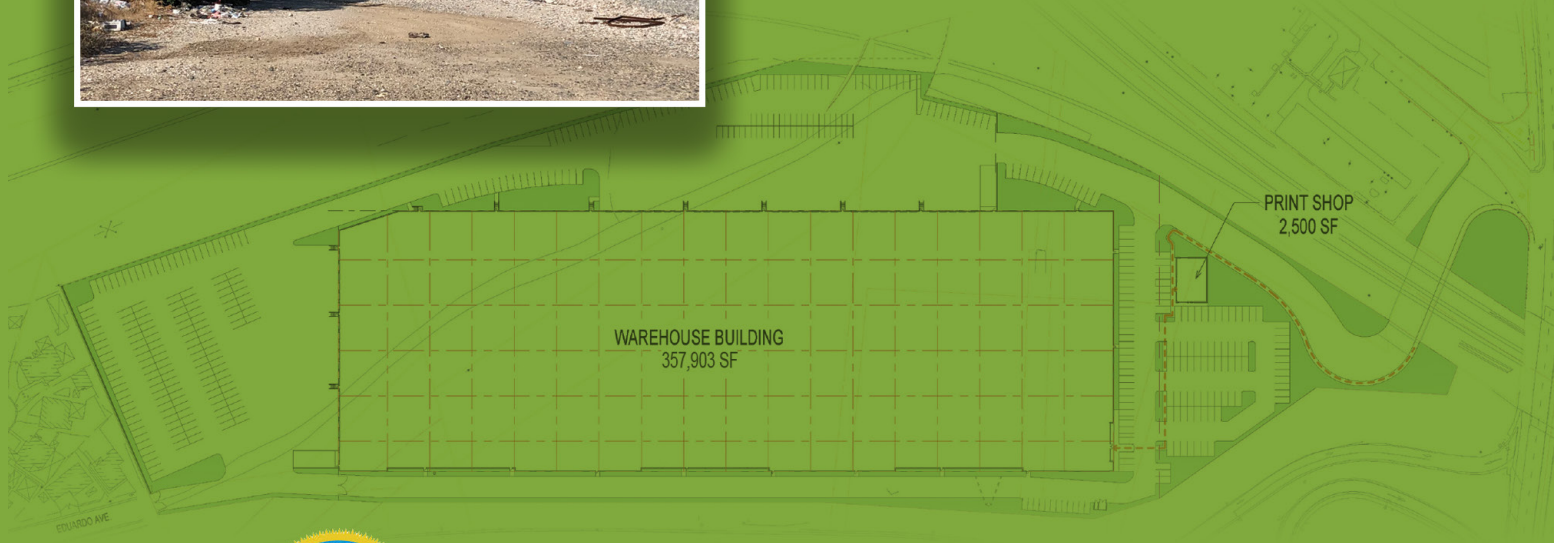
FINAL | APRIL 2022

Beverly Boulevard Warehouse Project

Initial Study/Mitigated Negative Declaration



Prepared For:
City of Pico Rivera

Prepared By:
Michael Baker International

Michael Baker
INTERNATIONAL

FINAL INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

Beverly Boulevard
Warehouse Project

Lead Agency:

CITY OF PICO RIVERA
6615 Passons Boulevard
Pico Rivera, California 90660
Contact: Mr. Hector Hernandez
562.801.4340

Prepared by:

MICHAEL BAKER INTERNATIONAL
5 Hutton Centre Drive, Suite 500
Santa Ana, California 92707
Contact: Mr. Alan Ashimine
949.855.5710

April 2022

JN 179201

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ATTACHMENTS

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This document is designed for double-sided printing to conserve natural resources.

1.0 Introduction

1.0 INTRODUCTION

The proposed Beverly Boulevard Project would include construction of a warehousing/distribution building and a print shop facility on the 19.06-acre site. The new warehousing/distribution building would consist of a 357,903-gross square-foot building footprint, which would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass approximately 2,500 gross square feet of building area and include 29 surface parking spaces. The project would also include 22 bicycle spaces and approximately 85,710 square feet of landscaping on-site. The project proposes to enhance the local economy and municipal revenue, and furnish local employment opportunities for residents.

In accordance with the California Environmental Quality Act (CEQA) Guidelines, an Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the proposed project. The IS/MND was made available for public review and comment pursuant to CEQA Guidelines Section 15070. The public review period commenced on December 3, 2021 and ended on January 3, 2022. The IS/MND and supporting attachments were available for review by the general public at the City of Pico Rivera City Hall, 6615 Passons Boulevard, Pico Rivera, California 90660, in addition to electronic format at https://www.pico-rivera.org/depts/ced/planning/projects.asp.

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2.0 Responses to Comments

2.0 RESPONSES TO COMMENTS

During the public review period, correspondence was received on the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) from a number of public agencies and interested parties. The following is a list of the agencies and parties that submitted correspondence related to the Draft IS/MND during the public review period:

Comment Letter No.	Person, Firm, or Agency	Letter Dated
1	Toan Duong, Land Development Los Angeles County Department of Public Works	December 6, 2021
2	Richard Drury Lozeau Drury	December 6, 2021
3	Gabrielino Band of Mission Indians/Kizh Nation	December 8, 2021
4	Lijun Sun, Program Supervisor, CEQA IGR South Coast Air Quality Management District	December 21, 2021
5	Miya Edmonson, IGR/CEQA Branch Chief California Department of Transportation	December 27, 2021
6	Erinn Wilson-Olgin, Environmental Program Manager California Department of Fish and Wildlife	December 28, 2021
7	Mandy Huffman, Environmental Planner Los Angeles County Sanitation Districts	December 29, 2021
8	Richard Drury Lozeau Drury	December 30, 2021
9	Andy Lee	December 31, 2022
10	Gary Ho, Bum Collins & Ho, LLP, Golden State Environmental Justice Alliance	January 2, 2022
11	Adam Salcido	January 3, 2022
12	Matthew Cervantes, PE, Senior Utilities Engineer California Public Utilities Commission	January 3, 2022
13	Mandy Huffman, Environmental Planner Los Angeles County Sanitation Districts	January 3, 2022
14	Frank Wen, PhD Southern California Association of Governments	January 3, 2022
15	Workers and Families for Better Pico Rivera	January 3, 2022
16	Toan Duong, Land Development Los Angeles County Department of Public Works	January 27, 2022

Although the *CEQA Guidelines* do not require a Lead Agency to prepare written responses to comments received (see *CEQA Guidelines* Sections 15704 and 15088), the City has elected to prepare the following written responses with the intent of conducting a comprehensive and meaningful evaluation of the proposed project (see Gray v. County of Madera (2008) 167 Cal.App.4th 1099, 1111 ["because the Board never had a legal duty to respond to comments, the inadequacy of the Board's responses to the comments is not sufficient to render approval of the CEQA Project ineffective or contrary to law. To hold otherwise could discourage lead agencies from addressing and considering comments which they did not have obligation to formally respond to"]). The number designations in the responses are correlated to the bracketed and identified portions of each comment letter.

Responses may include text changes to clarify/amplify or correct information in the Draft IS/MND, as requested by the Lead Agency or due to environmental points raised in the comments. A response to a comment requiring revisions to the Draft IS/MND presents the relevant Draft IS/MND text in a box, with new text indicated by underlining and deleted text indicated by ~~strike through~~, as shown in the following example. These text changes are also reflected in Section 4.0, *Errata*, of this Final IS/MND.

~~Deleted text~~ Added text

From: Toan Duong [mailto:TDUONG@dpw.lacounty.gov]
Sent: Monday, December 06, 2021 10:03 AM
To: Daniel Quintana <DQUINTAN@dpw.lacounty.gov>; Hector Hernandez <HHernandez@pico-rivera.org>
Cc: Kent Tsujii <KTSUJII@dpw.lacounty.gov>; Aracely Lasso <ALASSO@dpw.lacounty.gov>; Daniel Keyribaryan <DKeyribaryan@dpw.lacounty.gov>; Sulic, Ivan <ISulic@bos.lacounty.gov>; Wilson, Jayme <JWilson@bos.lacounty.gov>; Sam Chinn <SCHINN@dpw.lacounty.gov>; Jason Rietze <JRietze@dpw.lacounty.gov>
Subject: RE: City of Pico Rivera - Beverly Boulevard Warehouse Project - Notice of Intent

Hector,

In order to substantiate the IS/MND findings for this project, please also provide the following support documents:

- Section 4.10 Hydrology - Detail drainage plan or technical report to support the less than significant impact finding. The report should demonstrate that there is no additional runoff that discharges into LACFCD drainage facility for post-development. 1-1
- Section 4.17 Transportation – Technical report (Traffic Impact Analysis/VMT Memorandum reviewed by PW) showing t, and mitigations for the temporary/emergency access through the unincorporated streets. The findings and mitigations for the temporary access should be included in the IS/MND as it is needed for road permit construction access. 1-2

In addition to PW review, the County Department of Public Health should also review this project for other concerns (Noise, vibration, hazardous material, etc.) that could affect the adjacent unincorporated area residents. 1-3

Thank you.

From: Daniel Quintana <DQUINTAN@dpw.lacounty.gov>
Sent: Monday, December 6, 2021 9:23 AM
To: Hector Hernandez <HHernandez@pico-rivera.org>
Cc: Toan Duong <TDUONG@dpw.lacounty.gov>; Kent Tsujii <KTSUJII@dpw.lacounty.gov>; Aracely Lasso <ALASSO@dpw.lacounty.gov>

Subject: RE: City of Pico Rivera - Beverly Boulevard Warehouse Project - Notice of Intent

Good morning Hector,

Toan Duong from our Land Development Team cede in this email will be the point of contact for Los Angeles County Public Works. 1-4

Thank you.
Daniel Quintana, P.E.
Senior Civil Engineer
Los Angeles County Public Works
(626) 300-4718

From: Hector Hernandez <HHernandez@pico-rivera.org>
Sent: Monday, December 6, 2021 7:50 AM
To: Sulic, Ivan <ISulic@bos.lacounty.gov>; Wilson, Jayme <JWilson@bos.lacounty.gov>; Daniel Quintana <DQUINTAN@dpw.lacounty.gov>
Subject: City of Pico Rivera - Beverly Boulevard Warehouse Project - Notice of Intent
Importance: High

Hello,

Please review the attached Notice of Intent (NOI) to adopt a Mitigated Negative Declaration for the Beverly Boulevard Warehouse Project. The NOI includes information regarding the project description and information on how to comment on and review the NOI and Initial Study/Mitigated Negative Declaration (IS/MND). The NOI and IS/MND are available for review on the City's website at: https://www.pico-rivera.org/depts/ced/planning/projects.asp.

The 30-day public review period begun on Friday, December 3, 2021, and will conclude on Monday, January 3, 2022. Please submit comments in writing to the mailing address or email provided below. Comment letters must be received by 5:00 p.m. on January 3, 2022.

Mr. Hector Hernandez
Project Planner
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, California 90660
562/801-4340
hhernandez@pico-rivera.org

Thank you

RESPONSE TO COMMENT LETTER NO. 1

Toan Duong, Land Development
Los Angeles County Department of Public Works
December 6, 2021

1-1 This commenter requests that a detailed drainage plan or technical report be provided in order to substantiate the findings detailed in Section 4.10, *Hydrology and Water Quality* of the Draft IS/MND. It should be noted that a Technical Memorandum pertaining to the project's potential drainage impacts related to Los Angeles County Flood Control District (LACFCD) facilities has been attached to this Final IS/MND as Attachment A, *Drainage Technical Memorandum*. The Technical Memorandum notes that the project would not result in any increase in runoff discharging to LACFCD drainage facilities, and impacts would be less than significant in this regard.

1-2 The commenter requests additional information related to access along roadways in unincorporated Los Angeles County. A detailed and comprehensive analysis of vehicle miles traveled (VMT) and traffic impacts was provided as Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report* of the Draft IS/MND, which was prepared in consultation with the City of Pico Rivera and in accordance with the current Los Angeles County Public Works Transportation Impact Guidelines and the Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA. The Los Angeles County Department of Public Works was notified of availability of the Draft IS/MND and reviewed the Draft IS/MND and Appendix F during the public review period. The Draft IS/MND analyzed transportation impacts, including temporary and permanent project impacts on local roadways, in Section 4.17, *Transportation*, and included Mitigation Measure TR-1 on page 4.17-7 to ensure that temporary impacts on circulation and emergency access are reduced to less than significant. Specifically, Mitigation Measure TR-1 requires a Traffic Management Plan (TMP) to be prepared and implemented, which would include various provisions to ensure continuous and adequate emergency access during the construction process. The TMP could include measures such as construction signage, pedestrian protection, limitations on timing for lane closures to avoid peak hours, temporary striping plans, construction vehicle routing plans, and the need for a construction flag person to direct traffic during heavy equipment use. All other Project impacts related to transportation were determined to be less than significant. This comment does not provide any substantial evidence that further review under CEQA is required or that the project may have a significant environmental impact. As analyzed in the Draft IS/MND, the whole of the record supports the conclusion that the Project's traffic impacts are less than significant with the incorporation of mitigation.

1-3 The commenter states that the County Department of Public Health should also review this project for other concerns (noise, vibration, hazardous material, etc.) that could affect the adjacent unincorporated area residents. The Draft IS/MND addressed all of the required topical issues identified under Appendix G of the CEQA Guidelines, including the environmental topics that have been identified by the commenter. These topics are specifically discussed in Section 4.9, *Hazards and Hazardous Materials* and Section 4.13, Noise of the Draft IS/MND and impacts were determined to be less than significant. It should be noted that the Notice of Intent (NOI) associated with the Draft IS/MND was provided to the Los Angeles County of Department of Public Health on December 6, 2021, and no response was received.

1-4 This comment requests that Toan Duong be the point of contact for the project for the Los Angeles County Department of Public Works. This comment is noted, does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

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LOZEAU DRURY LLP

T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
richard@lozeaudrury.com

Via Email

December 6, 2021

Hector Hernandez, Project Planner
Community & Economic Development Department
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, CA 90660
hhernandez@pico-rivera.org

Re: Comment on Mitigated Negative Declaration, Beverly Boulevard Warehouse Project (SCH 2021120053)

Dear Mr. Hernandez:

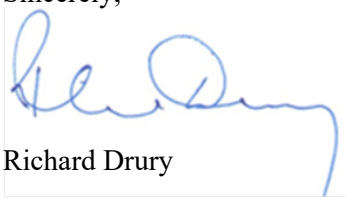
I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the Beverly Boulevard Warehouse Project (SCH 2021120053), including all actions related or referring to the proposed construction of an approximately 357,903 square foot warehouse/distribution building, located on a 19.06-acre project area situated between the San Gabriel River to the west and Interstate 605 to the east, south of Beverly Boulevard, in the City of Pico Rivera ("Project").

2-1

After reviewing the IS/MND, we conclude the IS/MND fails as an informational document, and that there is a fair argument that the Project may have adverse environmental impacts. Therefore, we request that the City of Pico Rivera ("City") prepare an environmental impact report ("EIR") for the Project pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000, et seq.

We reserve the right to supplement these comments, including but not limited to at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist*., 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,



Richard Drury

RESPONSE TO COMMENT LETTER NO. 2

Richard Drury
Lozeau Drury
December 6, 2021

2-1 This comment provides a summary of the project description and project location, and notes that there is a fair argument that the project may have adverse environmental impacts, and requests that an Environmental Impact Report (EIR) be prepared. The commenter also notes their right to supplement these comments in the future. This comment does not provide any specifics related to the adequacy of the environmental analysis in the Draft IS/MND, and the commenter has not identified any basis for withdrawal, revision or recirculation of the Draft IS/MND. This comment does not provide any substantial evidence that further review under CEQA is required or that the project may have a significant environmental impact. As analyzed in the Draft IS/MND, the whole of the record supports the conclusion that the project's impacts are less than significant with the incorporation of mitigation. Thus, no further response is required.

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Adopt Mitigative Declaration Study / Mitigated Negative Declaration

December 8,2021

Project Name: Beverly Boulevard Warehouse Project

We have received your Notice of the Adopt Mitigative Negative Declaration for the Beverly Boulevard Warehouse Project. Our Tribal Government would like to be consulted if any ground disturbance will be conducted for this project. 3-1

Sincerely,
Gabrieleno Band of Mission Indians/Kizh Nation
(1844) 390-0787 Office

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

RESPONSE TO COMMENT LETTER NO. 3

Gabrielino Band of Mission Indians - Kizh Nation
December 12, 2021

3-1 The comment notes that the Notice to the Adopt Mitigative Negative Declaration for the project has been received, and that the Gabrielino Band of Mission Indians – Kizh Nation would like to be consulted if any ground disturbance will be conducted for this project. As discussed in Draft IS/MND Section 4.18, *Tribal Cultural Resources*, the City distributed letters to tribes soliciting consultation under Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18) on July 1, 2020, including the Gabrielino Band of Mission Indians – Kizh Nation. At the conclusion of the 90-day tribal response period, the City did not receive any requests for consultation. As discussed in Section 4.18, while there were no cultural resources observed on-site, implementation of Mitigation Measure CUL-1 would require archaeological and Native American monitoring during construction to minimize impacts related to the potential discovery of previously unknown tribal cultural resources. Thus, impacts to tribal cultural resources would be less than significant.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:
hhernandez@pico-rivera.org
Hector Hernandez, Project Planner
City of Pico Rivera, Planning Department
6615 Passons Boulevard
Pico Rivera, California 90660

December 21, 2021

Mitigated Negative Declaration (MND) for the Proposed Beverly Boulevard Warehouse Project (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The City of Pico Rivera is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments include recommended revisions to the CEQA regional air quality impacts analysis for cleanup activities during construction and information about South Coast AQMD Rules 2305 and 316 that the Lead Agency should include in the Final MND.

