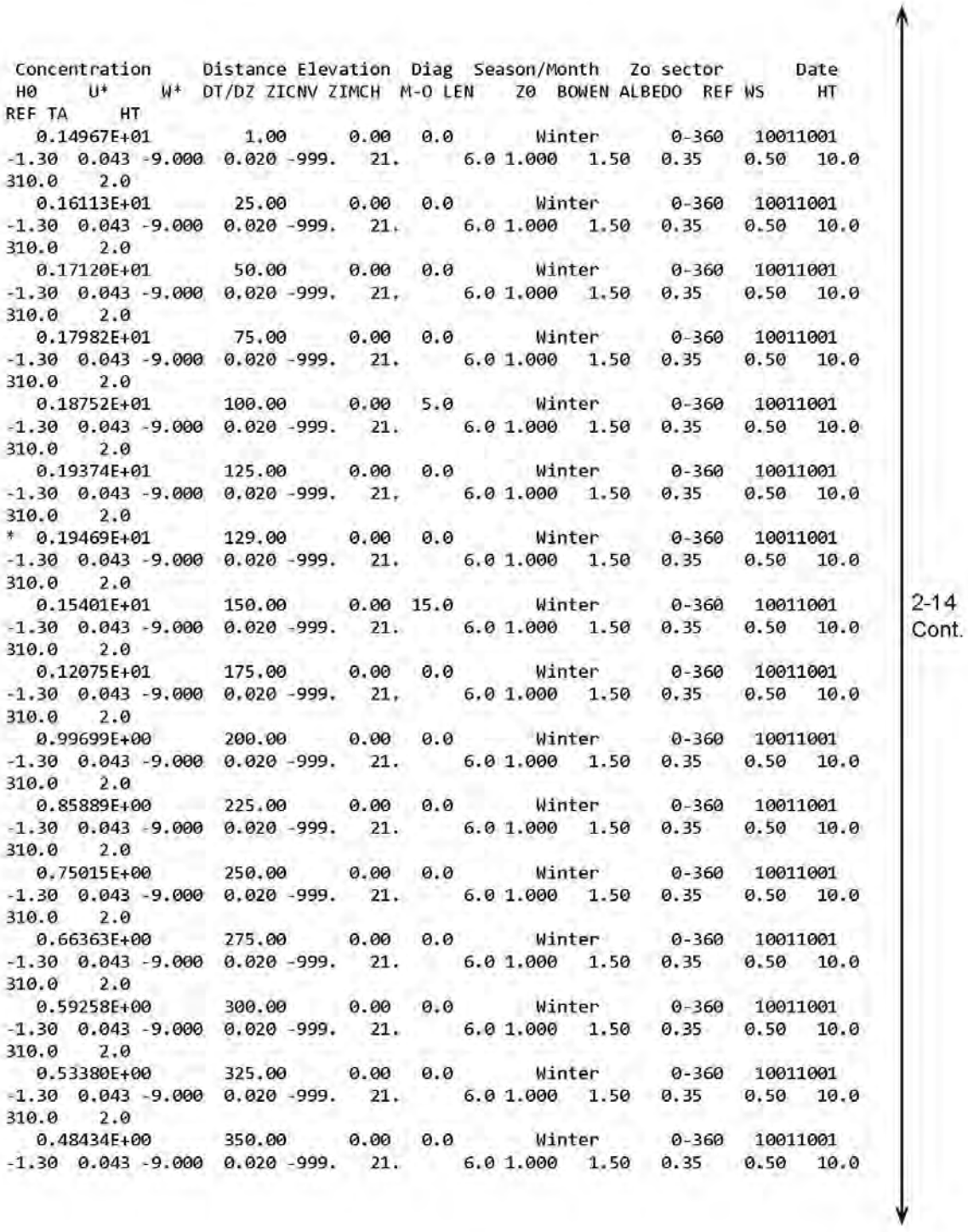
 AERSCREEN Finished Successfully

 But with Warnings
```

2-14 Cont.

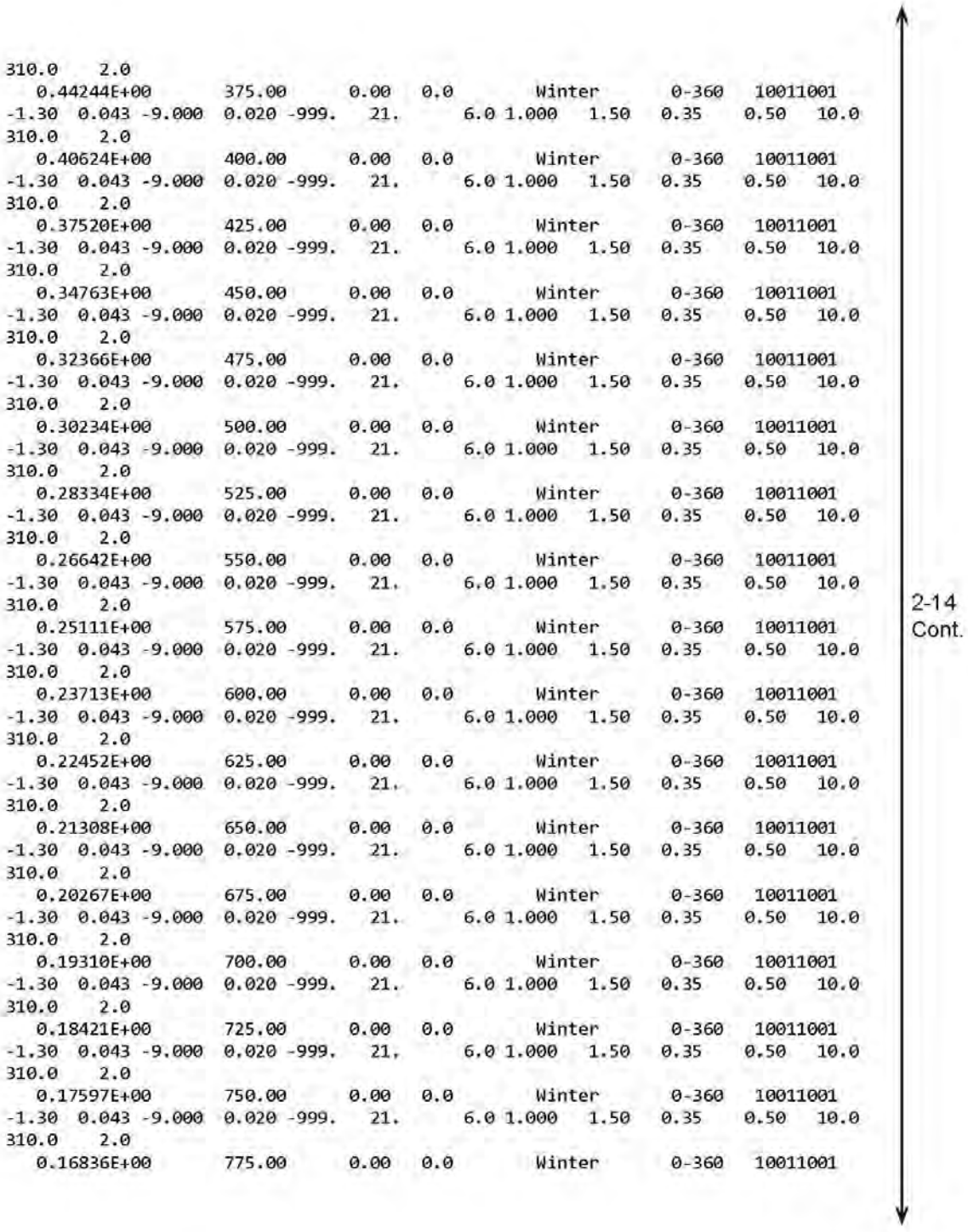

Check log file for details
****
Ending date and time 04/05/21 10:16:14

2-14
Cont.



```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.

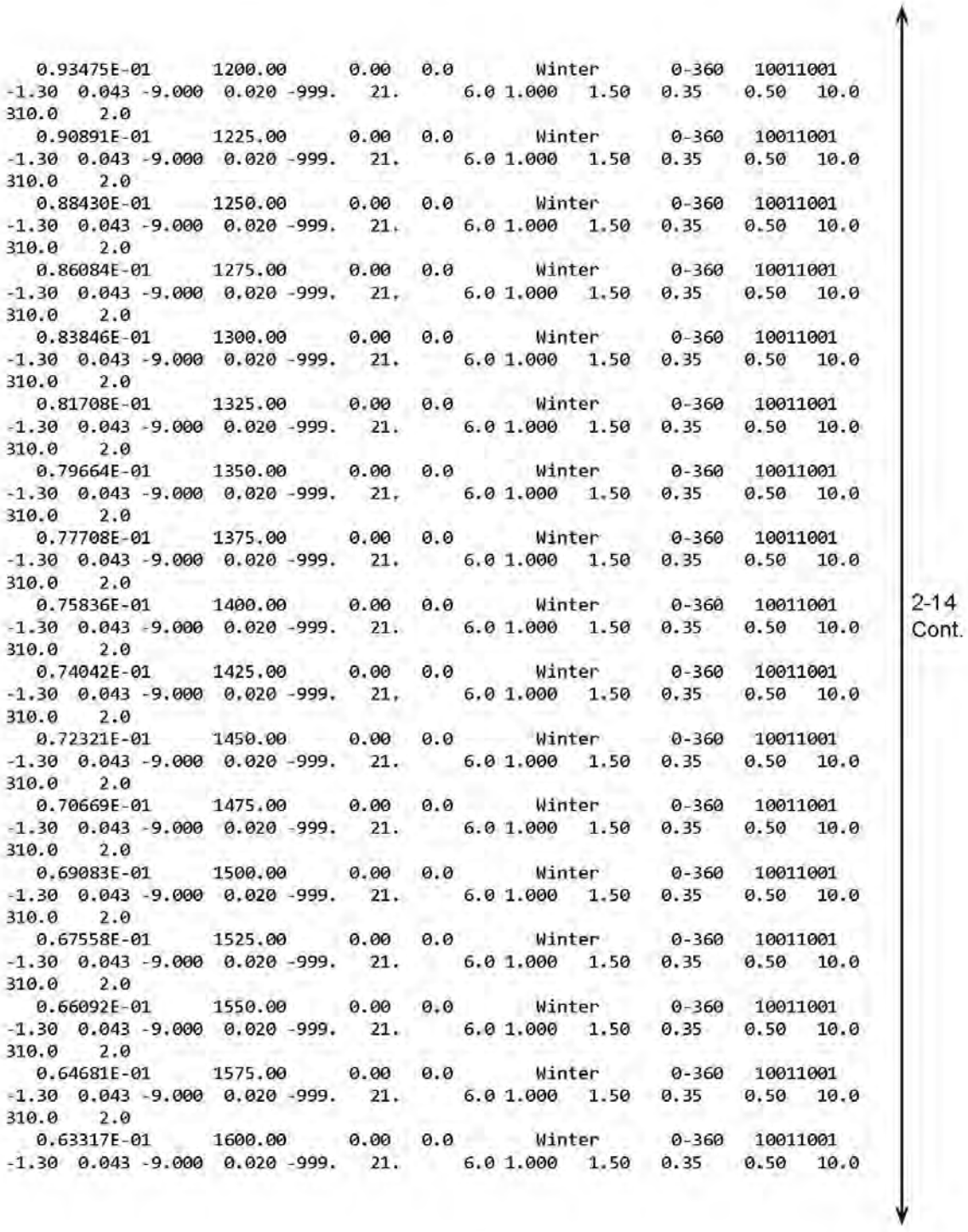


```
310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
```

2-14
Cont.