South Coast AQMD Staff's Summary of Project Information in the MND

Based on the MND, the Proposed Project consists of construction and operation of a 357,903-square-foot warehouse on 19.06 acres and is located on the southwest corner of Interstate 605 and Beverly Boulevard in the City of Pico Rivera. While the nearest sensitive receptor property line is located in the City of Whittier, adjacent to the southern portion of the Proposed Project, the nearest structure is located approximately 12 feet away[1]. Construction of the Proposed Project will occur in a 16-month period[2]. At full buildout in October 2023, the Proposed Project will include 52 loading docks to the northwest and south of the Proposed Project and generate 192 truck trips a day[3]. 4-1

South Coast AQMD Staff's Comments

CEQA Regional Air Quality Impacts Analysis for Cleanup Activities during Construction

Based on the Hazards and Hazardous Materials Section in the MND, preparation of a soil management plan to identify necessary cleanup activities, which may include, but not limited to, excavation and disposal of contaminated soil is required prior to the issuance of any grading permit for the Proposed Project[4]. However, the Lead Agency did not analyze air quality impacts from cleanup activities in the MND. 4-2

Cleanup activities will likely involve the use of heavy-duty, diesel-fueled trucks for soil export and result in emissions from truck hauling activities and vehicle trips by workers that will be

[1] MND. Page 4.13-10.
[2] *Ibid.* Page 2-12.
[3] *Ibid.* Page 4.3-15.
[4] *Ibid.* Page 4.9-4.

required to conduct cleanup activities. Additionally, cleanup activities will likely require the use of additional equipment that may be different from typical equipment for grading and site preparation for construction. Since cleanup activities are reasonably foreseeable at the time the MND was prepared, the Lead Agency should use good faith, best efforts to provide information on the scope, types, and duration of cleanup activities, quantify emissions from cleanup activities, and include those emissions in the Proposed Project's construction emissions profile to be compared to South Coast AQMD's air quality CEQA significance thresholds for construction to determine the level of significance in the Final MND. Alternatively, if emissions from cleanup activities are not included in the Final MND, the Lead Agency should provide reasons for not including them supported by substantial evidence in the record.

Based on the emission calculations from the CalEEMod output files, the Lead Agency used the non-default one-way truck trip length of 30 miles to quantify the Proposed Project's construction emissions from hauling construction materials and importing or exporting soil. Since cleanup activities could include the removal and disposal of contaminated soil, and depending on the type of contamination, contaminated soil may not be accepted at Olinda Alpha Landfill, El Sobrante Landfill, Azusa Land Reclamation, or the Frank R. Bowerman Sanitary Landfill servicing the City of Pico Rivera[5] and may need to be disposed at a permitted hazardous disposal facility outside Los Angeles County with a one-way truck trip length that is likely longer than 30 miles. Therefore, South Coast AQMD staff recommends that the Lead Agency identify the permitted hazardous disposal facility that the Proposed Project could use to dispose contaminated soil, disclose the information in the Final MND, and re-calculate the Proposed Project's construction emissions from haul truck trips for the transport and disposal of contaminated soil based on the appropriate one-way truck trip length. If construction emissions from haul truck trips are not re-calculated in the Final MND, the Lead Agency should provide reasons for not re-calculating them supported by substantial evidence in the record. 4-2 (cont.)

South Coast AQMD Rule 2305 and Rule 316

On May 7, 2021, South Coast AQMD's Governing Board adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and Rule 316 – Fees for Rule 2305. Rules 2305 and 316 are new rules that will reduce regional and local emissions of nitrogen oxides (NOx) and particulate matter (PM), including diesel PM. These emission reductions will reduce public health impacts for communities located near warehouses from mobile sources that are associated with warehouse activities. Also, the emission reductions will help the region attain federal and state ambient air quality standards. Rule 2305 applies to owners and operators of warehouses greater than or equal to 100,000 square feet. Under Rule 2305, operators are subject to an annual WAIRE Points Compliance Obligation that is calculated based on the annual number of truck trips to the warehouse. WAIRE Points can be earned by implementing actions in a prescribed menu in Rule 2305, implementing a site-specific custom plan, or paying a mitigation fee. Warehouse owners are only required to submit limited information reports, but they can opt in to earn Points on behalf of their tenants if they so choose because certain actions to reduce emissions may be better achieved at the warehouse development phase, for instance the installation of solar and charging infrastructure. Rule 316 is a companion fee rule for Rule 2305 to allow South Coast AQMD to recover costs associated 4-3

[5] *Ibid.* Page 4.19-3.

with Rule 2305 compliance activities. Since the Proposed Project consists of the development of one 357,903-square-foot warehouse, the Proposed Project's warehouse owners and operators will be required to comply with Rule 2305 once the warehouse is occupied. Therefore, South Coast AQMD staff recommends that the Lead Agency review South Coast AQMD Rule 2305 to determine the potential WAIRE Points Compliance Obligation for future operators and explore whether additional project requirements and CEQA mitigation measures can be identified and implemented at the Proposed Project that may help future warehouse operators meet their compliance obligation. South Coast AQMD staff is available to answer questions concerning Rule 2305 implementation and compliance by phone or email at (909) 396-3140 or waire-program@aqmd.gov. For implementation guidance documents and compliance and reporting tools, please visit South Coast AQMD's WAIRE Program webpage.[6] 4-3 (cont.)

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. 4-4

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact me at lsun@aqmd.gov, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun
Program Supervisor, CEQA IGR
Planning, Rule Development and Area Sources

LS
LAC211207-02
Control Number

[6] South Coast AQMD. WAIRE Program. Accessed at: http://www.aqmd.gov/waire.

RESPONSE TO COMMENT LETTER NO. 4

Lijun Sun, Program Supervisor, CEQA IGR
South Coast Air Quality Management District
December 21, 2021

4-1 This comment provides background information regarding the South Coast Air Quality Management District (SCAQMD) and provides a general summary of the proposed project and the Draft IS/MND's air quality analysis. This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND's environmental analysis. The City of Pico Rivera decision makers will consider all comments on the proposed project. Thus, no further response is required.

4-2 The commenter states that the Draft IS/MND did not analyze air quality impacts from soil cleanup activities. The CalEEMod modeling was re-run to account for hauling trip distances to dispose of contaminated soils; these results are included in Attachment B. As discussed in Section 4.9, *Hazards and Hazardous Materials*, the project site may include contaminated soil associated with on-site railroad activities and/or historical uses. Pursuant to Mitigation Measure HAZ-1, prior to the issuance of any grading permit for the project, the project applicant would retain a Phase II/Site Characterization Specialist to identify the extent of on-site contamination and necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. Based on information provided in Appendix H, *Phase I ESA* of the Draft IS/MND, the Draft IS/MND has been updated with an assumption that soil cleanup activities would generate up to approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil, which would be exported to the Kettleman Hills Facility, located approximately 175 miles from the project site in Kettleman City, California. During the grading phase of construction, the project would require approximately 65,000 cubic yards of soil import and approximately 1,978 cubic yards of additional soil import, which would be sourced from sites located approximately 30 miles from the project site. In addition, the project would require approximately 2,000 cubic yards of regular soil export, which would be routed to the Olinda Landfill, located approximately 24 miles from the project site. Overall, the combined weighted average hauling trip distance for soil import and export would be approximately 34 miles, which would result in an increase of approximately 4 miles when compared to the Draft IS/MND hauling trip distance of 30 miles. In addition, construction emissions were updated to include diesel emissions from potential soil cleanup activities, which would include the operation of one drill rig for approximately 7 days and an average of 8 hours per day. It is anticipated that the cleanup activities would occur before the grading phase of construction. Additional information related to on-site contamination and remediation can be found in Response 8-4, below.

The project's air quality emissions during construction have been updated on pages 4.3-8, 4.3-9, 4.3-13, and 4.3-14 of the Draft IS/MND and are reflected below and in Section 4.0, *Errata*, of the Final IS/MND. Additionally, the greenhouse gas emissions and energy consumption associated with the project have been updated on pages 4.6-5, 4.8-6, and 4.8-7 of the Draft IS/MND and are reflected below and in Section 4.0, *Errata*, of the Final IS/MND. Updated CalEEMod modeling worksheets are included in Attachment B, *Air Quality/Greenhouse Gas/Energy Modeling Worksheets*. As shown below, the project's air quality and greenhouse gas emissions would remain below the applicable SCAQMD thresholds. Further, the project's energy consumption impacts would remain less than significant. As such, these changes do not represent "significant new information" as defined in CEQA Guidelines Section 15088.5.

Draft IS/MND Section 4.3, *Air Quality*, Pages 4.3-8 and 4.3-9

Short-Term Construction Emissions

The project involves construction activities associated with cleanup activities, grading, on-site earthwork, building construction, paving, and architectural coating. The project would be constructed over approximately 17 months. The proposed earthwork would involve approximately 60,000 cubic yards of cut and 10,000 cubic yards of fill, resulting in approximately 65,000 cubic yards of import and 2,000 cubic yards of export. As discussed in Section 4.9, *Hazards and Hazardous Materials*, the project site may include contaminated soil associated with on-site railroad activities and/or historical uses. Pursuant to Mitigation Measure HAZ-1, prior to the issuance of any grading permit for the project, the project applicant would retain a Phase II/Site Characterization Specialist to identify the extent of on-site contamination and necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. To provide a conservative analysis, it was assumed that soil cleanup activities would result in approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil export in addition to the 2,000 cubic yards of regular export, and the same amount of regular soil import for backfilling. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site.[1] The analysis of daily construction emissions has been prepared utilizing CalEEMod. An individual CalEEMod run was compiled for the project's construction emissions; refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for the CalEEMod outputs and results. Table 4.3-2, *Construction Emissions*, presents the anticipated daily short-term construction emissions.

Table 4.3-2
Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Emissions[2,3]						
Year 1	~~7.056~~6.72	~~95.01~~82.03	51.06	~~0.230~~0.18	~~12.78~~11.33	~~6.29~~5.83
Year 2	~~70.34~~74.71	47.40	58.64	0.14	~~6.73~~7.07	3.03
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: ROG = reactive organic gases; NO_X = nitrous oxides; CO = carbon monoxide; SO_2 = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

1. Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case.
2. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.
3. The project's 17-month construction schedule would occur over two calendar years.

Refer to Appendix A, *Air Quality/Greenhouse Gas /Energy Data*, for assumptions used in this analysis.

[1] While Chapter 18.42 of the City's Municipal Code allows for construction activities to occur between seven a.m. and seven p.m., it is anticipated that construction equipment would not be used during every hour of the day. Rather, consistent with industry standards and typical construction practices, it is assumed that each piece of equipment listed would operate up to 8 total hours per day. For example, during grading operations, it can be reasonably inferred that water trucks would not operate continuously over a 12-hour period but would instead be used as necessary to minimize fugitive dust. In fact, most pieces of equipment likely would operate for fewer hours per day than indicated in the modeling.

Draft IS/MND Section 4.3, *Air Quality,* Pages 4.3-13 and 4.3-14

Construction

Although the site is approximately 19 acres, the total acres disturbed per day is based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. Based off the CalEEMod results, the project would disturb approximately ~~297~~594 acres over ~~66~~132 days (4.5 acres per day). Therefore, the LST thresholds interpolated from the two acres and five acres thresholds were utilized for the construction LST analysis. As noted above, the closest sensitive receptor to the project site is a residential property adjacent to the south of the project's construction limits. This sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD LST Methodology, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. As the nearest sensitive use is located adjacent to the project site, the lowest LST values of 25 meters were utilized. Table 4.3-4, *Localized Significance of Construction Emissions*, shows the construction-related emissions with incorporation of SCAQMD Rule 402 and 403. It is noted that the localized emissions presented in Table 4.3-4 are less than those in Table 4.3-1 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As seen in Table 4.3-4, on-site emissions with SCAQMD rules applied would not exceed the LSTs for SRA 5.

Table 4.3-4
Localized Significance of Construction Emissions

Source	Pollutant (pounds/day)[4]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 1				
On-Site Construction Emissions with SCAQMD Rules Applied[2]	~~62.92~~62.93	41.71	~~8.90~~8.88	~~5.07~~5.06
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Year 2				
On-Site Construction Emissions with SCAQMD Rules Applied[3]	31.37	35.93	1.39	1.30
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately 4.5 acres; therefore, thresholds interpolated from 2-acre and 5-acre thresholds were used), the distance to sensitive receptors, and the source receptor area (SRA 5).
2. For construction year 1, the grading phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
3. For construction year 2, the building construction phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
4. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.

Refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for detailed model input/output data.

Draft IS/MND Section 4.6, *Energy*, Page 4.6-5

Less Than Significant Impact. The project's estimated energy consumption is summarized in Table 4.6-1, *Project and Countywide Energy Consumption*. As shown in Table 4.6-1, the project's energy usage would constitute an approximate 0.0031 percent increase over Los Angeles County's typical annual electricity consumption and an approximate 0.0002 percent increase over Los Angeles County's typical annual natural gas consumption. The project's construction and operational vehicle fuel consumption would increase Los Angeles County's consumption by ~~0.0221~~0.0259 percent and 0.0058 percent, respectively (Criterion 1).

Table 4.6-1
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	Los Angeles County Annual Energy Consumption[2]	Percentage Increase Countywide[2]
Electricity Consumption	1,460 MWh	46,556,118 MWh	0.0031%
Natural Gas Consumption	3,119 therms	1,812,591,714 therms	0.0002%
Fuel Consumption			
• Construction Fuel Consumption[3]	~~134,297~~157,856 gallons	608,470,142 gallons	~~0.0221~~0.0259%
• Operational Automotive Fuel Consumption[3]	224,447 gallons	3,873,708,021 gallons	0.0058%

Notes:
1. As modeled in CalEEMod version 2020.4.0.
2. The project increases in electricity and natural gas consumption are compared to the total consumption in Los Angeles County in 2019. The project increases in automotive fuel consumption are compared with the projected Countywide fuel consumption in 2022.
   Los Angeles County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms. energy.ca.gov/elecbycounty.aspx, accessed October 5, 2020.
   Los Angeles County natural gas consumption data source: California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy. ca.gov/gasbycounty.aspx, accessed October 5, 2020.
3. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2017 model.

Refer to Appendix A, for assumptions used in this analysis.

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading, building construction, paving, and architectural coating. As indicated in Table 4.6-1, the overall fuel consumption during project construction would be approximately ~~134,297~~157,856 gallons, which would result in a nominal increase (~~0.0221~~0.0259 percent) in fuel use in the County. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (Criterion 2).

Draft IS/MND Section 4.8, *Greenhouse Gas Emissions*, Page 4.8-6

Table 4.8-1
Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e
	Metric Tons/yr[1]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	
Direct Emissions						
• Construction • (total of ~~2,207.84~~2,366.40 $MTCO_2e$ amortized over 30 years)	~~72.13~~77.34	0.01	~~0.28~~0.34	<0.01	~~1.18~~1.20	~~73.59~~78.88
• Area Source	0.02	0.00	0.00	0.00	0.00	0.02
• Mobile Source	1,649.07	0.06	1.61	0.17	49.29	1,699.97
Total Direct Emissions[3]	***~~1,721.22~~1,726.43***	***0.08***	***~~1.89~~1.95***	***0.17***	***~~50.47~~50.49***	***~~1,773.58~~1,778.87***
Indirect Emissions						
• Energy	275.54	0.02	0.56	<0.01	0.88	276.98
• Solid Waste Generation	34.43	2.03	50.87	0.00	0.00	85.30
• Water Demand	179.14	2.18	54.39	0.05	15.70	249.23
Total Indirect Emissions[3]	***489.11***	***4.23***	***105.82***	***0.06***	***16.58***	***611.51***
Total Project-Related Emissions[3]	***~~2,385.09~~2,390.38 $MTCO_2e$/year***					
GHG Emissions Threshold	***10,000.00 $MTCO_2e$/year***					
GHG Emissions Exceed Threshold?	***No***					

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2020.4.0 (CalEEMod) computer model.
2. CO_2 Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed September 2020.
3. Totals may be slightly off due to rounding.
4. Emission reductions applied in the CalEEMod model include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code and the 2019 CALGreen Code. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources.

Refer to Appendix A, for detailed model input/output data.

Direct Project-Related Sources of Greenhouse Gases

- *Construction Emissions*. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[2] As shown in Table 4.8-1, the proposed project would result in ~~73.59~~78.88 $MTCO_2e$ per year (amortized over 30 years), which represents a total of ~~2,207.84~~2,366.40 $MTCO_2e$ from construction activities.

[2] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (SCAQMD). SCAQMD, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009.

Draft IS/MND Section 4.8, *Greenhouse Gas Emissions*, Page 4.8-7

> *Total Project-Related Sources of Greenhouse Gases*
>
> As shown in Table 4.8-1, the total amount of proposed project related GHG emissions from direct and indirect sources combined would total ~~2,385.09~~2,390.38 $MTCO_2e$ per year, which is below the SCAQMD GHG threshold of 10,000 $MTCO_2e$ per year. Thus, impacts in this regard would be less than significant.

4-3 This comment summarizes SCAQMD's adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE), and Rule 316 – Fees for Rule 2305. The commenter recommends reviewing Rule 2305 to determine if mitigation can be incorporated to ensure future warehouse operators meet their compliance obligation. However, the project would be required to comply with Rule 2305, and the mitigation recommended by the commenter would not be required in this regard. WAIRE compliance has been incorporated on Page 4.3-11 of the Draft IS/MND and is reflected below.

Draft IS/MND Section 4.3, *Air Quality*, Page 4.3-11

> Total Operational Emissions
>
> As shown in Table 4.3-3, the total operational emissions for both summer and winter would not exceed established SCAQMD thresholds. Nevertheless, the project would be required to comply with SCAQMD Rule 2305 – Warehouse Indirect Source Rule, recently adopted in May 2021. Total operational emissions would be further reduced by implementing emission reduction measures established in Rule 2305. Therefore, impacts in this regard would be less than significant.

4-4 The City will consider and process the Mitigated Negative Declaration for this project in accordance with Section 15074 of the CEQA Guidelines. This comment does not provide any specifics related to the adequacy of the environmental analysis in the Draft IS/MND. Thus, no further response to this comment letter is required.

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COMMENT LETTER 5

Making Conservation a California Way of Life

December 27, 2021

Mr. Hector Hernandez
Project Planner
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, CA 90660

RE: Beverly Boulevard Warehouse Project
SCH # 2021120053
Vic. LA-605/PM R14.409
GTS # LA-2021-03787-MND

Dear Mr. Hernandez:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced environmental document. The proposed project would include construction of a warehousing/distribution building and a print shop facility on the 19.06-acre project site. The new warehousing development would encompass approximately 357,903 square feet of building area, which would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass approximately 2,500 square feet of building area and include 29 surface parking spaces. For site access from Beverly Boulevard, a new vehicular/bicycle/pedestrian bridge is proposed to span over the Union Pacific Railroad alignment in a west to east direction. Ancillary facilities would include landscaping, lighting, paving, circulation, and utility improvements. 5-1

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Senate Bill 743 (2013) has codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. You may reference the Governor's Office of Planning and Research (OPR) for more information:

http://opr.ca.gov/ceqa/updates/guidelines/

As a reminder, VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, which is the statewide implementation date.