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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

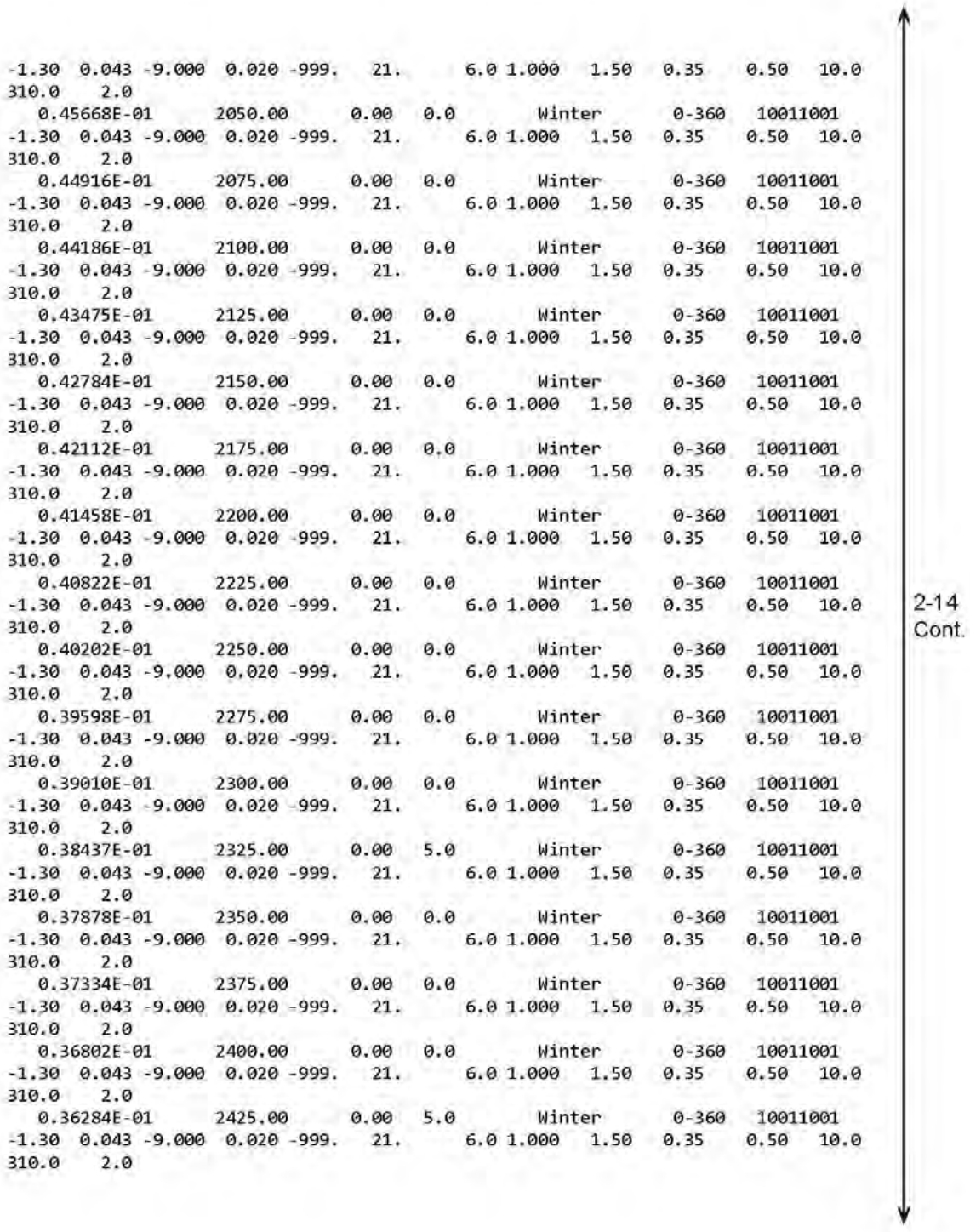


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   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14
Cont.

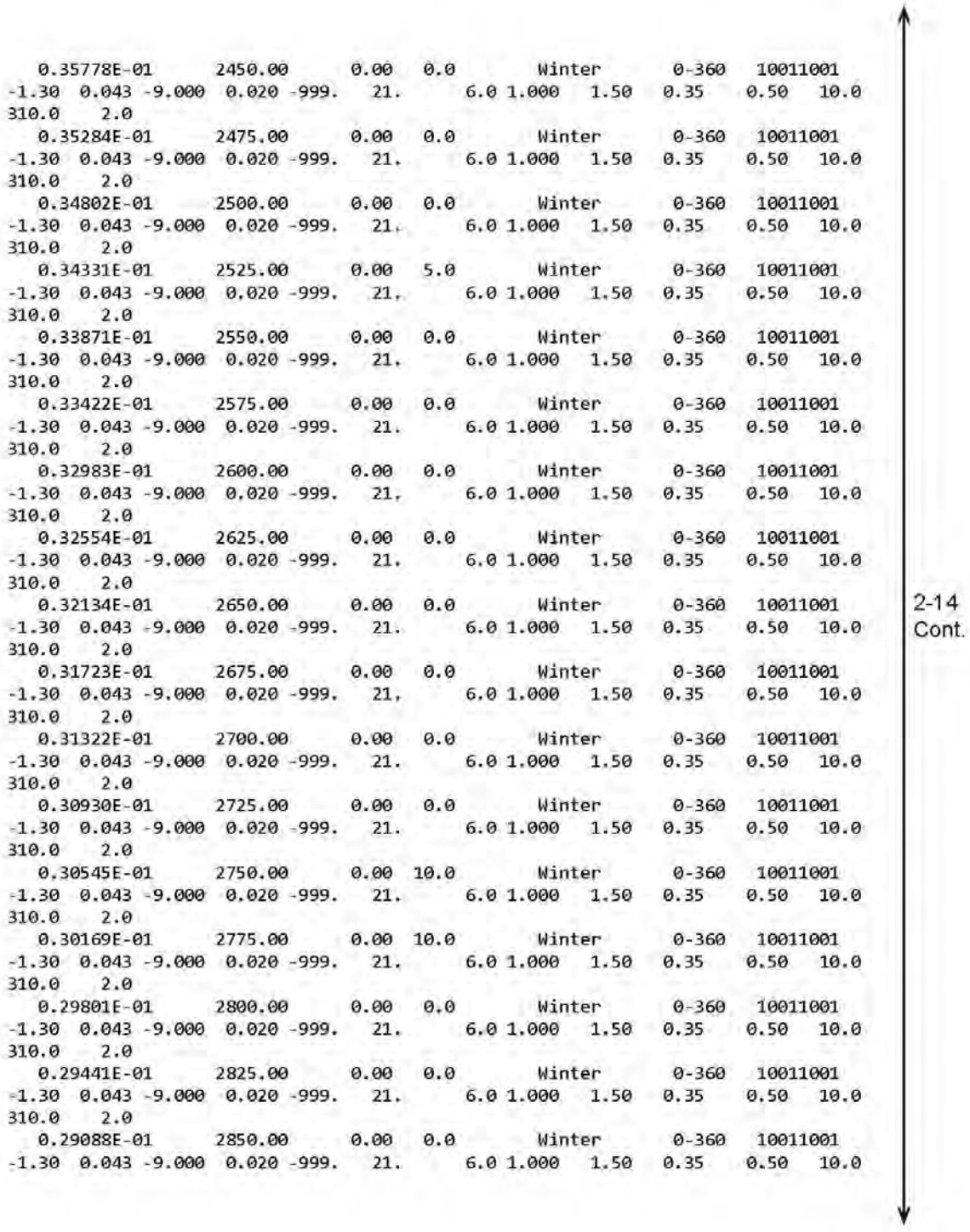
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310.0    2.0
   0.62000E-01      1625.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46442E-01      2025.00      0.00   0.0        Winter       0-360   10011001
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2-14 Cont.



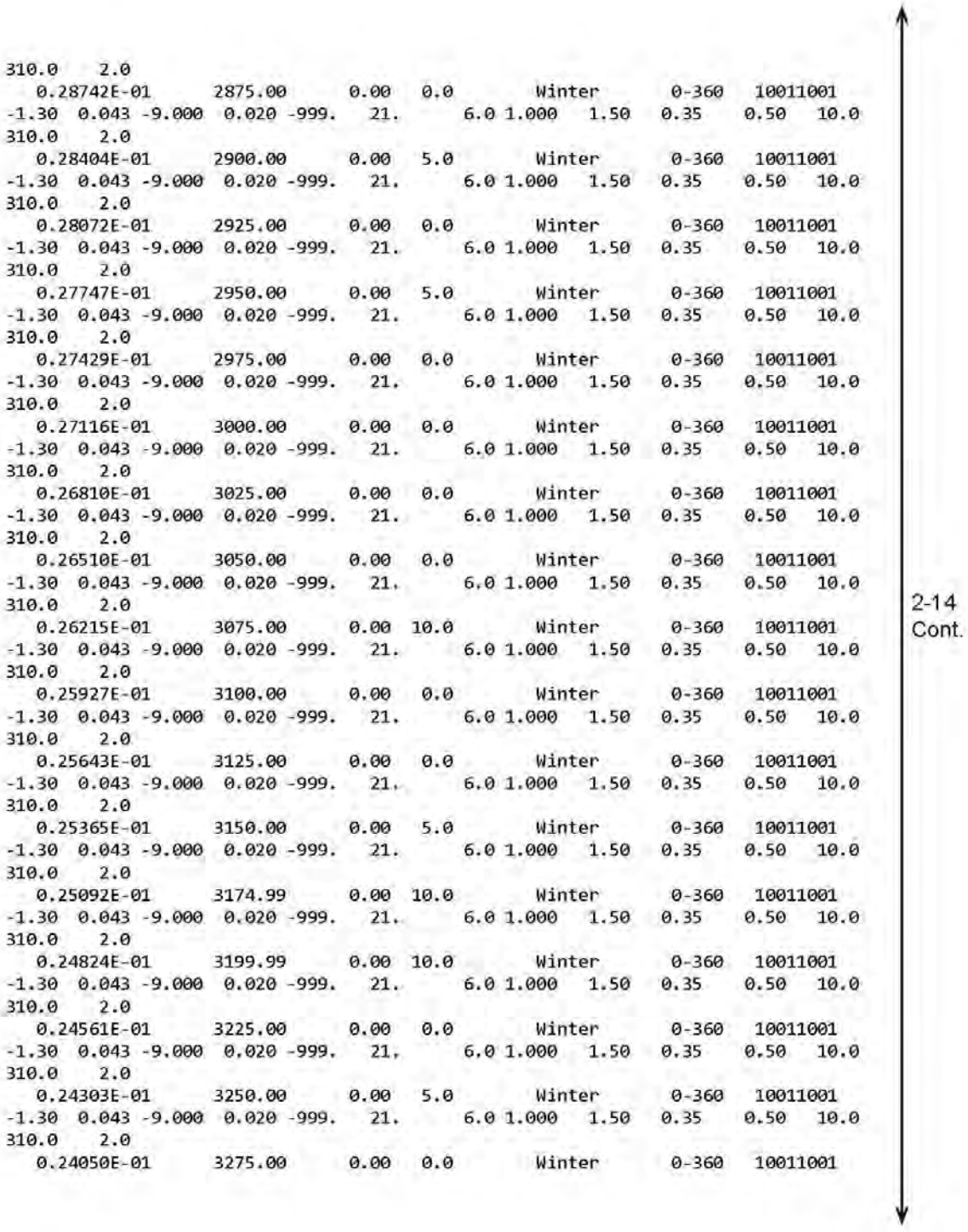
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310.0    2.0
   0.45668E-01      2050.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14
Cont.



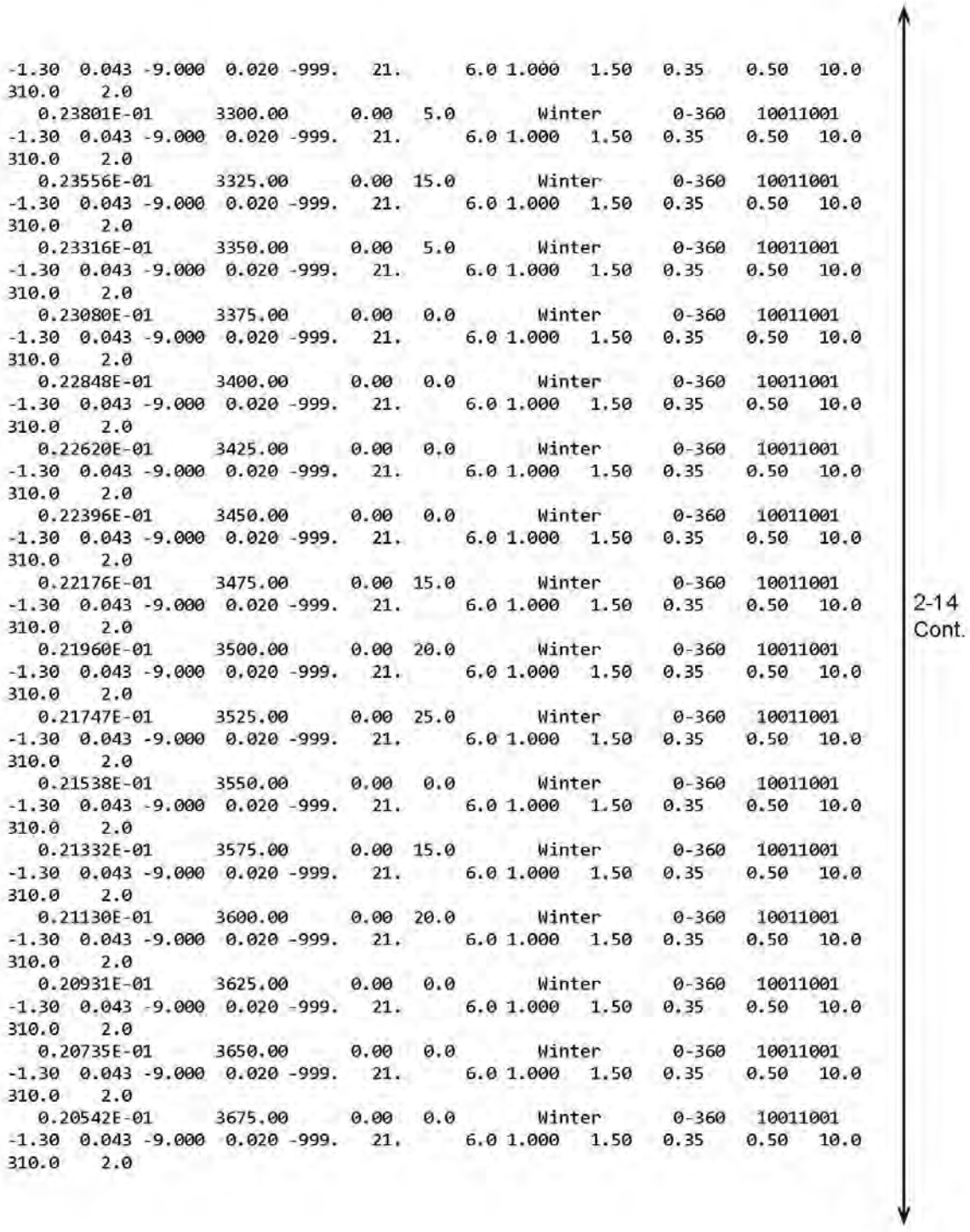
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   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14
Cont.



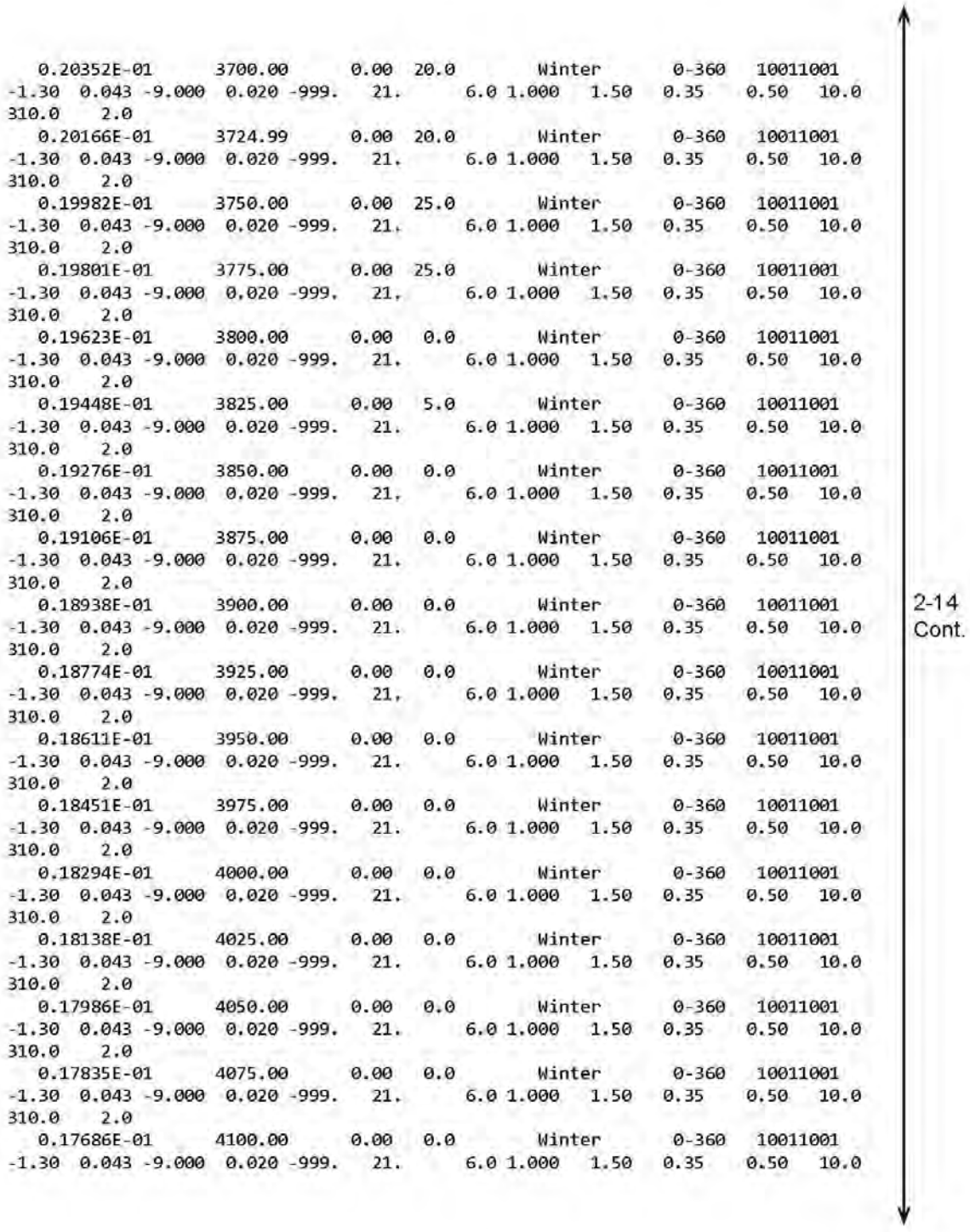
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310.0    2.0
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter      0-360   10011001
```

2-14 Cont.



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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14
Cont.

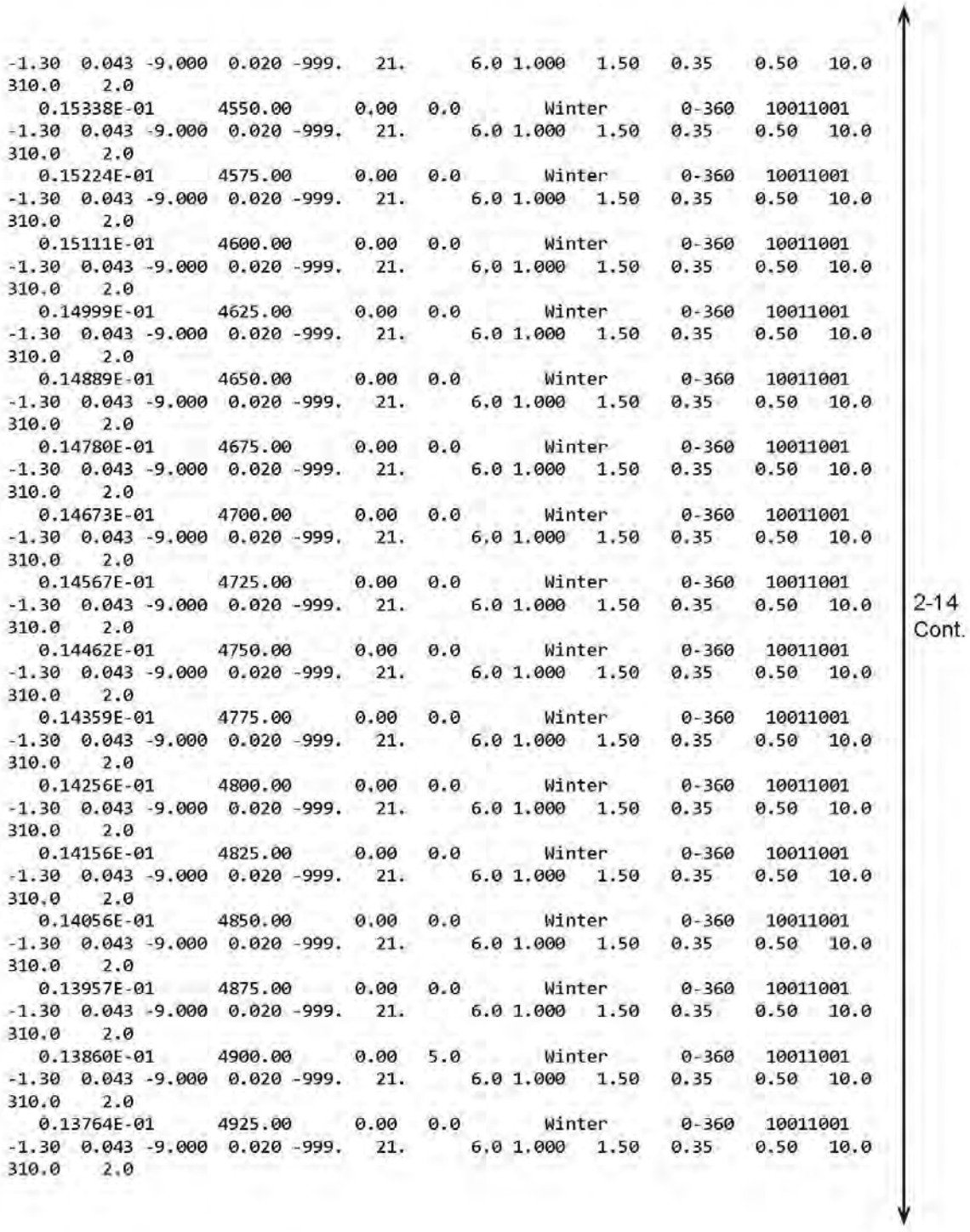


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310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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2-14
Cont.

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310.0    2.0
   0.17540E-01      4125.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter      0-360   10011001
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310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter      0-360   10011001
```

2-14 Cont.