Caltrans is aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, all future developments should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing. Overall, the environmental report should ensure all modes are served well by planning and development activities. This includes reducing single occupancy vehicle trips, ensuring safety, reducing vehicle miles traveled, supporting accessibility, and reducing greenhouse gas emissions. 5-1 cont.

We encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). This reference is available online at:

http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf

You can also refer to the 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), which is available online at:

http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Also, Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020 and the Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared in On December 18, 2020. You can review these resources at the following links:

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-12-22-updated-interim-ldigr-safety-review-guidance-a11y.pdf

In General, Caltrans encourages lead agencies to prepare traffic safety impact analysis using the above methods for any project in the California Environmental Quality Act (CEQA) review process so that, through partnerships and collaboration, California can reach zero fatalities and serious injuries by 2050.

The project is estimated to generate a daily total (Production-Attraction, PA) VMT of 4,207. The resulting VMT/Service Population is 19.66 (4,207 VMT / 214 service population). A comparison of the Project VMT/Service Population (19.66 VMT/Service Population) to the Citywide VMT/Service Population (27.21 VMT/Service Population) shows that the Project VMT/Service Population is anticipated to be 72.25 percent of the City VMT/Service Population. Since the project is 15 percent below the Citywide VMT/Service Population threshold, the project is not anticipated to result in a significant transportation impact under SB 743. 5-1 (cont.)

The proposed project would require improvements along Beverly Boulevard, which may result in temporary impacts to circulation that could impede emergency access. Inbound vehicular traffic would enter the site from Beverly Boulevard via a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket. The left turn pocket along westbound Beverly Boulevard would be restriped to accommodate 150 feet of queuing as part of the Proposed Improvement #1A.

Caltrans concurs the following Mitigation Measures and Recommended Improvements:

Mitigation Measures (TR-1) – Prior to the initiation of construction, the City of Pico Rivera shall ensure that a Traffic Management Plan (TMP) has been prepared for the proposed project and incorporated into the final project plans, specifications, and estimates (PS&E). The TMP shall include measures to minimize the potential safety impact during the short-term construction process, when partial lane closures may be required. It shall include, but not be limited to, measures such as construction signage, pedestrian protection, limitations on timing for lane closures to avoid peak hours, temporary striping plans, 5-2

construction vehicle routing plans, and the need for a construction flag person to direct traffic during heavy equipment use. The TMP shall be incorporated into project specifications for verification prior to final plan approval.

Proposed Improvement #1A – In addition to the planned Project features of including an eastbound right turn lane into the site and extending the westbound left turn storage lane, restriping the northbound driveway approach to provide two exiting lanes (one right turn and one left turn) will result in an allowable v/c change between the baseline and Plus Project conditions.

Proposed Improvement #1B – The addition of the Other Potential Improvement Option A (sanctuary lane) and/or Other Potential Improvement Option B (left turn restrictions) at the Site Driveway / Beverly Boulevard Intersection (#1) shall be predicated on a post opening traffic study provided by the developer's traffic engineer or a traffic engineer selected by the City to analyze left turn movements in and out of the development and the general operation of the driveway. The study is to include a queuing analysis and gap study. If the study finds that left turn gaps are not adequate, left turn restrictions shall be implemented. A post opening traffic will also be required after construction of the I-605/Beverly Boulevard Interchange improvement project if the development opening day occurs prior to interchange improvement implementation. 5-2 (cont.)

Proposed Improvement #2 – Add "Do Not Block" pavement marking along Beverly Boulevard to ensure exiting Project traffic maintains access to all movements. This improvement shall be provided regardless of the post opening study identified under Improvement #1B.

Caltrans' concurrence is based on a post opening Traffic Study be conducted by the developer's traffic engineer or traffic engineer selected by the City, and the City shall implement further needed improvements based on the updated Traffic Study. We would like the City to consult with Caltrans before the post opening Traffic Study is prepared.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan. 5-3

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips including project truck trips be limited to off-peak commute periods. 5-4

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # LA-2021-03787-MND. 5-4 (cont.)

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief

email: State Clearinghouse

RESPONSE TO COMMENT LETTER NO. 5

Miya Edmonson, IGR/CEQA Branch Chief
California Department of Transportation
December 27, 2021

5-1 The commenter provides information on the mission of Caltrans and stated general transportation related goals including links to supporting documentation from Caltrans, the Governor's Office of Planning and Research (OPR), the Federal Highway Administration (FHWA), and the California Air Pollution Control Officers Association (CAPCOA), as well as a description of the project. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

5-2 The commenter restates Mitigation Measure TR-1 of the Draft IS/MND in addition to the proposed transportation improvements as documented in Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report* of the Draft IS/MND. Caltrans requests that they be consulted prior to preparing the recommended post opening Traffic Study (Proposed Improvement #1B), which was identified as a proposed improvement within Appendix F of the Draft IS/MND. A post-project opening Traffic Study would be prepared and as a project feature, and is specified as PF-1. Revisions have been made to Section 4.17, *Transportation*, pages 4.17-1 and 4.17-2 of the Draft IS/MND to incorporate this Project Feature, and is reflected below and in Section 4.0, *Errata*, of the Final IS/MND.

Draft IS/MND Section 4.17, *Transportation*, Page 4.17-1

> ***Less Than Significant Impact.*** The proposed project would not result in significant impacts related to conflicts with a program, ordinance, or policy addressing the circulation system including the Los Angeles County Bicycle Master Plan, General Plan, Municipal Code regulations and standards, and Los Angeles County Congestion Management Plan. The project would be consistent with City standards including Municipal Code Title 15, Buildings and Construction, which adopts the California Building Code standards and regulations related to access and circulation, and would be subject to review by the City's Public Works Department during final design to ensure adherence to local requirements for internal site circulation, bridge design, secondary access, and primary access from Beverly Boulevard. As noted in Section 2.0, *Project Description*, the proposed roadway design changes along Beverly Boulevard that would improve the overall vehicular circulation in the project area. These design changes would include a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket. In addition, outbound traffic would exit the project site via a stop-controlled right- and left-turn movement onto Beverly Boulevard. To determine if these recommended changes improve traffic and the overall vehicular circulation system during project operations, a post-project opening traffic study would be prepared as part of Project Feature PF-1.

Draft IS/MND Section 4.17, *Transportation*, Page 4.17-2

> ***Mitigation Measures:*** No mitigation is required.
>
> ***Project Features:***

PF-1:	The proposed traffic and circulation improvements for the project shall be predicated on a post opening traffic study provided by the applicant's traffic engineer or a traffic engineer selected by the City of Pico Rivera to analyze left turn movements in and out of the development and the general operation of the driveway. The study is to include a queuing analysis and gap study. If the study finds that left turn gaps are not adequate, left turn restrictions shall be implemented. A post opening traffic will also be required after construction of the I-605/Beverly Boulevard Interchange improvement project if the development opening day occurs prior to interchange improvement implementation.

5-3 This comment notes the sensitivity of stormwater runoff for Los Angeles and Ventura counties. Project impacts related to hydrology and water quality were comprehensively analyzed in Section 4.10, *Hydrology and Water Quality*, of the Draft IS/MND. The project would maintain the existing drainage patterns and conditions of the project site. Underground detention systems would be installed to account for increased runoff due to increased impervious area. The underground detention systems would reduce flows to match the existing drainage condition as required by the City of Pico Rivera and County of Los Angeles. As discussed in Section 4.10, *Hydrology and Water Quality*, of the Draft IS/MND, in accordance with the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit requirements and NPDES Permit No. CAS004001, Order No. R4-2012-0175, a project-specific Water Quality Management Plan (WQMP) would be prepared which would identify structural and non-structural best management practices (BMPs) including, but not limited to, low-impact development (LID) strategies to infiltrate, store and reuse stormwater runoff where feasible, grading design that increases stormwater retention and infiltration, and maintenance programs to remove trash, debris, and waste This comment does not provide any substantial evidence that further review under CEQA is required or that the project may have a significant environmental impact. As analyzed in the Draft IS/MND, the whole of the record supports the conclusion that the project's impacts related to hydrology and water quality would be less than significant.

5-4 The commenter noted that a transportation permit will be required from Caltrans in the future in the event that the project uses oversized transport vehicles on State highways. This comment has been acknowledged, and the project applicant will comply with any applicable permit requirements. The commenter also recommends limiting large size truck trips (i.e., project truck trips) to off-peak commute periods. This provision would not be feasible based on the planned operations of the proposed project. However, the Vehicle Miles Traveled Memorandum/Traffic Operations Report prepared for the project was predicated on project-related truck trips occurring both during peak and off-peak commute periods, and as noted in the Draft IS/MND, impacts were determined to be less than significant.

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Via Electronic Mail Only

December 28, 2021

Hector Hernandez
City of Pico Rivera
6615 Passons Boulevard
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HHernandez@pico-rivera.org

Subject: Mitigated Negative Declaration for the Beverly Boulevard Warehouse Project, SCH #2021120053, City of Pico Rivera, Los Angeles County

Dear Mr. Hernandez:

The California Department of Fish and Wildlife (CDFW) has reviewed a Mitigated Negative Declaration (MND) from the City of Pico Rivera (City) for the Beverly Boulevard Warehouse Project (Project). The MND's supporting documents includes *Appendix B Biological Resources Analysis* (Appendix B). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources. 6-1

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq*.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Description and Summary

Objective: The Project proposes to develop approximately 19.06 acres. The Project site is unpaved and is periodically tilled/grubbed. Vegetation on the Project site consists of low-lying grasses, shrubs, and several mature palm trees occurring in several areas along the perimeter of the Project site. An existing concrete-lined drainage feature that flows east to west is located within the northern portion of the site.

The Project proposes to construct a warehouse building and print shop facility. The warehouse building would encompass approximately 357,903 square feet of building area, which would include warehouse, distribution, office facilities, and 393 surface parking spaces. The two-story warehouse building would have a maximum height of 73 feet. The print shop facility would encompass approximately 2,500 square feet of building area and include 29 surface parking spaces. The single-story print shop facility would have a maximum height of 25 feet. The Project also includes the following: 22 bicycle spaces; approximately 85,710 square feet of landscaping consisting of ornamental species of shrubs, ground cover, and trees; nighttime security and safety lighting; a 8-foot high chain link security fence along the easterly boundary of the Project site (adjacent to railroad right-of-way); a 10-foot screen wall along the northwesterly side of the warehouse building; and a minimum 6-foot-high block wall constructed along the southerly boundary of the Project site adjacent to residential uses. 6-1 (cont.)

The Project also proposes to improve the existing Southern California Edison driveway along Beverly Boulevard for primary access, located west of the Interstate 605/Beverly Boulevard interchange. In addition, the Project would construct a vehicular/bicycle/pedestrian bridge with a west to east direction spanning over the existing Union Pacific Railroad alignment to connect Beverly Boulevard and the Project site. The bridge would be approximately 118 feet long, 50 feet and 6 inches wide, and 23 feet and 4 inches above the Union Pacific Railroad alignment.

Location: The Project is located within the central portion of the City. The 19.06-acre Project site is divided into two segments by an existing Union Pacific Railroad alignment. The smaller segment of the Project site is located northwest of Union Pacific Railroad and immediately south of Beverly Boulevard. The second larger segment is located southeast of Union Pacific Railroad and immediately west of I-605. Both segments make up the “Project site”. The Project site is bound by the San Gabriel River to the west, Interstate 605/Beverly Boulevard interchange to the north, Interstate 605 to the east, and an existing single-family residential development to the south.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project’s significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project’s CEQA mitigation, monitoring, and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097). 6-2

Specific Comments

Comment: Impacts on Aquatic Resources

Issue: The Project could continue have a significant impact aquatic resources and associated vegetation.

Specific impacts: The Project as proposed would result in impacts to "*a total of approximately 0.19 acre (382 linear feet) of CDFW jurisdictional streambed*."

Why impact would occur: According to page 4.4-3 in the MND, there are two drainages on the Project site. The Project would impact 0.18 acres of Drainage 1 and 0.006 acres of Drainage 2 for a total of 0.19 acres. The impacts would be significant and permanent as these 0.19 acres "*would be removed as part of the Project*." The Project's MND as it is currently written does not provide mitigation measures to adequately reduce the Project's impact on streams to less than significant under CEQA.

6-2 (cont.)

First, the Project could result in unauthorized impacts to streams if the Project Applicant proceeds with the Project as described in the MND that includes additional activities not described in the Project's Lake or Streambed Alteration (LSA) Notification. On July 22, 2020, CDFW received an LSA Notification for the Project (LSA Notification No. 1600-2020-0153-R5). The LSA Notification was deemed complete on September 16, 2020. Per the LSA Notification, the Project would only impact 0.18 acres of Drainage 1. CDFW had until November 15, 2020, to provide a draft LSA Agreement to the Project Applicant. CDFW did not meet that deadline, so the Project as described in the LSA Notification that did not include the 2,500-square-foot print shop facility and impacts to Drainage 2, was approved by operation of law. Pursuant to Fish and Game Code section 1602, subdivision (a)(4)(D), if the Project Applicant proceeds with the Project, the Project must be completed as described and conducted in the same manner as specified in the LSA Notification and any modifications to that LSA Notification received by CDFW prior to September 16, 2020. This includes completing the Project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the LSA Notification. If the Project has changed substantially or added additional activities within a stream, the Project Applicant will need to resubmit a LSA Notification with a revised project description, impact assessment, and mitigation measures.

Second, the Project could continue to have a significant impact on streams because the MND does not require compensatory mitigation for the Project's impact on 0.19 acres of streambed. While the Project Applicant has proposed compensatory mitigation in the Project's LSA Notification, compensatory mitigation is not required in the MND to reduce impacts to less than significant. One of the basic purposes of CEQA is to disclose mitigation measures included in a project to avoid potentially significant effects on the environment. Pursuant to CEQA Guidelines section 15071, "a negative declaration circulated for public review shall include mitigation measures, if any, included in the project to avoid potentially significant effect." In addition, pursuant to CEQA Guidelines section 15126.4, "formulation of mitigation measures shall not be deferred until some future time." Specific details of a mitigation measure may be developed after project approval provided that the lead agency commits itself to mitigation [CEQA Guidelines, § 15126.4(a)(1)(B)]. Finally, pursuant to CEQA Guidelines section 15097, "the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project

and the measures it has imposed to mitigate or avoid significant environmental effects." Mitigation measures "must be fully enforceable through permit conditions, agreements, or other legally-binding instruments" [CEQA Guidelines, § 15126.4(a)(2)]. The City may be unable to mitigate significant impacts to stream resources consistent with CEQA Guidelines sections 15097 and 15126.4 because the MND does not require compensatory mitigation for stream impacts [also see Pub. Resources Code, § 21081.6; CEQA Guidelines section 15074(d)].

Evidence impacts would be significant: The Project would impact "*a total of approximately 0.19 acre (382 linear feet) of CDFW jurisdictional streambed*." CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated plant communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake[1];
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

6-2 (cont.)

The Project could continue to have a significant impact on fish and wildlife resources absent measures to mitigate for the Project's impact on streams as described in the MND. Inadequate mitigation measures provided in the Project's CEQA document will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on fish and wildlife resources, including rivers, streams, or lakes and associated plant communities.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: LSA Notification No. 1600-2020-0153-R5 may not authorize all of the impacts associated with the Project as described in the MND. Prior to starting Project activities, the Project Applicant should contact CDFW to make sure the LSA Notification included all impacts associated with the Project. If the LSA Notification does not include all impacts associated with the Project, the Project Applicant should renotify pursuant to Fish and Game Code section 1602. Please visit CDFW's Lake and Streambed Alteration Program webpage for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2021a).

Mitigation Measure #2: If the Project Applicant needs to renotify pursuant to Fish and Game Code section 1602, CDFW recommends the LSA Notification include the following information and analyses:

1) Linear feet and/or acreage of streams and associated plant communities that would be permanently and/or temporarily impacted by the Project. Plant community names should be provided based on vegetation association and/or alliance per the Manual of California Vegetation, second edition (Sawyer et al. 2009);

[1] "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a water body.

2) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation should be discussed; and,
3) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation should assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under existing and proposed conditions.

Mitigation Measure #3: Per LSA Notification No. 1600-2020-0153-R5, the Project Applicant should mitigate for impacts to streams by purchasing credits at a mitigation bank. The Project Applicant should purchase credits at a mitigation bank at no less than 1:1 for permanent impacts to 0.19 acres of streambed. The Project Applicant should submit the credit amount, bank sponsor, habitat types(s), and map of the mitigation site to CDFW for review and approval prior to purchasing the credits. The Project Applicant should submit a record of purchase to CDFW prior to starting Project activities and submit a record of purchase to the City before the City issues a grading permit for the Project.

6-2 (cont.)

Recommendation #1: CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the City for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, CDFW recommends the City consider CDFW's comments and incorporate the mitigation measures and revisions recommended in this letter into the Project's final environmental document. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation, enhancement, preservation, or restoration; and/or protection and management of mitigation lands in perpetuity.

Additional Recommendations

1) Prohibit Use of Rodenticides. Use of rodenticides and second-generation anticoagulant rodenticides should be prohibited during the Project and for the Project's lifetime. Rodenticides and second-generation anticoagulant rodenticides have harmful effects on the ecosystem. Second-generation anticoagulant rodenticides are much more likely to poison predatory wildlife that eat live or dead poisoned prey. Accordingly, second-generation anticoagulant rodenticides have a higher risk of severe poisoning for non-target wildlife as toxins move up the food chain. Second-generation anticoagulant rodenticides have been documented to cause injury or mortality of birds and mammals such as bobcats, coyotes, foxes, and mountain lions which is currently a candidate species for listing as threatened under the California Endangered Species Act (CDFW 2020).

6-3

2) Move Out of Harm's Way. CDFW recommends the City require the Project Applicant to have a qualified biologist on site to move out of harm's way wildlife of low mobility that could be

6-4

injured or killed. Wildlife should be protected, allowed to move away on its own (i.e., non-invasive, passive relocation), or relocated to suitable habitat at least 200 feet outside of the Project site. In areas where wildlife is found, work should only occur in these areas after a qualified biologist has relocated the animal and determined it is safe for work to restart. CDFW recommends that the City require the Project Applicant to have a qualified biologist on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project until the cessation of all ground and habitat disturbing activities, as well as vegetation removal to ensure that no wildlife is harmed. 6-4 (cont.)