```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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2-14 Cont.

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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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2-14 Cont.

Attachment E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

2-15

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

2-15 Cont.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

2-15 Cont.

Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

2-15 Cont.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

2-15 Cont.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost. *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

2-15 Cont.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association, Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

2-15 Cont.

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

2-15 Cont.

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Mentor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

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Attachment F

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:
California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:
Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

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- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

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- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

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public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

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principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

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Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

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Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

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Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

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Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

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Response to Comment Letter 2

Supporters Alliance for Environmental Responsibility
("SAFER", via Lozeau Drury LLP)
December 9, 2021

2-1 In summary, this comment includes an introductory statement for the comment letter and asserts the Final EIR does not adequately inform about or analyze environmental impacts, and does not impose feasible mitigation measures to reduce impacts. Additionally, the comment notes further comments within Comment Letter 2 were prepared with the assistance of Francis "Bud" Offermann, P.E., CIH (included as Comments 2-9 and 2-10). Please see Response to Comments 2-9 and 2-10 for more discussion. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-2 In summary, this comment correctly summarizes the Project Description for the proposed Project. However, the comment states the site is bound by Los Angeles International Airport (LAX) to the north. For informational purposes, LAX is not located immediately adjacent to the Project site, but instead 0.5-mile to the north. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-3 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations. The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-4 In summary, this comment states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, the commenter speculates on indoor air quality associated with finishes used on building material and furniture. Indoor air quality does not rise to the level of substantial evidence because it is generalized and does not address the specific impacts of this Project. Building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins, and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor PM2.5 concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and PM2.5 emissions. The commenter is speculating in the assertion that composite wood materials would be used in the interior of the building. Indoor building materials will not be known until the building permit stage, and as stated above, these materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

2-5 In summary, this comment states that the SWRCC included a memorandum which concluded that there is Substantial Evidence that the Project will have significant adverse air quality, health risk, and GHG impacts.

The SWRCC letter has been responded to in full in Response to Comment Letter 1 (see Responses to Comments 1-1 through 1-53) in this document. As discussed in these responses, all comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-6 The commenter states that there is substantial evidence that the Project may have a significant health impact as a result of DPM.

The SWRCC letter included similar assertions regarding DPM-related health risk. See Comment Letter 1 (Response to Comment 1-42) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-7 The commenter states that they believe that the impact conclusions contained in the Draft EIR are inadequate. Specifically, the commenter states that the Project would result in significant impacts based on 1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air

model; 2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; 3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; 4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; and; 5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-43) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-8 This comment notes the aforementioned comments (included as Comments 2-4 through 2-7) as reasons why the EIR is inadequate. Additionally, the comment expresses opposition to the proposed Project. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

2-9 The commenter states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Please see Response to Comment 2-4.

2-10 This comment includes the curriculum vitae of Francis "Bud" J. Offermann II, P.E., CIH. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-11 In summary, the comment states that the Draft EIR did not support its findings with substantial evidence.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-8 through 1-25). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-12 The commenter provides technical modeling to discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project is anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[3] On-site sources of GHG emissions include off-road equipment and off-

[3] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction

site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years, consistent with SCAQMD guidance which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

2-13 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-14 The commenter states that the input parameters of the air quality and GHG modeling are unsubstantiated.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-28 through 1-51). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-15 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Verbal Comment 1

Verbal Comment 1

Nino Mascolo
Property Owner
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Water supply

The environmental impact report addresses and describes the capacity to provide water adequately however, does not address the topic of water quantity and water supply. There is a "will serve" letter from the utility, but that's all. There is analysis of the water supply. We have been in a drought for the last two years and the state is considering fines for those users not reducing their water consumption.

The environmental impact report did not address the drought. It did not address whether there will be incremental use increase or to what extent the project will use more water compared to the current water use under baseline conditions. Given the need to decrease water consumption statewide, that is a critical issue. This project increases water consumption, so the burden should fall on the developer not on the community to obtain additional water.

1-1

Parking

The environmental impact report appendices state that there will be a before and after parking study which is a good idea. But any impacts that occur because of the development impose a burden on the property owners, their guests, and the public to figure out what to do. The environmental impact report does not require the project developer to address any of those parking impacts. There is a suggestion that a parking permit program be implemented, but I don't know how practical it will be. I propose that the project's residents and employees be the ones required to obtain parking passes. They should be the ones ticketed for parking next to Washington Park, which is a popular destination, and not the existing residents in the neighborhood. It's not fair for property owners and their guests to be burdened. The staff report states that the project will have to meet less strict parking requirements. The project residents and users will not park in a parking structure (within the project area) that is far from their units. Instead, they will choose to park on the street which is more convenient.

1-2

Traffic

EIR Section 4.1 3.4 talks about intersections. It states that five intersections will remain at level E or worse with the project. The project should be mitigating those impacts. We should be asking the developer to make things a little better and not impose worse conditions on the neighbors. Appendix J says there will be 2,500 additional daily trips caused by the project but parking is not being addressed.

1-3

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Response to Verbal Comment 1

Nino Mascolo
Individual
December 9, 2021

1-1 In summary, this comment states the Draft EIR does not adequately address water quality and water supply under drought conditions. Additionally, the comment expresses concern with the Project's water consumption.

The commenter was not specific in their concerns related to water quality. Please see Draft EIR Section 4.8, Hydrology and Water Quality, for discussion related to existing regulations and Project-specific analysis related to water quality standards.

In summary, this comment states the Draft EIR does not analyze Project impacts to water supply. As mentioned by the commenter, a Water Supply Will Serve Letter (included as Appendix G-2 of the Draft EIR) was referenced in the Draft EIR's analysis. Appendix G-2 was prepared by the City's Water Department to support the analysis contained within Section 4.15, Utilities and Service Systems, of the Draft EIR and represents assurance for the Project's anticipated water demands by providing and requiring potable water connections. In return, the City will charge the Project Applicant various fees for providing potable water and wastewater services to serve the proposed Project (Draft EIR page 4.15-21). Additionally, the Draft EIR summarizes applicable components and cites the City's Urban Water Management Plan (UWMP), which provides scenarios for anticipated water supply and demand, including availability to serve during normal, dry, and multiple dry years. As detailed further in Section 4.15, it was determined that the City would be able to meet the demand proposed by the Project and result in less than significant impacts (Draft EIR pages 4.15-19 through 4.15-22). No change or addition to the EIR's environmental analyses are required.

1-2 In summary, this comment states comments related to parking. The comment expresses support for Appendix J-2 of the Draft EIR's conclusion suggesting the following:

> "A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street." (Appendix J-2 page 14)

Moreover, the comment correctly states impacts to parking are not within the scope of the environmental analysis as required by CEQA. Nevertheless, this suggestion to provide parking permits for residents and employees will be provided to City decision makers for their review and consideration.

Additionally, the commenter suggests the Project's future residents and users would not park in the proposed parking structure, stating the structure is too far from the proposed units. For clarification, each area within the Project site would provide parking spaces as shown in Table 3-2, Conceptual Site Plan and Specific Plan Buildout Summary, within Chapter 3, Project Description, of the Draft EIR. No change or addition to the EIR's environmental analyses are required.

1-3 This comment notes discussion within the Section 4.13, Transportation, of the Draft EIR which states five study intersections are projected to operate at a level of service (LOS) E or worse during AM or PM peak periods under Future Plus Project conditions (Draft EIR pages 4.13-19 and 4.13-20). Moreover, the comment suggests mitigation should be incorporated to reduce impacts.

As discussed in Draft EIR Section 4.13, Project improvements are planned for the eastbound lane of Mariposa Avenue at PCH (see Development Standard C.1 of the Specific Plan), which would be reconfigured as a part of the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane. This infrastructure improvement has been taken into account for the plus-Project scenarios of the environmental analysis. The plus-Project scenarios of the impact analysis have also been analyzed without the Project improvement to show its potential benefit when compared to the baseline conditions (Draft EIR page 4.13-15). The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1 of the Draft EIR) (Draft EIR page 4.13-19).

However, the commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines. No change or addition to the EIR's environmental analyses are required.

Verbal Comment 2

Verbal Comment 2

Byron Washum
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

> I intend to provide written comments addressing parking and traffic impacts as well as the transformative change resulting from the project

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Response to Verbal Comment 2

Byron Washum
Individual
December 9, 2021

2-1 In summary, this comment states an intention to provide written comments addressing parking and traffic impacts as well as "transformative changes" resulting from the Project. Without specific comments related to the adequacy of the Draft EIR, no response is required.

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Verbal Comment 3

Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

> I am here on behalf of the Southwest Regional Carpenters union. We recommend hiring our members who live in the area to work on this and other projects, which helps to reduce impacts such as greenhouse gases. Our union helps provide a careers, training, a living wage and other benefits to local residents. 3-1

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Response to Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

3-1 The commenter notes his representation with the Southwest Regional Carpenters union, and states hiring local members to work on the proposed Project would help reduce impacts to greenhouse gas emissions. The comment further details example benefits of the union. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Nevertheless, the comment will be provided to City decision makers for their review and consideration.

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Verbal Comment 4

Verbal Comment 4

Paul Morrison
421 Indiana Street
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live across from the proposed parking structure. 4-1

Displacement of residents

Table ES 1 in the environmental impact report which contains a summary of impacts states that the project will not displace a substantial number of people.

Noise and vibration will cause displacement

I believe that the project will have a lot of construction impacts such as noise, vibration, and air quality impacts from the use of heavy machinery, such as pile drivers and beams. As a result I and other nearby residents may be displaced by the project. The City may benefit economically from the project. I am a retired resident of 24 years. My rents today is very low. If I am displaced by the construction, I will be effectively banished from El Segundo because I will not be able to afford rent in the area after I return post construction. 4-2

The developer and the City have a moral obligation to long-term residents like myself. The City should consider mitigation for residents like me with lower incomes. Maybe we can revisit this project every six months or every year so we can track the potential impact on residents like myself. 4-3

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Response to Verbal Comment 4

Paul Morrison
Individual
December 9, 2021

4-1 This comment notes that he lives across for the proposed parking structure and expresses concerns with Project-related impacts, detailed below. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Please see Responses to Comments 4-2 through 4-3 for more discussion.

4-2 This comment raises concern for the displacement of residents due to construction-related impacts associated with noise, vibration, and air quality, which would displace nearby residents. The Draft EIR analyzed impacts related to noise and vibration as well as air quality within Sections 4.10, Noise and 4.2, Air Quality, respectively. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and air quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of the assumptions underlying the Air Quality Management Plan. However, construction-related impacts associated with these environmental topic areas are not applicable to Threshold 4.11(b) regarding displacement of "substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere." Displacement refers to the physical displacement of people or housing. As described in Draft EIR Section 4.11, Population and Housing, no housing uses are located on the Project site and Project implementation would not require demolition of existing housing or displace people or housing. Construction-related impacts associated with the Project would not physically displace residents surrounding the Project site. No change or addition to the environmental analysis found within the Draft EIR is required.

4-3 In summary, this comment states the Project Applicant and the City should consider mitigation for residents with lower incomes. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Furthermore, impacts to rents, for example, are outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment."

In conclusion, the comment suggests periodic evaluation of the potential impacts as a result of the proposed Project. In accordance with CEQA Guidelines Section 15097, to ensure that the mitigation measures identified in the EIR are implemented, the City must adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant environmental effects. The "mitigation monitoring and reporting program" is monitored by the City to ensure that all mitigation measures have been implemented to the satisfaction of the City. Additionally, the comment regarding periodic evaluation will be provided to City decision makers for their review and consideration.

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Verbal Comment 5

Verbal Comment 5

Amalia Fuentes
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Indoor air quality

Referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations. 5-1

Diesel emissions

In addition to interior air quality impacts, the project will have diesel particulate matter impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold. 5-2

Greenhouse emissions

In addition, the environmental impact report has flaws in the calculations of greenhouse gas emissions from the project. 5-3

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Response to Verbal Comment 5

Amalia Fuentes
Supporters Alliance for Environmental Responsibility ("SAFER")
Individual
December 9, 2021

5-1 The commenter referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor $PM_{2.5}$ concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and $PM_{2.5}$ emissions. Furthermore, building materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

5-2 The commenter states the Project will have DPM impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold.

Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors, which represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis assumes a construction start date of October 2021, which represented the earliest date of construction when air quality and GHG assessments were initiated.[4] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024). Please refer to the US EPA's Nonroad Compression-Ignition Engines: Exhaust Emission Standards for details (available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1000A05.pdf).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the

[4] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

5-3 The commenter states that the Draft EIR has flaws in the calculations of GHG from the Project.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-29) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

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Verbal Comment 6

Verbal Comment 6

Maria Barron
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live at 1628 E. Palm Ave. 6-1

Noise, pollution and parking

I concur with all the concerns that were mentioned by the previous speakers. I am concerned about noise, pollution, and parking. 6-2

Parking permits.

However, I disagree with the suggestion that the project residents should get the parking permits. Instead I think it will be best for existing residents in the area to have parking permits so they can park on the street. 6-3

Noise and pollution from the project will be unbearable for nearby residents. 6-4

The City previously had a program to provide double-paned windows to residents and my residence qualified for this program. However, the program ran out of funds. So, we won't be getting them. I recommend that the city revisit the program to provide a double-paned windows for residents. 6-5

I believe the project proposes too many apartment units and the proposed buildings and parking structures are too tall. 6-6

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Response to Verbal Comment 6

Maria Barron
Individual
December 9, 2021

6-1 This comment provided the resident's address, which is within the vicinity of the Project site. However, this comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required.

6-2 The comment expresses similar concerns as mentioned by other speakers related to noise, pollution, and parking. The comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. For informational purposes, the Sections 4.10 (Noise), 4.2 (Air Quality), 4.8 (Hydrology and Water Quality), and 4.13 (Transportation) address the aforementioned areas of concern. No further response is required.

6-3 This comment disagrees with the suggestion made by Nino Mascolo (see Response to Comment 1-2) regarding parking permits for Project residents. Instead, this comment suggests parking permits should be given to existing residents surrounding the Project site to allow for parking on the street. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-4 In summary, this comment states Project-related impacts associated with noise and pollution will be "unbearable" for nearby residents. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. As mentioned above, Sections 4.10 (Noise), 4.2 (Air Quality), and 4.8 (Hydrology and Water Quality) address the aforementioned environmental topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise, air quality, and hydrology and water quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of assumptions used for the SCAQMD's Air Quality Management Plan. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-5 This comment notes a City program that provided double-paned windows to residents. However, the comment states the program ended and asks for the program to be restored. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-6 In summary, this comment states opposition to the Project's proposed residential unit count and proposed height. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

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Verbal Comment 7

Verbal Comment 7

Matthew Klemp
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Corner of Washington Street and Elm Avenue.

I previously submitted two letters commenting on the environmental impact report but I have not received a response other than that they will be included in the record. 7-1

My concerns related to noise, parking, and traffic.

The Environmental impact report makes some questionable key assumptions. A lot hinges on a lot of people walking to the downtown, or walking to mass transit, or taking mass transit. But that has not been the case here in El Segundo or in the Los Angeles area. It would be great if we had mass transit available, but it is not here. 7-2

Reduced parking requirements

In addition, a lot hinges on the assumption that two people living in one unit will use only a single car. That does not meet El Segundo's current parking standards. In addition, no one really walks from Pacific Coast Highway to downtown El Segundo. In addition, traffic on Mariposa Avenue is backed up especially when making a left turn onto Pacific Coast Highway. So, the additional traffic will make things worse on Mariposa Avenue. In addition, the environmental impact report excludes single-family homes from the sensitive receptors of unwanted noise. 7-3

High density and traffic/parking

The project brings high density residential to this neighborhood that already has a parking and traffic problem. Adding all those units in this small area will make park parking and traffic is much worse 7-4

Alternative sites.

Why can't we rezone somewhere else in the city to accommodate all these new residents. 95% of residents in the city live in approximately 25% of the city's area. South of Grand Avenue and east of Pacific Coast Highway would be appropriate places to rezone and would take away a lot of the objections to the project if those alternative site where evaluated and developed. 7-5

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Response to Verbal Comment 7

Matthew Klemp
Individual
December 9, 2021

7-1 In summary, this comment states he lives nearby the Project site. In addition, the commenter notes two previously submitted letters on the Draft EIR but states no response other than they would be included in the administrative record was made. Please see Response to Comment I-21 within Chapter 2, Responses to Comments, of the Final EIR for more discussion on previously submitted comments from "Matthew Klemp".

Additionally, the comment expresses concern related to noise, parking, and traffic. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. Sections 4.10 (Noise) and 4.13 (Transportation) address the aforementioned topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and transportation were reduced to be less than significant. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No further response is required.

7-2 In summary, this comment questions the Draft EIR's assumptions of walkability and transit of current and future residents and visitors of the city. The following response includes portions of Response to Comment Letter I-21 (included within Chapter 2, Responses to Comments, of the Final EIR):

The EIR evaluates the environmental impacts of the proposed Project based on the existing conditions of the Project site and area; applicable standards that are in place at the local, regional, state, and national levels; and, conservative assumptions based on default data from similar project types. While the availability of transit and the mixed-use nature of the Project and its surroundings may present a potential environmental benefit and are features discussed in the EIR, the environmental conclusions in the EIR do not hinge upon widespread use of alternative transport modes amongst the future residents, employees, guests, and visitors of the proposed Project. Rather, the analysis assumes that a majority of the future residents, employees, guests, and visitors would use single-occupancy vehicles.

Regarding the Project's proximity to downtown El Segundo, the distance is approximately 1.5 miles, which equates to an approximately 30-minute walk. While the potential for walking to downtown is mentioned in the EIR and is set forth as part of one of the Project objectives, the analysis in the EIR is not based on the potential for future Project residents to walk to downtown El Segundo. Rather, a conservative trip credit for alternative transport modes was taken for the purposes of the Project's vehicle trip calculations. The trip credit is minimal (5% of the Project's total vehicle trips) and is based on the mixed-use nature of the Project and Project area, combined with proximity to transit.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. However, U.S. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. As such, data collected in the Project area indicates that the assumptions in the EIR analysis for use of alternative transportation modes are conservative in nature and that the EIR assumes reduced use of alternative transportation modes relative to current rates of use in the surrounding community. While

the EIR describes the transit-oriented nature of the proposed Project and its proximity to existing businesses and services, the quantitative analyses (e.g., traffic generation, traffic-related noise generation) remain conservative with respect to vehicle use versus alternative transportation use. Furthermore, no additional walk/bike/transit trip generation credit was taken in the Draft EIR for the Project's proximity to Downtown El Segundo.

The comment also states that there is a lack of reliable transit in the Los Angeles area. However, the Metro C Line Mariposa Station is 0.51-mile from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 also run along Pacific Coast Highway with stops near the Project site. Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR). The distance between the Project site and the Mariposa Station equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours. Nevertheless, as described above, the trip credits taken in the EIR analysis for transit use are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Finally, the Project site is adjacent to a transit-priority area, which is an area delineated by SCAG to identify locations where transit use is practical and where transit-oriented development is encouraged. Plans and policies are in place at the local, regional, and state level to encourage increased use of alternative modes of transportation and to support mixed-used and higher density housing near transit. The proposed Project is supportive of these policies, as it would locate higher density housing and mixed-use development in proximity to transit. As these plans and policies are carried out, the use of alternative modes of transportation is also expected to increase over time, particularly in urbanized areas.

7-3 In summary, this comment questions the Draft EIR's assumptions of vehicles per unit for future residents of the proposed Project. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR. No change or addition is required of the Draft EIR's environmental analysis. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

Additionally, the comment asserts walkability assumptions within the Draft EIR. For more discussion on walkability, please see Response to Comment 7-2, above.

The comment also raises concerns for traffic congestion on Mariposa Avenue and Pacific Coast Highway. The commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic

congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines.

Finally, the comment asserts the Draft EIR excludes single-family homes as sensitive receptors to noise. This comment is similar to Comment I21-8 (included within Chapter 2, Responses to Comments, of the Final EIR). The comment incorrectly states that single-family homes were not included in the noise analysis for the Draft EIR. As noted in Section 4.10, Noise, of the Draft EIR:

> "Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary), those receptors would be less impacted by noise and vibration levels than the above-listed sensitive receptors" (Draft EIR pages 4.10-5 and 4.10-6).

Therefore, single-family homes were not excluded from the Draft EIR as noise-sensitive receptors; the nearest sensitive receptors are analyzed to provide the most conservative analysis. No change or addition is required of the Draft EIR's environmental analysis.

7-4 In summary, this comment states opposition to the Project's proposed density, trip generation, and parking. The comment asserts the proposed Project would exacerbate existing parking and traffic conditions. For discussion on the Project's impacts to parking and traffic, see Response to Comment 7-3, above. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

7-5 In summary, this comment states alternative sites should be considered for the proposed Project. This comment is similar to Comment I21-12 (included within Chapter 2, Responses to Comments, of the Final EIR). As such, following response includes portions of Response to Comment I21-12:

Alternatives to the proposed Project, including alternate locations, are evaluated in Chapter 6 of the Draft EIR. Alternate locations to the proposed Project site were ultimately rejected as infeasible. The reasons for this conclusion are summarized below, followed by a description as to why the commenter's specific suggestions for alternate locations are determined to be infeasible.

Infeasibility of Alternate Locations

1) Alternate locations would not avoid or reduce the Project's environmental impacts. As stated in Section 15126.6(f)(2)(A) of the CEQA Guidelines, the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that require mitigation. Rationale for this determination is provided in Section 6.4 of the Draft EIR.
2) No known sites are available within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative, as defined in the CEQA

Guidelines, is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The City evaluated the possibility for other sites, and this evaluation is summarized in Section 6.4 of the Draft EIR. The City determined that potential alternate locations were not suitable due to a variety of factors (land use designations, hazardous site conditions, and/or property ownership.)

Suggested Alternate Locations

The commenter's specific suggestions for alternate locations are addressed as follows:

- **East of Pacific Coast Highway or south of Grand Avenue.** The commenter suggests developing the proposed Project on the east side of Pacific Coast Highway and/or to the south of Grand Avenue. The commenter presents the option of rezoning a site on the east side of Pacific Coast Highway to accommodate mixed-use residential. As stated in Section 6.4 of the Draft EIR, development of the Project on another site along Pacific Coast Highway could provide a transition from the City's offices to the east and residential uses to the west, similar to the proposed Project site. However, other sites along Pacific Coast Highway were determined to be infeasible because no such sites are under control by the Project applicant, which is a factor for feasibility under CEQA. Additionally, other sites along Pacific Coast Highway may not be considered by the City to be appropriate for the increased height and density that is proposed for the Project. Furthermore, locating residential uses east of Pacific Coast Highway would place new residents farther away from services and amenities, such as parks, City Hall, the police station, and schools. This may result in increased vehicle trips within the City and/or increased development impacts, in the event that new public services and amenities need to be developed elsewhere in the City. Residents would also be required to cross Pacific Coast Highway to access public services, which could present increased traffic safety effects. The City did consider a parcel located near Pacific Coast Highway and Rosecrans Avenue, between The Point Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses. In general, the areas south of Grand Avenue are highly industrialized, and adding residences to this area would likely introduce an incompatible land use.