3) Use of Native Plants and Trees. CDFW strongly recommends avoiding non-native, invasive plants for landscaping and restoration, particularly any species listed as 'Moderate' or 'High' by the California Invasive Plant Council (Cal-IPC 2021a). CDFW supports the use of native species found in naturally occurring vegetation communities within or adjacent to the Project site. CDFW supports planting species of trees and understory vegetation (e.g., ground cover, subshrubs, and shrubs) that create habitat and provide a food source for birds. Information on alternatives for invasive, non-native, or landscaping plants may be found on the California Invasive Plant Council's, Don't Plant a Pest webpage for southern California (Cal-IPC 2021b). The Audubon Society's Plants for Birds, California Native Plant Society's Gardening and Horticulture, and Xerces Society's Pollinator-Friendly Native Plant Lists webpages provide information on native plant species that invite insects, pollinators, and birds (Audubon Society; CNPS 2021; Xerces Society 2021). 6-5

4) Data. CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (i.e., California Natural Diversity Database) that may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species detected by completing and submitting CNDDB Field Survey Forms (CDFW 2021b). To submit information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Releve Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2021c). The City should ensure the data has been properly submitted, with all data fields applicable filled out, prior to finalizing/adopting the environmental document. The City should provide CDFW with confirmation of data submittal. 6-6

5) Mitigation and Monitoring Reporting Plan. CDFW recommends the City update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist the City in developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, §§ 15097, 15126.4). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). 6-7

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the City of Pico Rivera and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). 6-8

Conclusion

We appreciate the opportunity to comment on the Project to assist the City of Pico Rivera in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Pico Rivera has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230. 6-9

Sincerely,

DocuSigned by:
B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW
Erinn Wilson-Olgin, Los Alamitos – Erinn.Wilson-Olgin@wildlife.ca.gov
Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
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Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov
State Clearinghouse, Office of Planning and Research – State.Clearinghouse@opr.ca.gov

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[CDFWa] California Department of Fish and Wildlife. 2021. Lake and Streambed Alteration Program. Available from: https://wildlife.ca.gov/Conservation/LSA.
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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Attachment A: Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-BIO-1 Impacts on Aquatic Resources-LSA Agreement	Prior to starting Project activities, the Project Applicant shall contact CDFW to make sure the LSA Notification (Notification No. 1600-2020-0153-R5) included all impacts associated with the Project. If the LSA Notification does not include all impacts associated with the Project, the Project Applicant shall renotify pursuant to Fish and Game section 1602.	Prior to starting Project construction and activities	Project Applicant
MM-BIO-2 Impacts on Aquatic Resources-LSA Notification	If the Project Applicant needs to renotify pursuant to Fish and Game Code section 1602, the Project Applicant's LSA Notification shall include the following information and analyses: 1) Linear feet and/or acreage of streams and associated plant communities that would be permanently and/or temporarily impacted by the Project; 2) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation shall be discussed; and, 3) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation shall assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under existing and proposed conditions.	LSA Notification Prior to starting any Project construction and activities	Project Applicant

MM-BIO-3 Impacts on Aquatic Resources-Compensatory Mitigation	The Project Applicant shall mitigate for impacts on streams by purchasing credits at a mitigation bank per LSA Notification No. 1600-2020-0153-R5). The Project Applicant shall purchase credits at a mitigation bank at no less than 1:1 for permanent impacts to 0.19 acres of streambed. The Project Applicant shall submit the credit amount, bank sponsor, habitat types(s), and map of the mitigation site to CDFW for review and approval prior to purchasing the credits. The Project Applicant shall submit a record of purchase to CDFW prior to starting Project activities and submit a record of purchase to the City before the City issues a grading permit for the Project.	Prior to starting Project construction and activities Before the City issues a grading permit for the Project	City of Pico Rivera (City)/Project Applicant
REC-1- LSA Notification and CEQA	CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the City for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, CDFW recommends the City consider CDFW's comments and incorporate the mitigation measures and revisions recommended in this letter into the Project's final environmental document.	Prior to finalizing Project CEQA document	City
REC-2- Prohibit Use of Second-Generation Anticoagulant Rodenticides	Use of rodenticides and second-generation anticoagulant rodenticides should be prohibited.	During the Project and for the Project's lifetime	Project Applicant
REC-3- Move out of Harm's Way	A qualified biologist should be on site to move out of harm's way wildlife of low mobility that could be injured or killed. Wildlife should be protected, allowed to move away on its own (i.e., non-invasive, passive relocation), or relocated to suitable habitat at least 200 feet outside of the Project site. In areas where wildlife is found, work	Daily during initial ground and habitat disturbing activities as	Project Applicant

6-10 (cont.)

	should only occur in these areas after a qualified biologist has relocated the animal and determined it is safe for work to restart. A qualified biologist should be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project until the cessation of all ground and habitat disturbing activities, as well as vegetation removal to ensure that no wildlife is harmed.	well as vegetation removal Weekly or bi-weekly (once every two weeks) for remainder of the Project until the cessation of all ground and habitat disturbing activities	
REC-4-Landscaping	Use of non-native, invasive plants for landscaping and restoration, particularly any species listed as 'Moderate' or 'High' by the California Invasive Plant Council should be avoided. The Project Applicant should use native species found in naturally occurring vegetation communities within or adjacent to the Project site. The Project Applicant should plant species of trees and understory vegetation (e.g., ground cover, subshrubs, and shrubs) that create habitat and provide a food source for birds.	Prior to finalizing Project design and plan	Project Applicant
REC-5-Data	The City should ensure that all sensitive and special status species data has been properly submitted to the California Natural Diversity Database. To submit information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Releve Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program. The Project Applicant should provide CDFW with confirmation of data submittal.	Prior to/after Notification pursuant to Fish and Game Code section 1600 et seq.	City/Project Applicant

6-10 (cont.)

REC-6- Mitigation and Monitoring Reporting Plan	The City should update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter.	Prior to finalizing CEQA document	City

6-10 (cont.)

RESPONSE TO COMMENT LETTER NO. 6

Erinn Wilson-Olgin, Environmental Program Manager
California Department of Fish and Wildlife
December 28, 2021

6-1 This comment provides an introduction to the comment letter and an overview of the California Department of Fish and Wildlife's (CDFW) role as a Trustee Agency for fish and wildlife resources and a Responsible Agency under CEQA. This comment also provides a summary of the project. The comment also notes that CDFW oversees and regulates the "take" of species protected under the California Endangered Species Act and Native Plant Protection Act. It should be noted that, based on the analysis provided as part of the Draft IS/MND, a "take" of such protected species is not anticipated to occur with implementation of the proposed project.

6-2 This comment consists of a series of comments related to impacts on aquatic resources and recommended mitigation measures. First, CDFW states that the project could result in unauthorized impacts to streams if the project applicant proceeds with the project as described in the MND that includes additional activities not described in the project's Lake or Streambed Alteration (LSA) Notification (LSA Notification No. 1600-2020-0153-R5) and the Operation by Law letter dated November 19, 2020. This documentation has been attached to this Final IS/MND as Attachment C, *Operation by Law Documentation*. The LSA Notification indicated that the project would result in 0.18 acre of impact to CDFW jurisdiction associated with Drainage 1 but did not include the 2,500-square-foot print shop facility as a project component and did not indicate 0.006 acre (45 linear feet) of impact to CDFW jurisdiction associated with Drainage 2.

Within the Draft IS/MND, it was identified that a total of 0.19 acre of CDFW jurisdiction exists within site boundaries. Through the LSA Notification process, it was determined that the project would result in 0.18 acre (337 linear feet) of impact to CDFW jurisdiction associated with Drainage 1 (meaning 0.01 of CDFW jurisdiction on-site would not be impacted). The entirety of CDFW jurisdiction associated with Drainage 1 (0.18 acres) would be impacted by the project. No impact to CDFW jurisdiction associated with Drainage 2 (0.01 acre) would occur, consistent with the LSA Notification and the Operation by Law letter. Although the print shop facility was not specifically mentioned in the LSA Notification submitted to CDFW, the location of the proposed print shop facility in the northeastern portion of the project site would not result in additional impacts to Drainage 1 or 2. Drainage 2 enters the northeastern boundary of the of the project site, and measures approximately 45 linear feet in length on-site. As shown in Exhibit 2-4 of the Draft IS/MND, the proposed print shop facility would be located further west of the existing Drainage 2. Given this location, grading and ground-disturbing activities for the project would not disturb segments of Drainage 2 that is located on-site. Thus, the project does not constitute a substantial project change resulting in additional impacts to CDFW jurisdiction. To clarify this information, revisions have been made to Section 4.4, *Biological Resources*, of the Draft IS/MND and is reflected below and in Section 4.0, *Errata*, of the Final IS/MND.

Draft IS/MND Section 4.4, *Biological Resources*, Pages 4.4-3 and 4.4-4

As shown in Table 4.4-1, the project would permanently impact approximately 0.05-acre (382 linear feet) of Corps/RWQCB jurisdiction (non-wetland waters of the U.S.) and approximately 0.189-acre (382 linear feet) of CDFW Streambed, which would be removed as part of the project. These impacts would occur as part of impacts to Drainage 1. Due to its location at the northeastern perimeter of the project site, Drainage 2 would not be impacted by the project. Based on the analysis conducted for the project site and proposed improvements, the project applicant shall be required to obtain a Preliminary Jurisdictional Determination (PJD) from the Corps and obtain a Clean Water Act Section 404 Permit (Nationwide Permit No. 39), a Section 1602 Streambed Alteration Agreement from the CDFW, and a Clean Water Act Section 401 Water Quality Certification from the Corps or a Waste Discharge Requirements (WDR) from the RWQCB. ~~Upon~~

~~obtaining the required permits~~ Through the regulatory permitting process, the applicant would consult with the resource agencies to determine and implement applicable compensatory mitigation as required under existing Federal and State law, thus, impacts in this regard would be less than significant.

As indicated above, the project would only result in 0.18 acre (337 linear feet) of impact to CDFW jurisdictional resources associated with Drainage 1.

Second, CDFW contends that the project could continue to have a significant impact because the Draft IS/MND does not require adequate mitigation for the project's impact on streams. The project applicant has completed a purchase with the Soquel Canyon Mitigation bank for 0.18 acre of ephemeral riparian enhancement and ephemeral waters enhancement mitigation credits. With the purchase of the mitigation credits from the Soquel Canyon Mitigation Bank as required by the Operation by Law Letter, the project remains consistent with the CDFW authorized impacts as specified in the LSA Notification and the project would not result in a significant to CDFW jurisdiction or fish and wildlife resources. Furthermore, as described above the project remains in compliance with the LSA Notification and Operation by Law Letter and therefore, and renotification to CDFW pursuant to California Fish and Game Code section 1602 is not required.

Third, CDFW suggests three mitigation measures and one recommendation. As shown in Attachment C, the LSA Notification (LSA Notification No. 1600-2020-0153-R5) describes project impacts that are consistent with what is described in the Draft IS/MND. Attachment C also states that the mitigation credits required for the project would be purchased at the Soquel Mitigation Bank prior to submitting a record of purchase to CDFW. As such, the three mitigation measures and one recommendation measure suggested by the CDFW are no longer applicable, and no additional mitigation measures are required under CEQA.

6-3 The commenter provides a list of additional recommendations to consider for the project, and includes specifics regarding the use of rodenticides to protect wildlife. While this comment is acknowledged, as described in the Draft IS/MND, no special-status plant species, wildlife, or vegetation communities were observed during the field survey. Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that no special-status plant species or vegetation communities are expected to occur on-site. Any use of rodenticides as part of long-term project operations would be conducted in accordance with existing Federal, State, and local standards.

6-4 The commenter recommends that a qualified biologist be on-site daily during initial ground disturbing activities for the protection of wildlife. As discussed in page 4.4-1 of the Draft IS/MND, there were no special-status species observed on-site during the field survey for the project. Although the project site has a low potential to support approximately seven special-status wildlife species, project implementation is not anticipated to result in a substantial impact, either directly or through habitat modifications, on any sensitive wildlife species. Additionally, implementation of Mitigation Measure BIO-1 would mitigate potential impacts to nesting birds by requiring a qualified biologist to be present on-site if ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season.

6-5 The commenter recommends that non-native, invasive plant species are avoided for landscaping and restoration. As discussed in Section 2.0, *Project Description* of the Draft IS/MND, planting for the project would include the Desert Museum Palo Verde (*Parkinsonia x 'Desert Museum'*), Afghan Pine (*Pinus eldarica*), Chinese Pistache (*Pistacia chinensis*), African Sumac (*Rhus lancea*), and Brisbane box (*Tristania conferta*). These species are not listed as invasive species by the California Invasive Plant Council. Therefore, the project would not introduce any invasive species for landscaping and restoration.

6-6 The commenter requests that any special-status species detected on-site be properly submitted to the California Natural Diversity Database (CNDDB) for any future subsequent environmental reports. The results of the biological analysis prepared for the project will be processed/archived in accordance with existing

standards and industry practices. This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND's environmental analysis. Nevertheless, this comment is acknowledged and will be considered by the City of Pico Rivera decision-makers. No further response is warranted.

6-7 This comment refers to additional mitigation measures suggested by CDFW, and recommends that they are added to the project's Mitigation Monitoring and Reporting Program. Aside from potential impacts to nesting birds, which would be mitigated to a less-than-significant level with the implementation of Mitigation Measure BIO-1, there were no other potentially significant impacts to biological resources identified within the Draft IS/MND. As such, no additional mitigation measures are required under CEQA.

6-8 This comment provides information regarding the assessment of filing fees. This comment is acknowledged. The project applicant would provide payment of CDFW filing fees at the time of filing of the Notice of Determination. This comment does not raise issues pertinent to the adequacy of the Draft IS/MND, and no further response is required.

6-9 This comment provides a closing to the comment letter and contact information for CDFW staff. It does not raise issues pertinent to the adequacy of the Draft IS/MND, and no further response is required.

6-10 This comment provides additional mitigation measures that CDFW suggests are incorporated into the Mitigation Monitoring and Reporting Program for the project. Refer to Response 6-7, above. Aside from potential impacts to nesting birds, which would be mitigated to a less-than-significant level with the implementation of Mitigation Measure BIO-1, there were no other potentially significant impacts to biological resources identified within the Draft IS/MND. As such, no additional mitigation measures are required under CEQA.

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COMMENT LETTER 7

From: Huffman, Mandy [mailto:mandyhuffman@lacsd.org]
Sent: Wednesday, December 29, 2021 2:24 PM
To: Hector Hernandez <HHernandez@pico-rivera.org>
Subject: Clarifications for Beverly Boulevard Warehouse Project

Good afternoon Mr. Hernandez,

The Los Angeles County Sanitation Districts received an NOI to adopt an MND for the Beverly Boulevard Warehouse Project. Regarding the print shop for the subject project,

1) will any heavy metal-based inks be used, and
2) if any plate-making operations are involved?

7-1

Thank you,

Mandy Huffman
Environmental Planner | Wastewater Planning
562-908-4288 ext. 2743
mandyhuffman@lacsd.org

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RESPONSE TO COMMENT LETTER NO. 7

Mandy Huffman, Environmental Planner
Los Angeles County Sanitation Districts
December 29, 2021

7-1 This comment includes an inquiry regarding specific processes and materials to be used at the print shop proposed as part of the project. As discussed in Section 2.0, *Project Description*, the proposed print shop facility would accommodate printing, packing, shipping, and mailbox/post office box services. A specific end-user for the print shop has not been identified at this time, however, any print shop operations with wastewater or waste materials containing hazardous wastes (such as heavy metals) would be handled and disposed of in accordance with applicable federal, state, and local regulations. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

COMMENT LETTER 8

LOZEAU DRURY LLP

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Via E-mail

December 30, 2021

Hector Hernandez
City of Pico Rivera
6767 Passons Blvd.
Pico Rivera, CA 90660
hhernandez@pico-rivera.org

Re: Comment on the Initial Study/ Mitigated Negative Declaration for the Beverly Boulevard Warehouse Project (SCH 2021120053)

Dear Mr. Hernandez:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the Beverly Boulevard Warehouse Project (SCH 2021120053), including all actions related or referring to the proposed construction, use, and maintenance of a warehouse/distribution and a print shop facility located on 19.06 acres between the San Gabriel River and Interstate 605, south of Beverly Boulevard, in the City of Pico Rivera ("Project").

8-1

After reviewing the IS/MND, we conclude the IS/MND fails as an informational document, and that there is a fair argument that the Project may have adverse environmental impacts. Therefore, we request that the City of Pico Rivera ("City") prepare an environmental impact report ("EIR") for the Project pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000, et seq.

This comment has been prepared with the assistance of environmental consulting firm Soil/Water/Air Protection Enterprise ("SWAPE") and expert wildlife biologist Shawn Smallwood, Ph.D. SWAPE's and Dr. Smallwood's comments and curriculum vitae are attached as Exhibit A and B hereto and are incorporated herein by reference in their entirety.

I. PROJECT DESCRIPTION

The proposed Project would include construction of a warehousing/distribution building and a print shop facility on a 19.06-acre site. The building would encompass about 357,903 gross square feet ("sf") of building area including warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass about 2,500 gross sf of building area including 29 surface parking spaces. The project would also have 22 bicycle spaces and about 85,710 sf of landscaping. The project will also require construction of a roadway.

8-1 (cont.)

There are residential uses located to East of the project (across the I-605 freeway) and to the South. The San Gabriel River lies to the West of the project, and a freeway and more industrial uses lie to the North. The project site is designated as "I; General Industrial" and "PF; Public Facilities."

II. LEGAL STANDARD

As the California Supreme Court has held "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." *Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) (citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505). "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Res. Code ("PRC") § 21068; *see also* 14 CCR § 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial*." No Oil, Inc.*, 13 Cal.3d at 83. "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 Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).

8-2

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens*); *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 CCR § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. PRC, §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.

However, mitigation measures may not be construed as project design elements or features in an environmental document under CEQA if such a mischaracterization is significant. *See Lotus vs. Department of Transportation* (2014) 223 Cal.App.4th 645. A "mitigation measure" is a measure designed to minimize a project's significant environmental impacts, PRC § 21002.1(a), while a "project" is defined as including "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." CEQA Guidelines § 15378(a). Unlike mitigation measures, project elements are considered prior to making a significance determination. Measures are not technically "mitigation" under CEQA unless they are incorporated to avoid or minimize "significant" impacts. PRC § 21100(b)(3). **8-2 (cont)**

To ensure that the project's potential environmental impacts are fully analyzed and disclosed, and that the adequacy of proposed mitigation measures is considered in depth, mitigation measures that are not included in the project's design should not be treated as part of the project description. *Lotus*, 223 Cal.App.4th at 654-55, 656 fn.8. Mischaracterization of a mitigation measure as a project design element or feature is "significant," and therefore amounts to a material error, "when it precludes or obfuscates required disclosure of the project'' environmental impacts and analysis of potential mitigation measures." *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 185.

Where an initial study shows that the project may have a significant effect on the environment, a mitigated negative declaration may be appropriate. However, a mitigated negative declaration is proper *only* if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331. In that

context, "may" means a reasonable possibility of a significant effect on the environment. PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–05.

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. 14 CCR § 15064(f)(1); *Pocket Protectors,* 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928. The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

8-2 (cont.)

Kostka & Zishcke*, Practice Under CEQA*, §6.29, pp. 273–74. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with *a preference for resolving doubts in favor of environmental review*." *Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).

For over forty years the courts have consistently held that an accurate and stable project description is a bedrock requirement of CEQA—the *sine qua non* (that without which there is nothing) of an adequate CEQA document:

> Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance. An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.

County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185 at 192–93. CEQA therefore requires that an environmental review document provide an adequate description of the project to allow for the public and government agencies to participate in the review process through submitting public comments and making informed decisions.

Lastly, CEQA requires that an environmental document include a description of the project's environmental setting or "baseline." CEQA Guidelines § 15063(d)(2). The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. *CBE v. SCAQMD*, 48 Cal.4th at 321. CEQA Guidelines section 15125(a) states, in pertinent part, that a lead agency's environmental review under CEQA:

8-2 (cont.)

> …must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time [environmental analysis] is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.

See Save Our Peninsula Committee v. County of Monterey (2001) 87 Cal.App.4th 99, 124–25 ("*Save Our Peninsula*").) As the court of appeal has explained, "the impacts of the project must be measured against the 'real conditions on the ground,'" and not against hypothetical permitted levels. *Id*. at 121–23.

III. DISCUSSION

A. There is Substantial Evidence of a Fair Argument that the Project May Result in Significant Hazardous Material, Air Quality, Diesel Particulate Matter, and Greenhouse Gas Impacts.

8-3

Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the IS/MND's analysis of the Project's impacts from hazardous materials, air quality, health risk, and greenhouse gases. SWAPE's comment letter and CVs are attached as Exhibit A and their comments are briefly summarized here.

1. The IS/MND failed to disclose the presence of arsenic-contaminated soil on-site, which represents a significant hazardous material impact.

8-4

Due to the presence of orchards and a railroad spur on the site, Project proponents prepared a Phase I Environmental Site Assessment ("ESA"), and stated that as a mitigation measure, they would retain a Phase II/Site Characterization Specialist to

prepare a Soil Management Plan. IS/MND, p. 4.9-4. However, SWAPE points out that the IS/MND fails to disclose that a Phase II ESA was already conducted for the project site to sample impacts to soil from past uses. Ex. A, p. 2. This Phase II ESA detected arsenic contamination which was not disclosed in the IS/MND. *Id.* at 2-3. According to the U.S. Environmental Protection Agency, arsenic is a known human carcinogen. *Id.* at 3. SWAPE recommends that the applicant enter a voluntary cleanup agreement with the Department for Toxic Substances Control to clean up the arsenic-contaminated soil. *Id.* at 4. If the arsenic is not cleaned up, it may pose a risk to construction workers and nearby residents. *Id.* An EIR must be prepared to disclose the impacts of the contaminated soil and to implement adequate mitigation measures. *Id.*

8-4 (cont.)

2. The IS/MND relied on unsubstantiated input parameters to estimate project emissions and thus the project may result in significant air quality impacts.

SWAPE found that the IS/MND 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 IS/MND relies on emissions calculated from the California Emissions Estimator Version CalEEMod.2020.4.0 ("CalEEMod"). IS/MND, p. 4.3-8. 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. Ex. A, p. 4. CEQA requires any changes to the default values to be justified by substantial evidence. *Id*.

SWAPE reviewed the IS/MND's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the IS/MND. Ex. A, p. 4. As a result, the IS/MND's air quality analysis cannot be relied upon to determine the Project's emissions.

8-5

Specifically, SWAPE found that the following values used in the IS/MND's air quality analysis were either inconsistent with information provided in the IS/MND or otherwise unjustified:

1. Unsubstantiated Parking Land Use Size. Ex. A, p. 4-5.
2. Failure to Model All Proposed Land Uses. Ex. A, p. 5.
3. Failure to Consider Potential Cold Storage Requirements. Ex. A, p. 6-7.
4. Unsubstantiated Reductions to Architectural and Area Coating Emissions Factors and Areas. Ex. A, p. 7-8.
5. Overestimated Building Construction Phase Length. Ex. A, p. 8.
6. Incorrect Amount of Material Import and Export. Ex. A, p. 8-9.
7. Incorrect Application of Construction-Related Mitigation. Ex. A, p. 9-11.
8. Incorrect Application of Operational Mitigation Measures. Ex. A, p. 11-13.

As a result of these errors in the IS/MND, 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. **8-5 (cont.)**

3. An updated air model analysis found that the Project will have a significant air quality impact.

To more accurately determine the Project's construction and operational emissions, SWAPE prepared an updated CalEEMod model using more site-specific information and corrected input parameters. *See* Ex. A, p. 13. SWAPE's updated analysis demonstrates that the Project's construction-related VOC emissions increased by approximately 124%, and exceed the applicable SCAQMD significance threshold. *Id*. at 13-14. Thus, SWAPE's model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND. An EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment. **8-6**

4. There is substantial evidence of a fair argument 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 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] **8-7**

The IS/MND failed to conduct a quantified construction health risk analysis ("HRA"), resulting in an inadequate health risk emissions analysis. SWAPE identifies three main reasons for why the IS/MND's evaluation of health risk impacts and less-than-significant conclusion is incorrect.

First, the IS/MND's failure to prepare a construction HRA is inconsistent with CEQA's requirement to correlate potential emissions with adverse impacts on human

[1] *See* CARB Resources - Overview: Diesel Exhaust & Health, available at https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.).

health. *Id.* at 14-15. SWAPE identifies potential emissions of DPM from exhaust stacks of construction equipment during the Project's 16 months of construction. *Id.* In failing to connect Toxic Air Contaminant 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. *Id.*; *See Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 510.

Second, 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. OEHHA recommends that projects lasting at least 2 months be evaluated for cancer risks to nearby sensitive receptors, a time period which this Project easily exceeds. Ex. A, p.15. SWAPE therefore recommends that health risk impacts from the project be evaluated, and an EIR is required to analyze these impacts. *Id.*

Third, the IS/MND's claim that there will be a less than significant impact without having evaluated the cumulative lifetime cancer risk from Project construction and operation *together* represents a failure under OEHHA guidelines. *Id.* OEHHA recommends that "the excess cancer risk is calculated separately from each age grouping and then summed to yield cancer risk at the receptor location." IS/MND p. 4.3-17. SWAPE recommends that an updated analysis be prepared which quantifies the Project's construction and operational health risks together. Ex. A, p. 15.

8-7 (cont.)

SWAPE prepared a screening-level HRA to evaluate potential impacts from Project construction. SWAPE used AERSCREEN, a screening-level air quality dispersion model. *Id.* at 16. SWAPE applied a sensitive receptor distance of 200 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance utilizing age sensitivity factors. *Id*. at 16-18.

SWAPE found that the excess cancer risks at a sensitive receptor located approximately 200 meters away over the course of Project construction are approximately 49.1 in one million for infants *Id*. at 18. Moreover, **the excess lifetime cancer risk over the course of a Project operation of 30 years is approximately 52.6 in one million**. *Id*. The risks to infants and lifetime residents appreciably exceed 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. A health risk assessment must be prepared disclosing the health risk impacts from toxic air contaminants from Project construction.

5. The IS/MND failed to adequately analyze the Project's greenhouse gas impacts and thus the Project may result in significant greenhouse gas emissions.

The IS/MND estimates that the Project would generate net annual GHG emissions of 2,385.09 metric tons of carbon dioxide equivalent per year ("MT CO2e/year"), which it states falls below the SCAQMD threshold of 10,000 MT CO2e/year. IS/MND, p. 4.8-6. The IS/MND also relies on consistency with the City's General Plan, SCAG 2020-2045 *RTP/SCS*, and CARB 2017 Climate Change Scoping Plan to conclude the Project's GHG impact is less than significant. *Id.* However, SWAPE states that the IS/MND's conclusion about a less-than-significant greenhouse gas impact is incorrect for three reasons: 8-8

1. Unsubstantiated Quantitative Analysis of Emissions. Ex. A, p. 19-20.
2. Failure to Identify a Potentially Significant GHG Impact. Ex. A, p. 20-21.
3. Failure to Consider Performance-based Standards Under SCAG's *RTP/SCS*. Ex. A, p. 21-22.

SWAPE's analysis demonstrates a potentially significant impact from the project that necessitates mitigation, and it proposes numerous feasible mitigation measures. In addition to implementing these measures, the EIR should include an updated hazardous material, air quality, health risk, and GHG analysis. 8-9

B. The Project Will Have Significant Adverse Biological Impacts That the IS/MND Fails to Adequately Analyze and Mitigate.

Shawn Smallwood, Ph.D. reviewed the IS/MND's analysis of the Project's biological impacts. Dr. Smallwood's comment letter and CV are attached as Exhibit B and his comments are briefly summarized here.

1. The IS/MND is inadequate in its characterization of the existing environmental setting as it relates to wildlife. 8-10

Dr. Smallwood's analysis of the Project's impacts is supported by a site visit conducted by Noriko Smallwood, a wildlife biologist with an M.S. degree from California State University Los Angeles. Ex. B, p. 1. Noriko Smallwood visited the site on December 15, 2021 and reconnoitered the area for 2 hours and 35 minutes with the use of binoculars. *Id*. During that visit, she observed the presence of 36 species of vertebrate wildlife at and near the Project site, four of which are special-status species. *Id.*, see Table 1, Ex. B, p. 3. Dr. Smallwood found that although the site is disked for "weed abatement," it represents an important stopover and staging location, as well as important habitat for wildlife. *Id.* at 2.

Every CEQA document must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's

anticipated impacts. *Communities for a Better Envt. v. So. Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321. Dr. Smallwood found that the IS/MND was incomplete and inaccurate in its characterization of environmental setting due to an inadequate biological survey and a review of literature and databases that was too cursory. Ex. B, p. 12. The biological survey for the IS/MND was prepared by biologists from Michael Baker International in May 2020. Their report indicates that they visited the site on a day when active tilling for weed abatement was occurring. *Id.* Dr. Smallwood found that the survey was therefore performed "on the day of the year least likely to detect wildlife." *Id.* He found that by relying on a survey conducted while a tractor was tilling on the soil, Michael Baker International mischaracterized the wildlife community on-site. *Id.*

Dr. Smallwood also identified flaws in the IS/MND's review of databases. Ex. B, p. 12. He states that Michael Baker International only consulted the California Natural Diversity Data Base ("CNDDB") and inappropriately used it to screen out special-status species from further consideration. *Id.* Dr. Smallwood looked at additional databases that are useful to determine presence and likelihood of presence, such as eBird and iNaturalist. *Id.* Based on that review, he identified 105 special-status species that could potentially occur on-site, as compared to the IS/MND's 20. *Id.*; see Table 2, Ex. B, p. 13-16. Ultimately, Dr. Smallwood found that "[t]he IS/MND's use of CNDDB records to filter out species from its characterization of the current environmental setting is [] inconsistent with CNDBB's purpose." *Id.* at 18.

8-10 (cont.)

A skewed baseline such as the one used by the City here ultimately "mislead(s) the public" by engendering inaccurate analyses of environmental impacts, mitigation measures and cumulative impacts for biological resources. *See San Joaquin Raptor Rescue Center,* 149 Cal.App.4th 645, 656; *Woodward Park Homeowners,* 150 Cal.App.4th 683, 708-711. This inaccurate baseline and the species identified by Dr. Smallwood and Noriko Smallwood warrants discussion and analysis in an EIR to ensure species are accurately detected and that any impacts are mitigated to a less than significant level.

2. The IS/MND fails to analyze the Project's impact on lost breeding capacity.

Dr. Smallwood found that the Project would contribute to a decline in birds in North America, a trend that has been happening over the last approximately 50 years largely due to habitat loss and fragmentation and would be further exacerbated by this project. Ex. B, p. 20-21. Based on studies on the subject, Dr. Smallwood estimates that the presence of the Project on the site could lead to as many as 218 bird nests lost annually. *Id.* at 20. He further found that the reproductive capacity of the site would be lost, as the Project would prevent 632 fledglings per year, which would in turn contribute to the lost capacity of 71,920 birds per year. *Id.*

Because this impact was not addressed in the IS/MND and Dr. Smallwood has presented substantial evidence of a fair argument that habitat loss will impact species, the City must prepare an EIR to analyze the impact.

3. The IS/MND fails to analyze the project's impact to wildlife movement.

The IS/MND improperly dismisses the Project's potential to impact wildlife movement based on the conclusion that "the project site does not act as a corridor or linkage for wildlife species" and therefore "would not interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors…" Ex. B, p. 21.

These conclusions rely on a false CEQA standard. A project will have a significant biological impact if it would "[i]nterfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors..." CEQA Guidelines, App. G. "The primary phrase of the standard goes to wildlife movement regardless of whether the movement is channeled by a corridor." *Id.* "Wildlife movement in the region is often diffuse rather than channeled," including stop-over habitat used by birds and bats, staging habitat, and crossover habitat used by nonvolant wildlife during dispersal, migration, or home range patrol. *Id*.

8-10 (cont.)

Because of its reliance on a false CEQA standard for determining impacts on wildlife movement, the IS/MND contains no evidence to support the conclusion that the Project will not have a significant impact on wildlife movement. An EIR must be prepared to analyze the Project's impacts on wildlife movement.

4. The IS/MND fails to analyze the project's impacts on wildlife from additional traffic generated by the Project.

According to the IS/MND, the Project will generate 4,207 new daily Vehicle Miles Traveled ("VMT"). Ex. B, p. 21-22. Yet the IS/MND provides no analysis of the impacts on wildlife that will be caused by an enormous increase in traffic on the roadways servicing the Project. As a result of increased traffic resulting from the Project, Dr. Smallwood identified likely impacts to special-status species including the western pond turtle, mountain lion, and American badger. *Id.* As Dr. Smallwood notes, "[m]any animals that would be killed by the traffic generated from this project would be located far from the project's construction footprint; they would be crossing roads traversed from cars and trucks originating from or headed toward the project site." *Id.* at 22.

Vehicle collisions with special-status species is not a minor issue, but rather results in the death of millions of species each year. Dr. Smallwood explains:

> In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally. The nearest study of traffic-caused wildlife mortality was performed along a 2.5 mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians,

> and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error.

Ex. B, p. 23.

Using the IS/MND's estimates of VMT as a basis, Dr. Smallwood was able to predict the impacts to wildlife that could be caused by the project. *Id.* at 24. Using the data from the Mendelsohn et al. (2009) study, Dr. Smallwood calculates that operation of the Project over 100 years would cause an accumulated 84,100 wildlife fatalities. *Id.* He therefore states that "the project-generated traffic would cause substantial, significant impacts to wildlife." *Id.* The IS/MND must be revised to include an analysis and mitigation of the result increased traffic from the Project will have on wildlife.

5. The IS/MND fails to adequately address the cumulative impacts of the Project on wildlife.

8-10 (cont.)

The IS/MND states that the Project's impacts would not be cumulatively considerable because of its relatively nominal impacts and mitigation measures that will be provided. However, Dr. Smallwood states that the IS/MND's interpretation of the CEQA standard for cumulative impacts is erroneous. Ex. B, p. 25. Further, he states that the Project's contribution to cumulative impacts is made potentially more significant because it is an "island of open space in the middle of the greater Los Angeles megacity." *Id.* He goes on, "[t]he project's situation epitomizes the terminal stage of habitat fragmentation at which point it represents one of the last remaining patches of open space." *Id.* An EIR should be prepared to adequately analyze potential cumulative impacts to wildlife caused by the Project.

As for the proposed mitigation measure, Dr. Smallwood states that while preconstruction surveys should be conducted for birds, they represent only a "last-minute effort[] to save the readily detectable birds or their nests from being crushed by heavy machinery." *Id*. These surveys therefore only detect a "tiny fraction" of bird nests and "would save very few of the nesting birds in peril." *Id.* Dr. Smallwood recommends that land be strategically conserved in perpetuity to make up for the habitat loss from the Project, and that an EIR be prepared to formulate appropriate mitigation. *Id.* He also states that detection surveys should be conducted for each of the special-status species identified in his report. *Id.* at 26.

6. CONCLUSION

8-11

In light of the above comments, the City must prepare an EIR for the Project and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,

Richard Toshiyuki Drury
LOZEAU DRURY LLP

EXHIBIT A

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December 26, 2021

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Subject: Comments on the Beverly Boulevard Warehouse Project (SCH No. 2021120053)

Dear Ms. Fuentes,

We have reviewed the December 2021 Initial Study/Mitigated Negative Declaration ("IS/MND") for the Beverly Boulevard Warehouse Project ("Project") located in the City of Pico Rivera ("City"). The Project proposes to construct a 357,903-SF warehouse with 5,000-SF of office space and a 2,500-SF print shop, as well as 422 parking spaces, on the 19.06-acre site.

8-12 (cont.)

Our review concludes that the IS/MND 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 Environmental Impact Report ("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.

Hazards and Hazardous Material

Inadequate Analysis of Impacts

Past uses of the Project site includes orchards and a railroad spur. A Phase I Environmental Site Assessment ("ESA"), included as Appendix H to the IS/MND, identified the use of a railroad spur as a recognized environmental condition. The IS/MND incorporates Mitigation Measure ("MM") HAZ-1, which states:

> "The project applicant shall retain a Phase II/Site Characterization Specialist to prepare a Soil Management Plan prior to the issuance of any grading permit for the proposed project. The Phase II/Site Characterization Specialist shall define the extent of on-site contamination

associated with the Recognized Environmental Condition (REC) and Other Environmental Features (OEFs) identified in the Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California prepared by Roux Associates, Inc. (dated July 2, 2021)" (p. 4.9-4).

The IS/MND fails to disclose that a Phase II ESA[1] has already been conducted to sample impacts to soil from past uses. The Phase II ESA found elevated arsenic levels, described in the Phase II as follows:

> "The 26 railroad samples and the 42 railroad step-out samples, collected at various depths from 18 different borings, were analyzed for arsenic only using USEPA Method 6010B. Arsenic was detected above the RL [reporting limit] and the DTSC SL [Department of Toxic Substances Control Screening Levels] in all 68 samples. However, arsenic was detected above both the USEPA RSL [Regional Screening Level] and the Southern California background maximum arsenic concentration of 12 mg/kg in 18 of the 26 railroad samples and 19 of the 42-railroad step-out samples" (p. 4).