In conclusion, the City acknowledges the comment and it will be provided to City decision makers for their review and consideration.

Exhibit No. 12

Request for Street Dedication Waivers & Waiver of Construction for Certain Future Right-of-Way Improvements Relating to The Pacific Coast Commons Project (Addresses: 475, 525, 545 and 600 block of Pacific Coast Highway)

Introduction

There are 5 streets abutting the Pacific Coast Commons Project: Pacific Coast Highway (formerly Sepulveda Boulevard), Indiana Street, Palm Avenue, Holly Avenue, and Mariposa Avenue. The El Segundo Circulation Element sets forth the street classification for streets and the planned right-of-way/roadway requirements relating to those streets.

Table 1 sets forth: the street; the classification of each street; the minimum/maximum roadway width and other right-of-way requirements; the existing conditions; the City requested dedications; and the applicant's request for waiver; modification and deferment of meeting the City's requested dedications.

The column for City Required Dedication is based upon written communication received from the City of El Segundo Public Works Department and the Planning and Building Safety Department (collectively "City") on September 18, 2020 and October 21, 2020.

The City's request for street dedication provides for the maximum allowed right-of-way widths proposed in the Circulation Element of the General Plan for Palm Avenue, Holly Avenue, Mariposa Avenue, and Indiana Street (excepting those portions of the frontage of Indiana Street where the existing Fairfield Inn and Suites and Aloft hotels are located).

The City has classified the block of Holly Avenue that fronts the project site between Pacific Coast Highway and Indiana Street as a local commercial street. Holly Avenue is 50 feet in width. The City has requested the maximum allowed right-of-way width of 64 feet. Therefore, the City's request is to provide a right-of-way dedication of 7 feet on the north side of Holly Avenue along the street frontage of the development project. The applicant proposes to dedicate the 7 feet. Additionally, the applicant agrees to construct the physical right-of-way improvements subject to credit against the cost of applicable City's traffic mitigation fees for the project since the project did not generate any impacts that necessitated the right-of-way improvements (see Section entitled "Dedications Considered Taking if No Nexus Exist" at the end of this application request for further information).

Pacific Coast Highway (which is a State Highway) is 125 feet in width and 85 feet greater than ½ of the required maximum right-of-way width has been provided through previous dedications and easements already for the project (western) side of the street.

It is important to note that as shown in Table 2, all of the streets that surround the project site already comply with the following right-of-way/roadway requirements even before any proposed street dedications requirements: a) minimum roadway width necessary for emergency vehicle access; b) minimum roadway width and lane width necessary for safe two-directional vehicle passage (minimum of 20 feet); c) minimum lane width of ten feet (10') for a travel lane; d) minimum width of eight feet (8') for a parking lane; and e) 44-inch minimum width for disabled access requirements for public sidewalks.

Summary of Impacts of Proposed Street Dedications

Some of the street dedications proposed by the City create significant hardships outlined below that would otherwise deprive the applicant full use of its property and result in an inferior project.

All of the combined street dedication requirements outlined in Table 1 result in the following significant impacts and hardships on the project; the impacts from each specific dedication requirement are detailed below in the specific discussion of that street:

- Loss of 159 parking spaces
- Loss of 70 residential units at currently proposed parking ratios
- Loss of ground floor restaurant and retail space
- Increased cost of parking structures

The applicant proposes that waivers of full or partial proposed street dedications be granted for Indiana Street and that the applicant not be required to construct certain right-of-way improvements for Palm Avenue, the east side of Indiana Street and the north side of Mariposa Avenue as explained more fully below.

These requests are warranted for this project and comply with the City's waiver criteria as specified per ESMC Section 15-24A-5 "Relief from Requirements" below:

Waiver Criteria:

1. The proposed waiver maintains the minimum roadway width necessary for emergency vehicle access as determined by the fire chief.
2. The proposed waiver maintains the minimum roadway width and lane widths deemed necessary for safe two-directional vehicular passage. The minimum lane width cannot be less than ten feet (10') in width for a travel lane and eight feet (8') feet in width for a parking lane;
3. The proposed waiver will maintain the necessary roadway width for the traffic volumes projected during the general plan buildout as determined by the director of planning and building safety, unless the director determines that the dedication or irrevocable offer to dedicate will require the removal of all or a portion of an existing building.

4. The proposed waiver complies with any requirements of state and federal regulations, including, without limitation, disabled access requirements for public sidewalks;
5. The proposed waiver would not be detrimental to the neighborhood or district in which the property is located;
6. That the proposed waiver is necessary in order that the applicant is not unreasonably deprived the use or enjoyment of his property; and
7. The proposed waiver is consistent with the legislative intent of this title.

Street Dedication Waiver Requests and Requests to Not Construct Certain Future Right-of-Way Improvements

Palm Avenue – South Side.

Request to not construct right-of-way improvements.

Impacts of construction of right-of-way improvements:

- Unsafe and unsightly street condition with widening of roadway and sharp jog in the public sidewalk unless acquisition occurs for additional street frontage for widening on the south side of the block of Palm Avenue between Pacific Coast Highway and Washington Street.

The City's request is to provide a right-of-way dedication of 12 feet on the south side of Palm Avenue along the street frontage of the development project. The applicant proposes to dedicate the 12 feet but requests that they not be required to construct any of the right-of-way improvements.

The property frontage of the project site is only 73.19 feet in width on a block that is 806 feet in length. The block is predominantly comprised of residential uses which are the sole uses to the west of the project site and across the street from the project site. The only fully commercial uses being the Carl's Jr. Restaurant to the east of the project site at the corner at Pacific Coast Highway and the vacant Stick and Stein restaurant across the street from Carl's Jr. on the north side. Despite the limited commercial uses, City staff has determined that the street should be classified as a local commercial street.

The minimum width requirements for both local residential and local commercial street classifications are 60 feet. The only difference in the roadway width between the two is that the local commercial street also has a maximum width of 64 feet to allow for 2-foot wider parking lanes. Although it is unclear what necessitates a wider roadway width for this portion of the block, nonetheless, the project has been designed to accommodate a 12-foot right-of-way expansion as opposed to a 10-foot right-of-way expansion.

Street dedication and physical improvements for this approximately 73 feet of frontage would create an unsafe street condition by widening a small section of the street by 12 feet, creating a significantly recessed driveway with impaired visibility of oncoming traffic without acquisition and widening of the entire street, and a sharp jog in the public

sidewalk. Therefore, this request is for the City to not require construction of the public right-of-way improvements (roadway widening, relocation of sidewalk and installation of new parkway) for the 12-foot width for expansion on the south side of Palm Avenue. The existing roadway and 5-foot sidewalk would be maintained. The area for future dedication would be landscaped yard area until such future time as the dedication is executed and the physical improvements would be implemented.

Compliance with Waiver Criteria

The City's request for dedication of 12 feet of land for right-of-way expansion would occur prior to Certificate of Occupancy for the North Site development phase of the project. Granting the request to not construct the right-of-way improvements on the south side of Palm Avenue would maintain the existing 40-foot right-of-way and 5-foot sidewalk until the street is widened in the future. The existing right-of-way dimensions would be in conformance with the requirements for the minimum roadway width for emergency vehicle access, safe two-directional vehicular passage, minimum travel lane widths, and sidewalk accessibility requirements until the irrevocable offer to dedicate land is implemented in the future.

Indiana Street.

Waiver for reduction of 7 feet on the project side of the street to a 0-foot dedication. (City staff from the Public Works and Planning Departments jointly issued a determination on October 21, 2019 that no dedication would be required for the portion of Indiana Street where the two existing hotels (Aloft and Fairfield Inn and Suites) are located since the existing buildings have no setback from the existing right-of-way, However, it is referenced in this application as the applicant asks that one comprehensive determination is issued that addresses all of the requests. The request for waiver for the remainder of the block between Mariposa and Holly Avenue for the two new development areas ("PCC South Site" and the "Fairfield Parking Site") at the south and north ends of the block respectively is for a reduction of 3 feet to a 4-foot dedication. Request to not construct right-of-way improvements on Indiana Street other than parkway landscaping.

Impacts of a 7-foot dedication on PCC South in lieu of a 4-foot dedication:

- Need to use speed ramp
- Loss of 94 parking spaces due to speed ramp
- Speed ramp may require all traffic to enter on Indiana instead of PCH
- Reduction of courtyard area
- Elimination of ground floor retail & restaurant uses
- Loss of 62 residential units based upon the current proposed parking requirement

Impacts of a 7-foot dedication on the Fairfield Inn and Suites Replacement Parking Structure in lieu of a 4-foot dedication:

- Loss of 10 parking spaces
- Possible reduction or loss of ground floor retail & restaurant uses

The majority of the block is occupied by the existing hotel buildings which will remain (the Aloft and Fairfield Inn and Suites hotels). These hotels were recently acquired in 2017 for $90,000,000 and their high value make it extremely unlikely that the hotels would be demolished in any reasonably foreseeable amount of time to achieve widening of the street along the entire east side of Indiana Street on this block.

A 7-foot dedication would make the current ramping system of PCC South infeasible because the reduced length of ramp would require an increased slope that would not permit parking on the ramp and result in the need to use a speed ramp (A steeply sloping vehicular ramp in which the steeper slope prohibits cars from parking on the ramp as is typical in many parking structures). The speed ramp would eliminate approximately 94 parking spaces, resulting in the loss of 62 multiple-family residential units at the currently proposed parking ratios in addition to elimination of the ground floor retail and restaurant uses. Another potential impact of being required to use a speed ramp is that all traffic for both the Aloft Hotel and the residential development may need to come in and exit from Indiana Street rather than having Aloft hotel traffic enter and exit from Pacific Coast Highway.

The replacement Fairfield parking structure located south of Mariposa is also the most constrained structure on the project site given the distance between the existing Fairfield improvements and the street dedication line of Indiana Street and Mariposa Avenue. The 7-foot dedication requirement on Indiana Street would result in a loss of approximately 10 parking spaces and potential reduction or elimination of the commercial and retail uses on the ground floor along Pacific Coast Highway.

Compliance with Waiver Criteria

The existing street right-of-way width is 50 feet (including existing easements). The applicant proposes to grant a street dedication to replace the existing easements so that the City will own all of the existing 50-foot right-of-way. This street dedication will occur once the proposed Vesting Tentative Tract Map No. 82806 is approved and recorded.

A 0-foot dedication for any additional right-of-way will still allow the City to maintain roadway and sidewalk dimensions in compliance with the minimum right-of-way standards for a local commercial street (12-foot travel lane, 8-foot parking lane and a 5-foot wide sidewalk) and in compliance with Waiver Criteria Nos. 1, 2 and 4. The 7-foot dedication would only accommodate the addition of a parkway that does not exist today and involve the widening of the parking lane from 8 feet to 10 feet. A 4-foot dedication will be provided along the portions of the block where the new development areas ("PCC South Site" and the "Fairfield Parking Site") are located and will generally include landscaping. Additional landscaping will be provided where feasible on the project site in the new Pacific Coast Commons project and where it exists today on the existing Fairfield and Aloft hotel parcels. Throughout the City where parking lanes are permitted and provided, they are 8 feet in width. It is unclear what analysis has been conducted to determine the necessity of a 10-foot wide parking lane on this particular block in comparison to other local commercial and residential streets in the area or City generally. Further, Indiana Street is a short street that only runs 3 blocks and truly is a local street that only serves the immediate neighborhood.