8-12 (cont.)

The following map included in the Phase II ESA shows the extent of the arsenic contamination.

[1] Phase II Soil Investigation Summary Memorandum, 18.82-acre Property, Beverly Boulevard and the 605 Freeway, Pico Rivera, California, July 2, 2021 (included as Appendix I to the Phase I ESA which is Appendix H to the IS/MND)

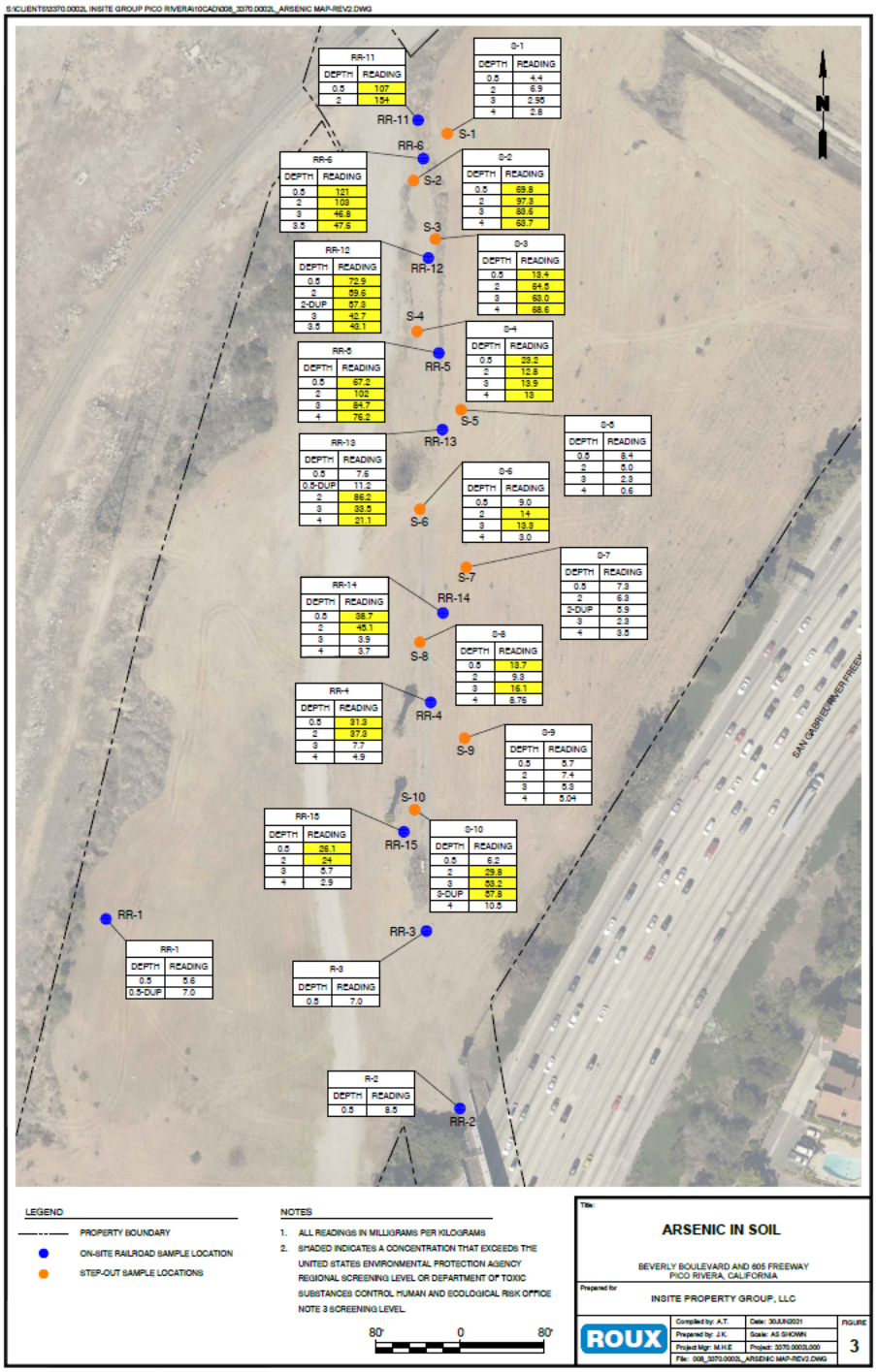

Figure 3 to the Phase II

8-12 (cont.)

The arsenic contamination found in the Phase II was not mentioned in the IS/MND and is therefore an undisclosed impact. The US EPA has determined that arsenic is a known human carcinogen.[2]

[2] https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=19&toxid=3

The applicant should enter into a voluntary cleanup agreement with DTSC to ensure their oversight of a cleanup of the arsenic-contaminated soils that is protective to construction workers and nearby residents. If not cleaned up to the satisfaction of regulators, workers and neighbors could be exposed to dust containing arsenic at harmful levels during site grading. An EIR is necessary to disclose the impacts of the contaminated soil and to provide mitigation to include a health-protective cleanup under regulatory oversight.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The IS/MND's air quality analysis relies on criteria air pollutant emissions CalEEMod.2020.4.0 (p. 4.3-8).[3] 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. 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.

8-12
(cont.)

When reviewing the Project's CalEEMod output files, provided in the Air Quality/Greenhouse Gas/Energy Data ("AQ, GHG, & Energy Report") as Appendix A to the IS/MND, we found that several model inputs were inconsistent with information disclosed in the IS/MND. As a result, the Project's construction and operational emissions are underestimated. Therefore, an 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 Parking Land Use Size

According to the IS/MND:

> "The new warehousing/distribution building would encompass approximately 357,903 gross square feet of building area, which would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass approximately 2,500 gross square feet of building area and include 29 surface parking spaces" (IS, pp. 2-6).

As such, the model should have included 422 parking spaces.[4] However, review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes only 403 parking spaces (see excerpt below) (Appendix A, pp. 2, 35, 62).

[3] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6.
[4] Calculated: 393 spaces + 29 spaces = 422 spaces.

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20
Parking Lot	403.00	Space	3.63	161,200.00
City Park	1.97	Acre	1.97	85,813.20
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00

As you can see in the excerpt above, the proposed parking is underestimated by 19 spaces. This underestimation presents an issue, as the square footage of parking land uses is used for certain calculations such as determining the area to be painted and stripped (i.e., VOC emissions from architectural coatings) and volume to be ventilated (i.e., energy impacts).[5] Thus, by underestimating the number of proposed parking spaces, the model underestimates the Project's construction-related and operational emissions and should not be relied upon to determine Project significance.

Failure to Model All Proposed Land Uses

According to the IS/MND:

> "The warehousing building area would include 352,903 square feet of warehousing/distribution uses (which includes 5,000 gross square feet of office use) and 5,000 square feet of mezzanine (total of 357,903 square feet of building area)" (IS, pp. 2-6).

8-12 (cont.)

As demonstrated above, the model should have included 5,000-SF of office space. However, review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes all 352,903-SF as "Unrefrigerated Warehouse-No Rail" (see excerpt below) (Appendix A, pp. 2, 35, 62).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20
Parking Lot	403.00	Space	3.63	161,200.00
City Park	1.97	Acre	1.97	85,813.20
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00

As you can see in the excerpt above, the model fails to distinguish between the warehouse and office land uses. This inconsistency presents an issue, as CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors.[6] Furthermore, each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions.[7] Thus, by failing to include all proposed land use types, the model may underestimate the Project's construction-related and operational emissions and should not be relied upon to determine Project significance.

[5] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6, p. 29.
[6] "CalEEMod User's Guide, Appendix D." CAPCOA, September 2016, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2.
[7] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6, p. 29.

Failure to Consider Potential Cold Storage Requirements

Review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes the entirety of the proposed warehouse space as unrefrigerated (see excerpt below) (Appendix A, pp. 2, 35, 62).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20
Parking Lot	403.00	Space	3.63	161,200.00
City Park	1.97	Acre	1.97	85,813.20
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00

As you can see in the excerpt above, the model fails to include any refrigerated warehouse land use space. However, this is incorrect. Regarding operation of the proposed warehouse space, the IS/MND states:

> "At the time of this analysis, the future tenant of the project is unknown" (p. 4.6-6)

8-12 (cont.)

As demonstrated above, future site tenants are unknown. As such, future tenants of the proposed warehouse may require cold storage for operation. Therefore, as refrigerated warehouse space is the most energy-intensive, the Project should have included all of the proposed warehouse space as cold storage in order to conduct the most conservative analysis.

This presents an issue, as refrigerated warehouses release more air pollutants and greenhouse gas ("GHG") emissions when compared to unrefrigerated warehouses for three reasons. First, warehouses equipped with cold storage (refrigerators and freezers, for example) are known to consume more energy when compared to warehouses without cold storage.[8] Second, warehouses equipped with cold storage typically require refrigerated trucks, which are known to idle for much longer when compared to unrefrigerated hauling trucks.[9] Third, according to an October 2016 Institute of Transportation Engineers ("ITE") report entitled *High-Cube Warehouse Vehicle Trip Generation Analysis*, cold storage warehouses result in greater trip rates when compared to transload & short-term storage warehouses.[10] Furthermore, as stated by the California Supreme Court, CEQA was "intended to be interpreted in such manner as to afford the fullest possible protection to the environment."[11] As such, the warehouse land use should have been modeled as refrigerated space in order account for the additional emissions that refrigeration requirements may generate.

[8] Managing Energy Costs in Warehouses, Business Energy Advisor, *available at*: http://bizenergyadvisor.com/warehouses

[9] "Estimation of Fuel Use by Idling Commercial Trucks," p. 8, *available at:* http://www.transportation.anl.gov/pdfs/TA/373.pdf

[10] "HIGH-CUBE WAREHOUSE VEHICLE TRIP GENERATION ANALYSIS." ITE, October 2016, *available at:* https://www.ite.org/pub/?id=a3e6679a%2De3a8%2Dbf38%2D7f29%2D2961becdd498, p. 13.

[11] Friends of Mammoth v. Board of Supervisors, Supreme Court of California, *available at:* https://scocal.stanford.edu/opinion/friends-mammoth-v-board-supervisors-32943

By failing to account for potential cold storage requirements, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance. An EIR should be prepared to account for the possibility of refrigerated warehouse needs by future tenants.

Unsubstantiated Reductions to Architectural and Area Coating Emission Factors and Areas

Review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes several reductions to the default architectural and area coating emission factors and areas (see excerpt below) (Appendix A, pp. 3, 36, 63):

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	180,202.00	100,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50

As you can see in the excerpt above, the parking and nonresidential exterior and interior architectural and area coating emission factors were each reduced from their default value of 100- to 50-grams per liter ("g/L"). Additionally, the architectural coating area was reduced from 180,202-SF to 100,000-SF. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[12] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "SCAQMD rule 1113" (Appendix A, pp. 3, 36, 63). Furthermore, regarding SCAQMD Rule 1113, the IS/MND states:

8-12 (cont.)

> "The project would be required to comply with SCAQMD Rule 1113. SCAQMD Rule 1113 restricts the VOC content of architectural coatings; reducing ROG emissions. Additionally, the project would include a large number of prefinished panels or masonry, which would reduce the project's architectural coating area and associated ROG emissions" (p. 4.3-11)

However, this justification is insufficient for two reasons.

First, we cannot verify the accuracy of the revised architectural coating emission factors based on SCAQMD Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required VOC limits (grams of VOC per liter of coating) for 57 different coating categories (e.g., Floor coatings, Faux Finishing Coatings, Fire-Proofing Coatings, Cement Coatings, Multi-Color Coatings, Primers, Sealers, Recycled Coatings, Shellac, Stains, Traffic Coatings, Waterproofing Sealers, Wood Coatings, etc.). The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates a reduction to the default coating values without more information regarding what category of coating will be used. As the IS/MND and associated

[12]"CalEEMod User's Guide." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6, p. 1, 14.

documents fail explicitly require the Project use a specific type of coating, we are unable to verify the revised emission factors assumed in the model.

Second, despite the IS/MND's claim that the Project would include a large number of prefinished panels or masonry, which would reduce the project's architectural coating area, the IS/MND fails to substantiate the actual square footage of the coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses the architectural and area coating emission factors and areas to calculate the Project's reactive organic gas/volatile organic compound ("ROG"/"VOC") emissions associated with application rates and coating content. Thus, by including unsubstantiated reductions to the Project's architectural and area coating emission factors and areas, the model may underestimate the Project's ROG/VOC emissions and should not be relied upon to determine Project significance.

Overestimated Building Construction Phase Length

Regarding the Project's anticipated building construction duration, the IS/MND states:

> "Building construction and ancillary improvements would continue during the remaining 10 months" (p. 2-12).

8-12 (cont.)

As such, the model should have included a building construction phase length of 10 months. However, review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes the following construction schedule (see excerpt below) (Appendix A, pp. 9, 42, 69):

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Grading	Grading	6/1/2022	8/31/2022	5	66
2	Building Construction	Building Construction	9/1/2022	8/31/2023	5	261
3	Paving	Paving	7/1/2023	7/31/2023	5	21
4	Architectural Coating	Architectural Coating	10/1/2023	10/31/2023	5	22

As you can see in the excerpt above, the model includes a 12-month building construction phase length. Thus, the revised phase length is overestimated by 2 months and the model is inconsistent with the IS/MND.

This overestimation presents an issue, as construction-related emissions are improperly spread out over a longer period of time for the building construction phase. As such, the Project's peak daily construction-related emissions are underestimated, and the model should not be relied upon to determine Project significance.

Incorrect Amount of Material Import and Export

Regarding the amount of material import and export required for Project construction, the IS/MND states:

"On-site grading activities would occur for a duration of three months and would include 60,000 cubic yards of cut and 10,000 cubic yards of fill" (p. 2-12).

As such, the model should have included 60,000 cubic yards ("cy") of material export and 10,000 cy of material import. However, review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes only 2,000 cy of material export and 65,000 of material import (Appendix A, pp. 4, 35, 64):

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	65,000.00

As you can see from the excerpt above, the amount of material import and export required for Project construction is underestimated by 3,000 cy in the model.[13]

This underestimation presents an issue, as material import and export are used to calculate emissions produced from material movement, including truck loading and unloading, and additional hauling truck trips.[14] Thus, by failing to include the full amount of material import and export required for Project construction, the model underestimates the Project's construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Construction-Related Mitigation

Review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes the following construction-related mitigation measures (see excerpt below) (Appendix A, pp. 10, 44, 71):

8-12 (cont.)

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

As a result, the model includes an unpaved road vehicle speed of 15 miles per hour ("MPH") (see excerpt below) (Appendix A, pp. 3, 36, 63).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[15] According to the "User Entered Comments & Non-Default Data" table, the justification

[13] Calculated: (60,000 cy + 10,000 cy) – (2,000 cy + 65,000 cy) = 3,000 cy.
[14] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6, p. 2, 35.
[15] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

provided for these changes is: "SCAQMD Rule 403" (Appendix A, pp. 3, 36, 63). Furthermore, the IS/MND states:

> "The proposed project would result in less than significant air quality impacts and would comply with all applicable SCAQMD rules and regulations, including Rule 403 that requires excessive fugitive dust emissions controlled by regular watering or other dust prevention measures" (p. 4.3-6)

However, the inclusion of the above-mentioned construction-related mitigation measures remain unsupported for three reasons.

First, the inclusion of the construction-related mitigation measures, based on the Project's compliance with SCAQMD Rule 403, is unsupported. 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 project has undergone environmental review and are above-and-beyond existing laws, regulations, and requirements that would reduce environmental impacts."[16]

As demonstrated 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 SCAQMD Rule 403, is unsubstantiated.

8-12 (cont.)

Second, according to the above-mentioned AEP report:

> "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."[17]

As demonstrated above, project design features ("PDFs") that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned construction-related measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site.

[16] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[17] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Third, simply because the IS/MND references SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the model. Specifically, according to SCAQMD Rule 403, Projects can either water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph or apply a chemical stabilizer (see excerpt below).[18]

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS	
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

As you can see in the above excerpt, to simply comply with SCAQMD Rule 403, the Project may either water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph, or apply a chemical stabilizer. Thus, the "Replace Ground Cover," "Water Exposed Area," and "Reduce Vehicle Speed on Unpaved Roads" measures are not all explicitly required by SCAQMD Rule 403 and should therefore not be included in the model. By incorrectly including several construction-related mitigation measures without properly committing to their implementation, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Operational Mitigation Measures

8-12 (cont.)

Review of the CalEEMod output files demonstrates that the "Beverly Boulevard Warehouse" model includes the following water-, waste-, and area-related operational mitigation measures (see excerpt below) (Appendix A, pp. 24, 25, 46, 65):

Water-Related Mitigation Measures:

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

[18] "RULE 403. FUGITIVE DUST." SCAQMD, June 2005, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf, p. 403-21, Table 2.

Waste-Related Mitigation Measure:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Additionally, the model assumes the Project would use low VOC paint for its residential, nonresidential, and parking land uses (see excerpt below) (Appendix A, pp. 3, 36, 63).

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintParkingValue	50	100

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[19] [20] According to the "User Entered Comments & Non-Default Data" table, the justification provided for the inclusion of the water- and waste-related operational mitigation measures are: "CALGreen Code" and "AB 341," respectively (Appendix A, pp. 3, 36, 63). However, the "User Entered Comments & Non-Default Data" table fails to provide justification for the inclusion of the area-related mitigation measures. Regarding water- and waste-related project design features ("PDFs"), the IS/MND states:

> "Emission reductions applied in the CalEEMod model include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code and the 2019 CALGreen Code. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources" (p. 4.8-6).

8-12 (cont.)

However, the inclusion of the above-mentioned operational mitigation measures is unsupported for two reasons.

First, as previously discussed, 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."[21]

[19] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[20] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[21] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.

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 on CALGreen Code, AB 341, or SCAQMD Rule 1113 is unsubstantiated.

Second, according to the above-mentioned AEP report:

> "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."[22]

As you can see in the excerpt above, PDFs that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the water-, waste-, and area-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. By including water-, waste-, and area-related 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.

8-12 (cont.)

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate Project's construction-related emissions, we prepared an updated CalEEMod model, using the Project-specific information provided by the IS/MND. In our updated model, we included the proposed land use types and sizes; omitted the unsubstantiated architectural and area emission factors and areas; included the correct building construction phase length; corrected the material import and export values; and excluded the incorrect construction-related and operational mitigation measures (see Attachment A).

Our updated analysis estimates that the Project's construction-related VOC emissions exceed the applicable SCAQMD thresholds of 75 pounds per day ("lbs/day") (see table below).[23]

[22] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.
[23] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

SWAPE Criteria Air Pollutant Emissions	
Model	**VOC** (lbs/day)
IS/MND	70.3
SWAPE	**157.3**
% Increase	124%
SCAQMD Threshold	75
Threshold Exceeded?	***Yes***

As you can see in the excerpt above, the Project's construction-related VOC emissions, as estimated by SWAPE, increase by approximately 124% and exceed the applicable SCAQMD significance threshold. Thus, our model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The IS/MND estimates that the highest calculated carcinogenic risk posed to nearby, existing sensitive receptors as a result of heavy trucks accessing the site during Project operation would be 1.66 in one million, which would not exceed the SCAQMD significance threshold of 10 in one million (see excerpt below) (p. 4.3-18, Table 4.3-6):

8-12 (cont.)

Table 4.3-6
Project Maximum Individual Cancer Risk

Exposure Scenario	Maximum Individual Cancer Risk (Risk per Million)[1]	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
30-Year Exposure at a Sensitive Receptor[2]	0.53	10	No
30-Year Exposure within Modeling Domain[3]	1.66	10	No

Notes:
1. Refer to Appendix G, *Health Risk Data*.
2. The maximum cancer risk at a sensitive receptor would be experienced at UTM NAD83 Zone 11S coordinate location 401385.35, 3762424.23 to the south of the project site.
3. The maximum cancer risk within the modeling domain would be experienced at UTM NAD83 Zone 11S coordinate location 401465.73, 3763079.27, directly on the project site.

Refer to Appendix G, *Health Risk Data*, for detailed model input/output data.

However, the IS/MND fails to discuss the health risk impacts associated with toxic air contaminant ("TAC") emissions generated during Project construction whatsoever. As such, the IS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

First, by failing to prepare a quantified construction HRA, the Project is inconsistent with CEQA's requirement to correlate the increase in emissions that the Project would generate to the adverse impacts on human health caused by those emissions. This is incorrect, as construction of the proposed Project will produce emissions of diesel particulate matter ("DPM") through the exhaust stacks of

construction equipment over the course of the 16-month construction duration (p. 2-12). However, the IS/MND fails to discuss the potential TACs associated with Project construction or evaluate the concentrations at which such pollutants would trigger adverse health effects. Thus, without making a reasonable effort to connect the Project's construction-related TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the increase in TAC emissions with potential adverse impacts on human health.

Second, the State of 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.[24] OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by the IS/MND (p. 4.3-17).[25] This guidance document describes the types of projects that warrant the preparation of an HRA. The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors. As the Project's proposed construction duration vastly exceeds the 2-month requirement set forth by OEHHA, it is clear that the Project meets the threshold warranting a quantified construction-related HRA under OEHHA guidance. These recommendations reflect 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-generated construction DPM emissions be included in an EIR for the Project.

8-12 (cont.)

Third, while the IS/MND includes a HRA evaluating the health risk impacts to nearby, existing receptors as a result of truck movement, maneuvering, and idling during Project operation, the HRA fails to evaluate the cumulative lifetime cancer risk to nearby, existing receptors as a result 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" (p. 4.3-17).[26] However, the Project's HRA fails to sum each age bin to evaluate the total cancer risk over the course of the Project's total construction and operation. This is incorrect and thus, an updated analysis should quantify the entirety of the Project's construction and operational health risks together and sum them to compare to the SCAQMD threshold of 10 in one million, as referenced by the IS/MND (p. 4.3-15).

[24] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, *available at*: https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf, p. 6.
[25] "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.
[26] "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

Screening-Level Analysis Indicates 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.[27] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[28] and the California Air Pollution Control Officers Associated ("CAPCOA")[29] 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 construction-related health risk impact to residential sensitive receptors using the annual PM_{10} exhaust estimates from the IS/MND's CalEEMod output files. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. The IS/MND's CalEEMod model indicates that construction activities will generate approximately 411 pounds of DPM over the 517-day construction period.[30] The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

8-12 (cont.)

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{411.2\ lbs}{517\ days} \times \frac{453.6\ grams}{1\ lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00418\ g/s}$$

Using this equation, we estimated a construction emission rate of 0.00418 grams per second ("g/s"). Construction was simulated as a 19.06-acre rectangular area source in AERSCREEN, with approximate dimensions of 393- by 196-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 population of Pico Rivera was obtained from U.S. 2020 Census data.[31]

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%.[32]

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[27] 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

[28] OEHHA (February 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[29] 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.

[30] See Attachment A for calculations.

[31] "Pico Rivera." U.S. Census Bureau, 2020, *available at:* https://datacommons.org/place/geoId/0656924.

[32] 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.

According to the IS/MND, the nearest sensitive receptor is located directly to the south of the Project site (p. 4.13-4). However, review of the AERSCREEN output files demonstrates that the maximally exposed receptor is located approximately 200 meters from the Project site. Thus, the single-hour concentration estimated by AERSCREEN for Project construction is approximately 2.565 µg/m^3 DPM at approximately 200 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.2565 µg/m^3 for Project construction at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA, as recommended by SCAQMD.[33] Consistent with the 517-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and first 1.17 years of the infantile stage of life (0 – 2 years).

Consistent with OEHHA guidance, as recommended by SCAQMD and referenced by the IS/MND, we used Age Sensitivity Factors ("ASF(s)") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (p. 9).[34, 35] According to this guidance, 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). Furthermore, in accordance with guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[36] Finally, consistent with OEHHA and SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester, infant, and child receptors, and a FAH value of 0.73 for adult receptors.[37] 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 in the tables below.

8-12 (cont.)

[33] "Supplemental Guidelines for Submission of Rule 1200 Health Risk Assessments (HRAs)." SDAPCD, July 2019, *available at:* https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Toxics_Program/APCD_1200_Supplemental_Guidelines.pdf.

[34] "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.

[35] "Supplemental Guidelines for Submission of Rule 1200 Health Risk Assessments (HRAs)." SDAPCD, July 2019, *available at:* https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Toxics_Program/APCD_1200_Supplemental_Guidelines.pdf.

[36] SCAQMD (Jun 2015) Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act, p. 19, http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6; *see also* OEHHA (Feb 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[37] SCAQMD (Aug 2017) Risk Assessment Procedures for Rules 1401, 1401.1, and 212, p. 7, http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf.

The Maximally Exposed Individual at an Existing Residential Receptor

Age Group	Emissions Source	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	Cancer Risk (without ASFs*)	ASF	Cancer Risk (with ASFs*)
3rd Trimester	Construction	0.25	0.2565	361	3.49E-07	10	**3.49E-06**
Infant (Age 0 - 2)	*Construction*	*1.17*	*0.2565*	*1090*	*4.91E-06*		
	Operation	*0.83*	*	*1090*	*		
	Total	2			4.91E-06	10	**4.91E-05**
Child (Age 2 - 16)	Operation	14	*	572	*	3	*
Adult (Age 16 - 30)	Operation	14	*	261	*	1	*
Lifetime		**30**			**5.26E-06**		**5.26E-05**

* We, along with CARB and SCAQMD, recommend using the more updated and health protective 2015 OEHHA guidance, which includes ASFs.

As demonstrated in the table above, the excess cancer risks for the 3rd trimester of pregnancy and infants at the MEIR located approximately 200 meters away, over the course of Project construction, utilizing ASFs, are approximately 3.49 and 49.1 in one million, respectively. The excess cancer risk associated with Project construction over the course of a residential lifetime (30 years), utilizing ASFs, is approximately 52.6 in one million. When summing the Project's construction-related cancer risk, as estimated by SWAPE, with the IS/MND's operational cancer risk of 1.66 in one million, we estimate an excess cancer risk of approximately 54.26 in one million over the course of a residential lifetime (p. p. 4.3-18, Table 4.3-6).[38] As such, the infant and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the IS/MND.

8-12 (cont.)

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. Thus, an EIR should be prepared, including 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.

[38] Calculated: 52.6 in one million + 1.66 in one million = 54.26 in one million.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The IS/MND estimates that the Project would generate net annual GHG emissions of 2,385.09 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD threshold of 10,000 MT CO_2e/year (see excerpt below) (p. 4.8-6, Table 4.8-1).

Table 4.8-1
Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e
	Metric Tons/yr[1]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	
Direct Emissions						
• Construction • (total of 2,207.84 $MTCO_2e$ amortized over 30 years)	72.13	0.01	0.28	<0.01	1.18	73.59
• Area Source	0.02	0.00	0.00	0.00	0.00	0.02
• Mobile Source	1,649.07	0.06	1.61	0.17	49.29	1,699.97
Total Direct Emissions[3]	***1,721.22***	***0.08***	***1.89***	***0.17***	***50.47***	***1,773.58***
Indirect Emissions						
• Energy	275.54	0.02	0.56	<0.01	0.88	276.98
• Solid Waste Generation	34.43	2.03	50.87	0.00	0.00	85.30
• Water Demand	179.14	2.18	54.39	0.05	15.70	249.23
Total Indirect Emissions[3]	***489.11***	***4.23***	***105.82***	***0.06***	***16.58***	***611.51***
Total Project-Related Emissions[3]	***2,385.09 $MTCO_2e$/year***					
GHG Emissions Threshold	***10,000.00 $MTCO_2e$/year***					
GHG Emissions Exceed Threshold?	***No***					

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2020.4.0 (CalEEMod) computer model.
2. CO_2 Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed September 2020.
3. Totals may be slightly off due to rounding.
4. Emission reductions applied in the CalEEMod model include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code and the 2019 CALGreen Code. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources.

Refer to Appendix A, for detailed model input/output data.

8-12 (cont.)

Furthermore, the IS/MND's analysis relies upon the Project's consistency with the City's General Plan, SCAG 2020-2045 *RTP/SCS*, and CARB 2017 Climate Change *Scoping Plan* to conclude that the Project would result in a less-than-significant GHG impact (p. 4.8-7 – 4.8-14). However, the IS/MND's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons:

(1) The IS/MND's quantitative GHG analysis relies upon an unsubstantiated air model;
(2) The IS/MND fails to identify a potentially significant greenhouse gas impact; and
(3) The IS/MND fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1) Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 2,385.09 MT CO_2e/year (p. 4.8-6, Table 4.8-1). However, the IS/MND's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ, GHG, & Energy Report as Appendix A to the IS/MND, we found that several of the values inputted into the model are not consistent with information disclosed in the IS/MND. As a result, the model underestimates the Project's emissions, and the IS/MND's quantitative GHG analysis should not be relied upon to determine Project significance. An 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.

2) Failure to Identify a Potentially Significant GHG Impact

In an effort to quantitatively evaluate the Project's GHG emissions, we compared the Project's GHG emissions, as estimated by the IS/MND, to the SCAQMD 2035 service population efficiency target of 3.0 MT CO_2e/SP/year, which was calculated by applying a 40% reduction to the 2020 targets.[39] When applying the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[40] As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 2,385.09 MT CO_2e/year (p. 4.8-6, Table 4.8-1). According to CAPCOA's *CEQA & Climate Change* report, a service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[41] As the Project does not include any residential land uses, the service population would include the number of jobs supported by the Project. According to the IS/MND, the Project will employ 128 people during operation (p. 4.17-6). As such, we estimate a service population of 128 people.[42] When dividing the Project's net annual GHG emissions, as estimated by the IS/MND, by a service population of 128 people, we find that the Project would emit approximately 18.6 MT CO_2e/SP/year (see table below).[43]

SWAPE Annual Greenhouse Gas Emissions

Project Phase	Proposed Project (MT CO_2e/year)
Total Emissions	2,385.09
Service Population	128
Service Population Efficiency (MT CO2e/SP/year)	**18.6**
SCAQMD Population Efficiency 2035 Target	3.0
Threshold Exceeded?	***Yes***

8-12 (cont.)

As demonstrated above, the Project's service population efficiency value exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year, indicating a potentially significant impact not previously identified or addressed by the IS/MND. As a result, the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. An EIR should be prepared, including an updated GHG analysis

[39] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.

[40] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.

[41] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[42] Calculated: 0 residents + 128 employees = 128 service population.

[43] Calculated: (1,380 MT CO_2e/year) / (277 service population) = (4.98 MT CO_2e/SP/year).

and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

3) Failure to Consider Performance-based Standards Under SCAG's RTP/SCS

As discussed above, the IS/MND concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.8-7 – 4.8-14). However, the IS/MND 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 the per capita GHG emission targets.

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"), in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (see excerpt below). [44]

8-12 (cont.)

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/b/	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%/c/

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

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goals, SWAPE calculated the Project's per-capita CO_2e emissions from passenger and light duty vehicles[45]. 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 128. The table below shows the per capita emissions for the Project based on the IS/MND's modeling.

[44] "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.
[45] See Attachment D for calculations

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals

Sources	IS/MND Modeling
Annual Mobile Emissions (MT CO_2e/year)	1,699.97
Passenger & Light-Duty Fleet Mix (%)	69%
Daily CO_2e Emissions (lbs/day)	7,084.87
Service Population	128
Per Capita Emissions (lbs/day/SP)	**55.35**
21.3 lbs/day/SP (2020 Goal) **Exceeded?**	***Yes***
18.8 lbs/day/SP (2035 Goal) **Exceeded?**	***Yes***

As shown in the above table, when utilizing the IS/MND's modeling, the Project would result in 55.35 pounds per day per service population ("lbs/day/SP") emissions. This exceeds both SCAG's 2020 and 2035 targets of 21.3- and 18.8-lbs/day/SP, respectively, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*. As such, the Project's consistency with SCAG's *RTP/SCS* should not be relied upon and an EIR should be prepared to include an updated GHG analysis.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality, 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 the Department of Justice Warehouse Project Best Practices document.[46] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

8-12 (cont.)

- Requiring off-road construction equipment to be zero-emission, where available, and all diesel-fueled off-road construction equipment, to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Requiring on-road heavy-duty haul trucks to be model year 2010 or newer if diesel-fueled.
- Providing electrical hook ups to the power grid, rather than use of diesel-fueled generators, for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.

[46] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice.

- Forbidding idling of heavy equipment for more than two minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.
- Requiring that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2010 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring all heavy-duty vehicles entering or operated on the project site to be zero-emission beginning in 2030.
- Requiring on-site equipment, such as forklifts and yard trucks, to be electric with the necessary electrical charging stations provided.
- Forbidding trucks from idling for more than two minutes and requiring operators to turn off engines when not in use.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Constructing electric truck charging stations proportional to the number of dock doors at the project.
- Constructing electric plugs for electric transport refrigeration units at every dock door, if the warehouse use could include refrigeration.
- Constructing electric light-duty vehicle charging stations proportional to the number of parking spaces at the project.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity, such as equal to the building's projected energy needs.

8-12 (cont.)

- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Achieving certification of compliance with LEED green building standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.

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 EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality, health risk, and GHG analyses 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.

8-12 (cont.)

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.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: CalEEMod Output Files
Attachment B: Health Risk Calculations
Attachment C: AERSCREEN Output Files
Attachment D: SCAG Calculations
Attachment E: Matt Hagemann CV
Attachment F: Paul E. Rosenfeld CV

8-12
(cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	352.90	1000sqft	8.10	352,903.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

8-12 (cont.)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with IS/MND's model.

Land Use - See SWAPE comments "Underestimated Parking Land Use Size," "Failure to Model All Proposed Land Uses," and "Failure to Consider Potential Cold Storage Requirements."

Construction Phase - See SWAPE comment on "Overestimated Building Construction Phase Length"

Off-road Equipment - Consistent with IS/MND's model.

Grading - See SWAPE comment on "Incorrect Amount of Material Import and Export"

Off-road Equipment - Consistent with IS/MND's model.

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Consistent with IS/MND's model.

Off-road Equipment -

Trips and VMT - Consistent with IS/MND's model.

Architectural Coating - See SWAPE comment on "Unsubstantiated Reductions to Architectural and Area Coating Emission Factors and Areas"

Vehicle Trips - Consistent with IS/MND's model.

Fleet Mix - Consistent with IS/MND's model

Road Dust - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Coating - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Construction Off-road Equipment Mitigation - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Water Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Waste Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	300.00	217.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	12/12/2023	8/30/2023
tblConstructionPhase	PhaseEndDate	10/17/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	8/23/2022	8/31/2022
tblConstructionPhase	PhaseEndDate	11/14/2023	5/29/2023
tblConstructionPhase	PhaseStartDate	11/15/2023	8/1/2023
tblConstructionPhase	PhaseStartDate	8/24/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	7/13/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	10/18/2023	5/1/2023
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	60,000.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	352,900.00	352,903.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

8-12 (cont.)

2.0 Emissions Summary

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.4249	4.9785	3.9542	0.0125	0.8868	0.1680	1.0547	0.3250	0.1560	0.4810	0.0000	1,165.3794	1,165.3794	0.1802	0.0838	1,194.8549
2023	2.0324	2.6732	3.5352	8.3400e-003	0.3157	0.1034	0.4192	0.0852	0.0966	0.1818	0.0000	758.8337	758.8337	0.1164	0.0287	770.2903
Maximum	**2.0324**	**4.9785**	**3.9542**	**0.0125**	**0.8868**	**0.1680**	**1.0547**	**0.3250**	**0.1560**	**0.4810**	**0.0000**	**1,165.3794**	**1,165.3794**	**0.1802**	**0.0838**	**1,194.8549**

8-12 (cont.)