This request would also meet Waiver Criteria Nos. 3, 5, 6 and 7. The necessary roadway width will be provided and maintained in compliance with the Circulation Element. This waiver request will not result in a reduction of roadway width or a reduction in the number of lanes. The project with the proposed reduced dedication will meet the 5-foot sidewalk requirement and exceed the 44 inches required to meet disabled access requirements. The proposed waiver would not be detrimental to the neighborhood or district in which the property is located as the minimum roadway and sidewalks will be provided. No parkway exists currently. The additional 4-feet of dedication will allow for the addition of parkway for the portions of the block where the new development occurs and additional on-site landscaping adjacent to the right-of-way will be provided where feasible in locations where buildings are not proposed or are not currently located. The proposed waiver is consistent with the legislative intent of Title 15 in that the proposed waiver will still allow a roadway and a sidewalk in compliance with the minimum width standards for a local commercial street specified in the Circulation Element. Although the City is not requiring any dedication for the portion of the street where the existing Aloft and Fairfield Inn and Suites are located and are not proposed to be demolished, it should be noted that Waiver Criteria No. 3 specifically addresses the justification for a waiver if the dedication requires the removal of all or a portion of an existing building.

Mariposa Avenue – South Side.

Waiver for reduction of 3 feet to provide only a 4-foot dedication for the portion of the block westerly of the proposed right-turn lane.

Impacts of a 7-foot dedication on the Fairfield Inn and Suites Replacement Parking Structure:

- Elimination of a row of parking on all levels resulting in loss of 55 parking spaces
- Require increased building height with an additional 1.5 to 2 stories of parking
- Inefficient parking structure design with significantly higher costs per stall
- Possible elimination of ground floor restaurant and retail uses

The south side of Mariposa is the most constrained aspect of the entire project. The distance between Mariposa and the existing Fairfield hotel buildings that will remain are so tight that there is barely room to fit two drive aisles and a ramp. The 7-foot dedication requirement on Indiana Street would not provide sufficient room for the parking structure to have a ramp and two double loaded drive aisles and would result in a single loaded drive aisle configuration that would result in a loss of approximately 10 parking spaces per floor for a total loss of 50 parking spaces (this would increase the loss to 60 parking spaces if the 7-foot setback on Indiana was also implemented). This would result in an increase of height for the parking structure by 1.5 to 2 levels, in addition to possible elimination of the commercial and retail uses on the ground floor along Pacific Coast Highway. In addition, the resulting structure would be so inefficient that it would result in significant additional cost to construct the same number of parking spaces. The combination of the reduction of the parking structure footprint and spaces from the street dedication requirements on Indiana Street and Mariposa Ave would also make it

difficult to provide the necessary replacement parking for the Fairfield Hotel in addition to possibly eliminating the ground floor retail and restaurant uses.

Additionally, the applicant requests a waiver for any additional street dedication at the location of the proposed newly created right-turn lane as this turn lane is wider than the current street dedication requirements by five feet. The project should not be required to provide any additional dedication other than to realign the existing sidewalk southward with the installation of the right-turn lane, since the right-turn lane provides additional land to the City greater than the street dedication requirement. Twelve feet of right-of-way width is proposed for dedication for the length of the proposed right-turn lane (where only 7 feet is required). The right-turn lane is approximately 55 feet in length for the portion that is fully 10-feet wide not including the transition into the lane. It should be noted that these dimensions for the length of the right-turn lane are approximate as the project has not been prepared to construction level drawings. The roadway widening and addition of the right-turn lane would be fully designed after project approval with detailed design specifications for review by the City of El Segundo and Caltrans (since the right-turn lane would intersect with Pacific Coast Highway (a state highway.) This additional width will allow for a 12-foot center travel lane, a 10-foot lane, the proposed new 10-foot wide right turn lane, as well as a 5-foot sidewalk, all in compliance with the Circulation Element.

The existing street right-of-way width is 50 feet. A 4-foot dedication on the westerly portion of the block when added to the existing right-of-way will result in a 12-foot travel lane, a 10-foot curb lane, and a 5-foot sidewalk in compliance with the right-of-way standards for a 4-lane collector. The waiver request would result in a 2-foot parkway where a 5-foot parkway is required for a 4-lane collector; however, there is currently no parkway or landscaping along this right-of-way currently. The ability to provide some parkway landscaping in addition to full compliance with the roadway and sidewalk requirements still meets all of the waiver criteria and legislative intent of the General Plan and zoning regulations because no parkway exists today and it will improve the existing conditions by adding some landscaping along with the public benefit of the proposed right-turn lane.

Compliance with Waiver Criteria

This waiver request would meet all waiver criteria - The necessary roadway width will be provided and maintained in compliance with the Circulation Element. This waiver will not result in a reduction of roadway width or a reduction in the number of lanes. The project with the proposed 3-foot reduced dedication will still increase the right-of-way width of Mariposa Avenue and it only affects a portion of the block. A right turn lane and additional improvements will be provided for the remainder of the block that when added to the existing right-of-way will be wider than the right-of-way requirements in the Circulation Element. The project will meet the 5-foot sidewalk requirement and exceed the 44 inches required to meet disabled access requirements. The proposed waiver would not be detrimental to the neighborhood or district in which the property is located as the minimum roadway and sidewalks will be provided and the project will improve the existing roadway, sidewalk and parkway conditions. The proposed waiver is consistent with the legislative intent of Title 15 in that the proposed waiver will still allow a street

dedication that will expand the right-of-way in compliance with the minimum roadway standards and sidewalk standards for a 4-lane collector in the Circulation Element and a 2-foot parkway will be provided where none exists currently. Additionally, unusual conditions exist with existing buildings that constrain removing a portion of one of the existing buildings (Fairfield Inn and Suites "Food and Beverage" building) and replacing it with required parking in a parking structure in the exact same location as the existing Food and Beverage building which has a 0-foot setback from the Mariposa Avenue public right-of-way.

Mariposa Avenue – North Side.

Request to not construct right-of-way improvements on the north side of Mariposa Avenue.

Impacts of construction of right-of-way improvements:

- Unsafe and unsightly street condition with widening of roadway by 7 feet and sharp jog in the public sidewalk unless acquisition occurs for additional street frontage for widening on the north side of the block of Mariposa Avenue between Pacific Coast Highway and Washington Street.

The City's request is to provide a right-of-way dedication of 7 feet on the north side of Mariposa Avenue along the street frontage of the development project. The applicant proposes to dedicate the 7 feet but requests that they not be required to construct any of the right-of-way improvements.

The property frontage of the project site (north side) is approximately 163 feet in width. The blocks between Pacific Coast Highway and Washington Street span 806 feet in length. Only residential uses are located west of the project site. No parking is permitted on Mariposa Avenue and the site is sandwiched between the gas station property and the residential properties to the west.

Construction of the physical improvements for this approximately 163 feet of frontage would create an unsafe street condition by widening a small section of the street by 7 feet in the middle of the block, creating a recessed driveway with impaired visibility of oncoming traffic without acquisition and widening of the entire street, and a sharp jog in the public sidewalk that is not conducive to pedestrian pathway requirements. Therefore, this request is for the City to not require that the applicant construct the public right-of-way improvements (roadway widening, relocation of sidewalk and installation of new parkway) for the 7-foot width for expansion on the north side of Mariposa Avenue. The existing roadway and sidewalk would be maintained. The area for future dedication would be landscaped yard area until such future time as the dedication is executed and the physical improvements would be implemented.

Compliance with Waiver Criteria

The City's request for dedication of 7 feet of land for right-of-way expansion would occur prior to Certificate of Occupancy for the North Site development phase of the project. Granting the request to not construct the right-of-way improvements on the north side of

Mariposa Avenue would maintain the existing 50-foot right-of-way and variable width sidewalk (5-foot minimum) until the street is widened in the future.

The right-of-way includes a variable roadway width and sidewalk width currently. A 7-foot dedication when added to the existing right-of-way will result in a 12-foot travel lane, a 10-foot travel/parking lane, and a 5-foot sidewalk, and a 5-foot parkway in compliance with the right-of-way standards for a 4-lane collector.

The area that would be affected is a limited amount of street frontage on a very long block comprised of existing older residential uses and a gas station. Additionally, the project site frontage on the north side of Mariposa is occupied by a driveway access that also serves as a fire lane that is required by the Fire Department that will remain in the proposed project.

The existing right-of-way dimensions would be in conformance with the requirements for the minimum roadway width for emergency vehicle access, safe two-directional vehicular passage, minimum travel lane widths, and sidewalk accessibility requirements and the existing conditions would remain until such future time as the physical improvements would be constructed.

Additional Considerations

Deferral of Dedication of Land and Construction of Right-of-Way Improvements on Mariposa Avenue and Holly Avenue.

The City cannot require right-of-way dedications for the streets surrounding the project site until each of the three phases of development occur. The only exception is that the proposed dedications of Indiana Street and Holly Street (existing half of the 25-foot wide street easements would be required and occur with the recordation of Vesting Tract Map No. 82806.

First, the City cannot require implementation because the entire project site has existing active uses (the two existing hotels) that will remain and the City can only require implementation at such time as the applicant constructs the project entitlements. The existing Food and Beverage Building that is part of the Fairfield Inn and Suites Hotel will remain and can be used in the interim for permitted uses until such time as it is demolished to allow for construction of the new development at the “Fairfield Parking Site.’ The two other development sites (“South Site” and “North Site”), contain parking that is required for the two existing hotels and cannot be removed until such time as the applicant implements each respective phase of the development project.

The applicant requests that the City include a condition of approval that requires the dedications of land for right-of-way purposes would occur upon completion of construction before Certificates of Occupancy are issued for each development phase. The applicant requests that the City include a second condition of approval that would require construction of right-of-way improvements on Mariposa Avenue and Holly Avenue to commence once building permits have been issued for their associated

development phase and that they must be completed before a Certificate of Occupancy for that development phase is issued.

Waiver of Requirement to Construct Right-of-Way Improvements on Indiana Street, Palm Avenue, and the North Side of Mariposa Avenue

Due to the fact that there is not sufficient land available to complete the right-of-way requirements the full length of each block on these streets, the applicant requests a waiver to construct the right-of-way improvements for Indiana Street, Palm Avenue and the north side of Mariposa Avenue. Creating intermittent widening and narrowing of streets in this area will create unsafe driving conditions, lane width confusion, merging issues, and also create a disjointed street frontage that is not conducive to pedestrian travel paths.

Minimum vs. Maximum Commercial Street Width

The dedication requirements that the City believes are applicable to Palm Avenue, Indiana Street and Holly Avenue are based upon the local commercial street classification and are further based upon the maximum right-of-way width (64 feet) rather than the minimum right-of-way width (60 feet) for a local commercial street. The 4-foot difference relates to the width of the parking lanes on both sides of the street and whether they are 8 feet wide or 10 feet wide. If the City did not impose the maximum regulations, then the waiver request on Indiana Street would be reduced from 7 feet to 5 feet for the portion of the block where the existing hotels are located and from 7 feet to 1 foot for the portions of the block where the new development is proposed (the “South Site” and the “Fairfield Parking Site” located in the PCC MU-1 and COM-3 land use districts respectively).

Dedications Considered Taking if No Nexus Exists.

While the applicant is willing to discuss providing land for street dedication and paying for improvements upon those street dedications without any compensation as part of a development agreement, we think it is important to note that while the City has the right to require all the street dedications specified in the Circulation Element, compensation is required to the property owner for both street dedication and construction of improvements absent a clear nexus between the required dedication and the project related impacts. The traffic report indicates that the project that includes the dedication and construction of the right turn lane on Mariposa Avenue does not create any impacts that would require street widening and thus a taking would occur.

There is substantial case law to support this position. Ehrlich v. City of Culver City (1996) 12 Cal.4th 854, 871 – 873, the California Supreme Court explained the two-step procedure developed by the United States Supreme Court in Nollan v. California Coastal Commission (1987) 483 U.S. 825 and Dolan v. City of Tigard (1994) 512 U.S. 374. When there is a physical dedication, a court must first determine if there is an essential nexus between a legitimate state interest and the permit condition. If such nexus exists, the court must then decide if there is the required degree of connection between the exaction and the impacts of the project, i.e., a rough proportionality. Thirty years ago the California appellate court decided Rohn v. City of Visalia (1989) 214 Cal.App.3d 1463, a case very similar to the present situation. In that case Visalia

wanted a street dedication requirement to rezone property from residential to professional office in order to correct an alignment of the street as shown in the City's General Plan. However, the court found that the dedication could not be required where the studies showed there was no impact from the change in designation.

The law therefore prohibits the City from widening streets to the widths mandated in the determination by the City without the payment of just compensation to the developer. Similarly, absent the required nexus, the City cannot require the developer to make the street improvements.

Attachments:

1. PCC Street Dedication Waiver Table 1
2. PCC Street Dedication Waiver Table 2
3. PCC Proposed Street Dedication Plan Map

Table 1

STREET	CLASSIFICATION	MIN/MAX RIGHT-OF-WAY REQUIREMENTS	EXISTING CONDITIONS	CITY REQUIRED DEDICATION/IMPROVEMENT	APPLICANT REQUEST
Pacific Coast Highway * Only west side	Major Arterial	142' – 150' /75' centerline • 118 – 126' roadway • 6' sidewalk • 6' parkway	125'/85' to centerline from project side • 12-feet for sidewalks and parkways on each side	Nothing required	No Request
Palm Avenue * Only south side	Local Commercial and Local Residential	60'– 64' /30'-32' centerline • 40' – 44' roadway • 12' lane • 8' -10' parking lane • 5' sidewalk • 5' parkway 60'/30' centerline • 36' roadway • 10' lane • 8' parking lane • 8' sidewalk • 4' parkway	40' right-of-way/20' to centerline • 15' roadway • 5' sidewalk • No parkway	12' on project side of the street	Dedication of 12' will be provided; applicant will not be required to construct the right-of-way improvements
Indiana Street * Only east side	Local Commercial	60' – 64'/30'-32' centerline • 40' – 44' roadway • 12' lane • 8' -10' parking lane • 5' sidewalk • 5' parkway	50' right-of way/25' to centerline • Variable roadway width – approx. 17' • Variable sidewalk width – approx. 8' • No parkway	7' on project side of the street	Waiver of 7' along frontage of VTTM No. 82806 Lots 2 & 3 (where existing hotels are located); Waiver of 3' along frontage of VTTM No. 82806 Lots 1 & 4 (where new development will be located); the applicant will not be required to construct the right-of-way improvements

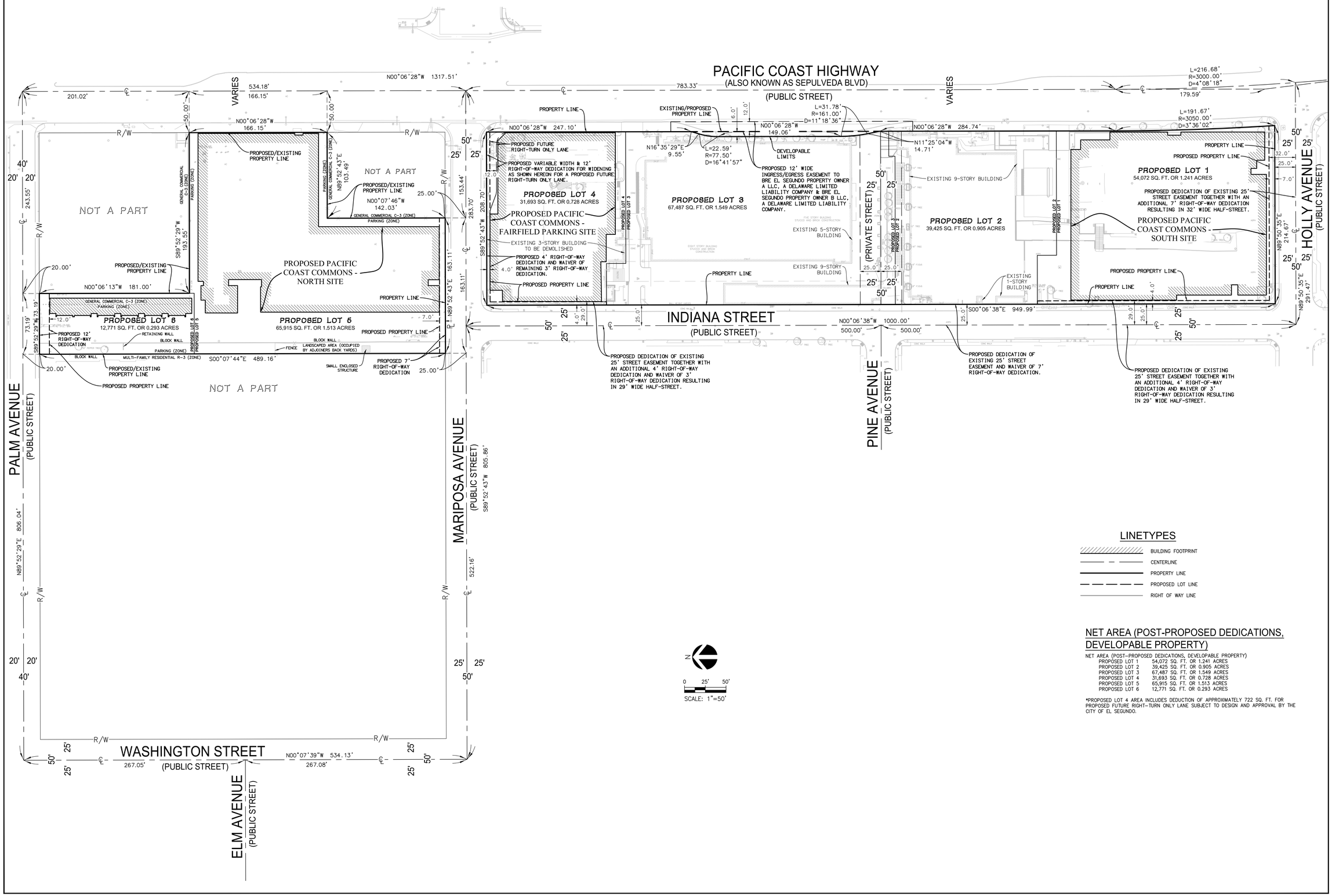
Table 1

STREET	CLASSIFICATION	MIN/MAX RIGHT-OF-WAY REQUIREMENTS	EXISTING CONDITIONS	CITY REQUIRED DEDICATION/IMPROVEMENT	APPLICANT REQUEST
Holly Avenue * Only north side; local commercial only along project frontage	Local Commercial	60'– 64' /30'-32' centerline • 40' – 44' roadway • 12' lane • 8' -10' parking lane • 5' sidewalk • 5' parkway	50' right-of-way/25' to centerline • 20' roadway • 5' sidewalk • No parkway	7' on project side of the street	No Request – Dedication of 7' will be provided and the right-of-way improvements will be constructed by applicant.
Mariposa Avenue * Both sides	4 lane collector	64'/32' centerline • 44' roadway • 12' lane • 10' parking • 5' sidewalk • 5 ' parkway	50' right-of-way • 36' roadway • 7' sidewalks each side • No parkway south side • No parkway north side	7' on each side of the street	South side - waiver of 3' to allow reduction to 4' dedication for the westerly portion of the block until the point where the street widens to provide a future 10-foot wide right-turn lane; the right-of-way improvements will be constructed by the applicant. North side – Dedication of 7' will be provided; the applicant will not be required to construct the right-of-way improvements.

Table 2

STREET	EXISTING CONDITIONS	MINIMUM ROADWAY WIDTH FOR EMERGENCY VEHICLES - 20’	MINIMUM ROADWAY/LANE WIDTH FOR TWO-DIRECTIONAL VEHICLE PASSAGE - 20’	MINIMUM LANE WIDTH FOR TRAVEL LANE – 10’	MINIMUM WIDTH FOR PARKING LANE – 8’	MINIMUM WIDTH FOR DISABLED ACCESS FOR PUBLIC SIDEWALKS – 44”
Pacific Coast Highway * Only west side	125’/85’ to centerline from project side • 12-feet for sidewalks and parkways on each side	Complies	Complies	Complies	Complies	Complies
Palm Avenue * Only south side	40’ right-of-way/20’ to centerline • 15’ roadway to street centerline • 5’ sidewalk • No parkway	Complies	Complies	Complies	Complies	Complies
Indiana Street * Only east side	50’ right-of way/25’ to centerline • Variable roadway width – approx. 17’ to street centerline • Variable sidewalk width – approx. 8’	Complies	Complies	Complies	Complies	Complies
Holly Avenue * Only south side; local commercial only along project frontage	50’ right-of-way/25’ to centerline • 20’ roadway to street centerline • 5’ sidewalk • No parkway	Complies	Complies	Complies	Complies	Complies
Mariposa Avenue * Both sides	50’ right-of-way • 36’ roadway • 7’ sidewalks each side • No parkway	Complies	Complies	Complies	Complies	Complies

PROPOSED STREET DEDICATION PLAN



N

0 25' 50'

SCALE: 1"=50'

LINETYPES

- BUILDING FOOTPRINT
- CENTERLINE
- PROPERTY LINE
- PROPOSED LOT LINE
- RIGHT OF WAY LINE

NET AREA (POST-PROPOSED DEDICATIONS, DEVELOPABLE PROPERTY)

NET AREA (POST-PROPOSED DEDICATIONS, DEVELOPABLE PROPERTY)

PROPOSED LOT 1	54,072 SQ. FT. OR 1.241 ACRES
PROPOSED LOT 2	39,425 SQ. FT. OR 0.905 ACRES
PROPOSED LOT 3	67,487 SQ. FT. OR 1.549 ACRES
PROPOSED LOT 4	31,693 SQ. FT. OR 0.728 ACRES
PROPOSED LOT 5	65,915 SQ. FT. OR 1.513 ACRES
PROPOSED LOT 6	12,771 SQ. FT. OR 0.293 ACRES

*PROPOSED LOT 4 AREA INCLUDES DEDUCTION OF APPROXIMATELY 722 SQ. FT. FOR PROPOSED FUTURE RIGHT-TURN ONLY LANE SUBJECT TO DESIGN AND APPROVAL BY THE CITY OF EL SEGUNDO.

kpff

700 FLOWER ST., Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
F: 213.266.5294
www.kpff.com

REVISIONS

DATE		ISSUED FOR

DATE	01/22/2021
PROJECT NUMBER	1800649
DRAWN BY	DB
CHECKED BY	CJ
SCALE	AS SPECIFIED

PROJECT DESCRIPTION

401, 475 & 525 N PACIFIC COAST HWY
EL SEGUNDO, CA 90245

SHEET NUMBER

SHEET 1 0F 1