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					
2022	0.4249	4.9785	3.9542	0.0125	0.8868	0.1680	1.0547	0.3250	0.1560	0.4810	0.0000	1,165.3788	1,165.3788	0.1802	0.0838	1,194.8543
2023	2.0324	2.6732	3.5352	8.3400e-003	0.3157	0.1034	0.4192	0.0852	0.0966	0.1818	0.0000	758.8333	758.8333	0.1164	0.0287	770.2899
Maximum	**2.0324**	**4.9785**	**3.9542**	**0.0125**	**0.8868**	**0.1680**	**1.0547**	**0.3250**	**0.1560**	**0.4810**	**0.0000**	**1,165.3788**	**1,165.3788**	**0.1802**	**0.0838**	**1,194.8543**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	**6-1-2022**	**8-31-2022**	3.2169	3.2169
2	**9-1-2022**	**11-30-2022**	1.5757	1.5757
3	**12-1-2022**	**2-28-2023**	1.4614	1.4614
4	**3-1-2023**	**5-31-2023**	1.5451	1.5451
5	**6-1-2023**	**8-31-2023**	2.1652	2.1652
		Highest	3.2169	3.2169

2.2 Overall Operational

Unmitigated Operational

8-12 (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					
Area	1.5019	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Energy	1.9400e-003	0.0176	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	286.2241	286.2241	0.0229	3.0800e-003	287.7157
Mobile	0.2445	2.3923	3.3512	0.0174	1.2299	0.0182	1.2481	0.3328	0.0173	0.3501	0.0000	1,668.4333	1,668.4333	0.0665	0.1650	1,719.2494
Waste						0.0000	0.0000		0.0000	0.0000	68.8505	0.0000	68.8505	4.0690	0.0000	170.5741
Water						0.0000	0.0000		0.0000	0.0000	26.2312	196.8521	223.0833	2.7108	0.0656	310.4111
Total	**1.7484**	**2.4100**	**3.3761**	**0.0175**	**1.2299**	**0.0196**	**1.2495**	**0.3328**	**0.0186**	**0.3514**	**95.0817**	**2,151.5290**	**2,246.6107**	**6.8692**	**0.2337**	**2,487.9712**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.5019	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Energy	1.9400e-003	0.0176	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	286.2241	286.2241	0.0229	3.0800e-003	287.7157
Mobile	0.2445	2.3923	3.3512	0.0174	1.2299	0.0182	1.2481	0.3328	0.0173	0.3501	0.0000	1,668.4333	1,668.4333	0.0665	0.1650	1,719.2494
Waste						0.0000	0.0000		0.0000	0.0000	68.8505	0.0000	68.8505	4.0690	0.0000	170.5741
Water						0.0000	0.0000		0.0000	0.0000	26.2312	196.8521	223.0833	2.7108	0.0656	310.4111
Total	**1.7484**	**2.4100**	**3.3761**	**0.0175**	**1.2299**	**0.0196**	**1.2495**	**0.3328**	**0.0186**	**0.3514**	**95.0817**	**2,151.5290**	**2,246.6107**	**6.8692**	**0.2337**	**2,487.9712**

8-12 (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	N20	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	Grading	Grading	6/1/2022	8/31/2022	5	66	
2	Building Construction	Building Construction	9/1/2022	6/30/2023	5	217	
3	Paving	Paving	5/1/2023	5/29/2023	5	21	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	8/1/2023	8/30/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 297

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 180,202; Striped Parking Area: 23,510 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Off-Highway Tractors	2	8.00	124	0.44
Building Construction	Cranes	1	8.00	231	0.29
Grading	Rollers	2	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Welders	0	8.00	46	0.45
Grading	Scrapers	3	8.00	367	0.48

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50

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
Grading	11	28.00	0.00	8,750.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Building Construction	17	351.00	137.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

8-12 (cont.)

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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					0.5589	0.0000	0.5589	0.2361	0.0000	0.2361	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1824	1.9540	1.3570	2.9400e-003		0.0838	0.0838		0.0771	0.0771	0.0000	258.1895	258.1895	0.0835	0.0000	260.2771
Total	**0.1824**	**1.9540**	**1.3570**	**2.9400e-003**	**0.5589**	**0.0838**	**0.6427**	**0.2361**	**0.0771**	**0.3132**	**0.0000**	**258.1895**	**258.1895**	**0.0835**	**0.0000**	**260.2771**

8-12 (cont.)

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	0.0280	1.1184	0.2280	4.0200e-003	0.1129	8.1600e-003	0.1210	0.0310	7.8100e-003	0.0388	0.0000	399.5041	399.5041	0.0214	0.0634	418.9292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1700e-003	2.6400e-003	0.0343	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6900e-003	6.0000e-005	2.7500e-003	0.0000	8.3813	8.3813	2.4000e-004	2.3000e-004	8.4551
Total	**0.0312**	**1.1210**	**0.2623**	**4.1100e-003**	**0.1230**	**8.2300e-003**	**0.1312**	**0.0337**	**7.8700e-003**	**0.0416**	**0.0000**	**407.8854**	**407.8854**	**0.0216**	**0.0636**	**427.3843**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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					
Fugitive Dust					0.5589	0.0000	0.5589	0.2361	0.0000	0.2361	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1824	1.9540	1.3570	2.9400e-003		0.0838	0.0838		0.0771	0.0771	0.0000	258.1892	258.1892	0.0835	0.0000	260.2768
Total	**0.1824**	**1.9540**	**1.3570**	**2.9400e-003**	**0.5589**	**0.0838**	**0.6427**	**0.2361**	**0.0771**	**0.3132**	**0.0000**	**258.1892**	**258.1892**	**0.0835**	**0.0000**	**260.2768**

8-12
(cont.)

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	0.0280	1.1184	0.2280	4.0200e-003	0.1129	8.1600e-003	0.1210	0.0310	7.8100e-003	0.0388	0.0000	399.5041	399.5041	0.0214	0.0634	418.9292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1700e-003	2.6400e-003	0.0343	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6900e-003	6.0000e-005	2.7500e-003	0.0000	8.3813	8.3813	2.4000e-004	2.3000e-004	8.4551
Total	**0.0312**	**1.1210**	**0.2623**	**4.1100e-003**	**0.1230**	**8.2300e-003**	**0.1312**	**0.0337**	**7.8700e-003**	**0.0416**	**0.0000**	**407.8854**	**407.8854**	**0.0216**	**0.0636**	**427.3843**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	0.1474	1.5534	1.6665	2.8200e-003		0.0720	0.0720		0.0673	0.0673	0.0000	247.0071	247.0071	0.0673	0.0000	248.6898
Total	**0.1474**	**1.5534**	**1.6665**	**2.8200e-003**		**0.0720**	**0.0720**		**0.0673**	**0.0673**	**0.0000**	**247.0071**	**247.0071**	**0.0673**	**0.0000**	**248.6898**

8-12 (cont.)

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	0.0116	0.3065	0.1016	1.1700e-003	0.0376	2.7800e-003	0.0403	0.0108	2.6600e-003	0.0135	0.0000	113.8014	113.8014	3.8000e-003	0.0164	118.7882
Worker	0.0523	0.0436	0.5668	1.5000e-003	0.1673	1.0900e-003	0.1684	0.0444	1.0100e-003	0.0455	0.0000	138.4960	138.4960	3.9500e-003	3.7600e-003	139.7154
Total	**0.0640**	**0.3500**	**0.6685**	**2.6700e-003**	**0.2049**	**3.8700e-003**	**0.2088**	**0.0553**	**3.6700e-003**	**0.0590**	**0.0000**	**252.2974**	**252.2974**	**7.7500e-003**	**0.0202**	**258.5036**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	0.1474	1.5534	1.6665	2.8200e-003		0.0720	0.0720		0.0673	0.0673	0.0000	247.0068	247.0068	0.0673	0.0000	248.6895
Total	**0.1474**	**1.5534**	**1.6665**	**2.8200e-003**		**0.0720**	**0.0720**		**0.0673**	**0.0673**	**0.0000**	**247.0068**	**247.0068**	**0.0673**	**0.0000**	**248.6895**

8-12 (cont.)

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	0.0116	0.3065	0.1016	1.1700e-003	0.0376	2.7800e-003	0.0403	0.0108	2.6600e-003	0.0135	0.0000	113.8014	113.8014	3.8000e-003	0.0164	118.7882
Worker	0.0523	0.0436	0.5668	1.5000e-003	0.1673	1.0900e-003	0.1684	0.0444	1.0100e-003	0.0455	0.0000	138.4960	138.4960	3.9500e-003	3.7600e-003	139.7154
Total	**0.0640**	**0.3500**	**0.6685**	**2.6700e-003**	**0.2049**	**3.8700e-003**	**0.2088**	**0.0553**	**3.6700e-003**	**0.0590**	**0.0000**	**252.2974**	**252.2974**	**7.7500e-003**	**0.0202**	**258.5036**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	0.2058	2.1386	2.4807	4.2200e-003		0.0951	0.0951		0.0888	0.0888	0.0000	369.1542	369.1542	0.1002	0.0000	371.6600
Total	**0.2058**	**2.1386**	**2.4807**	**4.2200e-003**		**0.0951**	**0.0951**		**0.0888**	**0.0888**	**0.0000**	**369.1542**	**369.1542**	**0.1002**	**0.0000**	**371.6600**

8-12 (cont.)

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	0.0101	0.3589	0.1343	1.6600e-003	0.0561	1.7200e-003	0.0578	0.0162	1.6500e-003	0.0179	0.0000	161.9127	161.9127	5.4100e-003	0.0233	168.9919
Worker	0.0724	0.0575	0.7794	2.1700e-003	0.2500	1.5400e-003	0.2516	0.0664	1.4200e-003	0.0678	0.0000	201.4967	201.4967	5.2900e-003	5.1800e-003	203.1727
Total	**0.0825**	**0.4164**	**0.9138**	**3.8300e-003**	**0.3061**	**3.2600e-003**	**0.3094**	**0.0826**	**3.0700e-003**	**0.0857**	**0.0000**	**363.4094**	**363.4094**	**0.0107**	**0.0285**	**372.1646**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	0.2058	2.1386	2.4807	4.2200e-003		0.0951	0.0951		0.0888	0.0888	0.0000	369.1538	369.1538	0.1002	0.0000	371.6595
Total	**0.2058**	**2.1386**	**2.4807**	**4.2200e-003**		**0.0951**	**0.0951**		**0.0888**	**0.0888**	**0.0000**	**369.1538**	**369.1538**	**0.1002**	**0.0000**	**371.6595**

8-12 (cont.)

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	0.0101	0.3589	0.1343	1.6600e-003	0.0561	1.7200e-003	0.0578	0.0162	1.6500e-003	0.0179	0.0000	161.9127	161.9127	5.4100e-003	0.0233	168.9919
Worker	0.0724	0.0575	0.7794	2.1700e-003	0.2500	1.5400e-003	0.2516	0.0664	1.4200e-003	0.0678	0.0000	201.4967	201.4967	5.2900e-003	5.1800e-003	203.1727
Total	**0.0825**	**0.4164**	**0.9138**	**3.8300e-003**	**0.3061**	**3.2600e-003**	**0.3094**	**0.0826**	**3.0700e-003**	**0.0857**	**0.0000**	**363.4094**	**363.4094**	**0.0107**	**0.0285**	**372.1646**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	9.2400e-003	0.1017	0.0909	1.8000e-004		4.2400e-003	4.2400e-003		3.9000e-003	3.9000e-003	0.0000	15.7337	15.7337	5.0900e-003	0.0000	15.8609
Paving	4.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1017**	**0.0909**	**1.8000e-004**		**4.2400e-003**	**4.2400e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.7337**	**15.7337**	**5.0900e-003**	**0.0000**	**15.8609**

8-12 (cont.)

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.6000e-004	3.5900e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9273	0.9273	2.0000e-005	2.0000e-005	0.9351
Total	**3.3000e-004**	**2.6000e-004**	**3.5900e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9273**	**0.9273**	**2.0000e-005**	**2.0000e-005**	**0.9351**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	9.2400e-003	0.1017	0.0909	1.8000e-004		4.2400e-003	4.2400e-003		3.9000e-003	3.9000e-003	0.0000	15.7337	15.7337	5.0900e-003	0.0000	15.8609
Paving	4.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1017**	**0.0909**	**1.8000e-004**		**4.2400e-003**	**4.2400e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.7337**	**15.7337**	**5.0900e-003**	**0.0000**	**15.8609**

8-12 (cont.)

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.6000e-004	3.5900e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9273	0.9273	2.0000e-005	2.0000e-005	0.9351
Total	**3.3000e-004**	**2.6000e-004**	**3.5900e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9273**	**0.9273**	**2.0000e-005**	**2.0000e-005**	**0.9351**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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					
Archit. Coating	1.7250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**1.7271**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

8-12 (cont.)

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.9400e-003	0.0263	7.0000e-005	8.4400e-003	5.0000e-005	8.4900e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8005	6.8005	1.8000e-004	1.7000e-004	6.8570
Total	**2.4400e-003**	**1.9400e-003**	**0.0263**	**7.0000e-005**	**8.4400e-003**	**5.0000e-005**	**8.4900e-003**	**2.2400e-003**	**5.0000e-005**	**2.2900e-003**	**0.0000**	**6.8005**	**6.8005**	**1.8000e-004**	**1.7000e-004**	**6.8570**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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					
Archit. Coating	1.7250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**1.7271**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

8-12 (cont.)

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.9400e-003	0.0263	7.0000e-005	8.4400e-003	5.0000e-005	8.4900e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8005	6.8005	1.8000e-004	1.7000e-004	6.8570
Total	**2.4400e-003**	**1.9400e-003**	**0.0263**	**7.0000e-005**	**8.4400e-003**	**5.0000e-005**	**8.4900e-003**	**2.2400e-003**	**5.0000e-005**	**2.2900e-003**	**0.0000**	**6.8005**	**6.8005**	**1.8000e-004**	**1.7000e-004**	**6.8570**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.2445	2.3923	3.3512	0.0174	1.2299	0.0182	1.2481	0.3328	0.0173	0.3501	0.0000	1,668.4333	1,668.4333	0.0665	0.1650	1,719.2494
Unmitigated	0.2445	2.3923	3.3512	0.0174	1.2299	0.0182	1.2481	0.3328	0.0173	0.3501	0.0000	1,668.4333	1,668.4333	0.0665	0.1650	1,719.2494

4.2 Trip Summary Information

8-12 (cont.)

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	48.70	11.05	3.50	118,757	118,757
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	614.05	614.05	614.05	2,631,627	2,631,627
Total	848.25	810.60	803.05	3,151,592	3,151,592

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
General Office Building	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

8-12 (cont.)

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	267.0600	267.0600	0.0225	2.7300e-003	268.4377
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	267.0600	267.0600	0.0225	2.7300e-003	268.4377
NaturalGas Mitigated	1.9400e-003	0.0176	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	19.1641	19.1641	3.7000e-004	3.5000e-004	19.2780
NaturalGas Unmitigated	1.9400e-003	0.0176	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	19.1641	19.1641	3.7000e-004	3.5000e-004	19.2780

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	51550	2.8000e-004	2.5300e-003	2.1200e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7509	2.7509	5.0000e-005	5.0000e-005	2.7673
Other Non-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
Parking Lot	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	4075	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2175	0.2175	0.0000	0.0000	0.2188
Unrefrigerated Warehouse-No Rail	303497	1.6400e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1957	16.1957	3.1000e-004	3.0000e-004	16.2920
Total		**1.9400e-003**	**0.0176**	**0.0148**	**1.1000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**	**0.0000**	**19.1641**	**19.1641**	**3.6000e-004**	**3.5000e-004**	**19.2780**

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	51550	2.8000e-004	2.5300e-003	2.1200e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7509	2.7509	5.0000e-005	5.0000e-005	2.7673
Other Non-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
Parking Lot	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	4075	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2175	0.2175	0.0000	0.0000	0.2188
Unrefrigerated Warehouse-No Rail	303497	1.6400e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1957	16.1957	3.1000e-004	3.0000e-004	16.2920
Total		**1.9400e-003**	**0.0176**	**0.0148**	**1.1000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**	**0.0000**	**19.1641**	**19.1641**	**3.6000e-004**	**3.5000e-004**	**19.2780**

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	62500	11.0841	9.4000e-004	1.1000e-004	11.1413
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	59080	10.4776	8.8000e-004	1.1000e-004	10.5316
Regional Shopping Center	32675	5.7948	4.9000e-004	6.0000e-005	5.8247
Unrefrigerated Warehouse-No Rail	1.35162e+006	239.7035	0.0202	2.4500e-003	240.9401
Total		**267.0600**	**0.0225**	**2.7300e-003**	**268.4377**

8-12 (cont.)

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	62500	11.0841	9.4000e-004	1.1000e-004	11.1413
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	59080	10.4776	8.8000e-004	1.1000e-004	10.5316
Regional Shopping Center	32675	5.7948	4.9000e-004	6.0000e-005	5.8247
Unrefrigerated Warehouse-No Rail	1.35162e+006	239.7035	0.0202	2.4500e-003	240.9401
Total		**267.0600**	**0.0225**	**2.7300e-003**	**268.4377**

8-12 (cont.)

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.5019	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Unmitigated	1.5019	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209

6.2 Area by SubCategory

Unmitigated

8-12 (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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Total	**1.5019**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0196**	**0.0196**	**5.0000e-005**	**0.0000**	**0.0209**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.1725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Total	**1.5019**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0196**	**0.0196**	**5.0000e-005**	**0.0000**	**0.0209**

8-12 (cont.)

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	223.0833	2.7108	0.0656	310.4111
Unmitigated	223.0833	2.7108	0.0656	310.4111

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.34722	4.6248	3.9000e-004	5.0000e-005	4.6486
General Office Building	0.888669 / 0.544668	3.4072	0.0292	7.2000e-004	4.3510
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.185181 / 0.113498	0.7100	6.0900e-003	1.5000e-004	0.9067
Unrefrigerated Warehouse-No Rail	81.6081 / 0	214.3413	2.6751	0.0647	300.5048
Total		**223.0833**	**2.7108**	**0.0656**	**310.4111**

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.34722	4.6248	3.9000e-004	5.0000e-005	4.6486
General Office Building	0.888669 / 0.544668	3.4072	0.0292	7.2000e-004	4.3510
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.185181 / 0.113498	0.7100	6.0900e-003	1.5000e-004	0.9067
Unrefrigerated Warehouse-No Rail	81.6081 / 0	214.3413	2.6751	0.0647	300.5048
Total		**223.0833**	**2.7108**	**0.0656**	**310.4111**

8-12 (cont.)

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	68.8505	4.0690	0.0000	170.5741
Unmitigated	68.8505	4.0690	0.0000	170.5741

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
General Office Building	4.65	0.9439	0.0558	0.0000	2.3385
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.63	0.5339	0.0316	0.0000	1.3226
Unrefrigerated Warehouse-No Rail	331.73	67.3382	3.9796	0.0000	166.8275
Total		**68.8505**	**4.0689**	**0.0000**	**170.5741**

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
General Office Building	4.65	0.9439	0.0558	0.0000	2.3385
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.63	0.5339	0.0316	0.0000	1.3226
Unrefrigerated Warehouse-No Rail	331.73	67.3382	3.9796	0.0000	166.8275
Total		**68.8505**	**4.0689**	**0.0000**	**170.5741**

8-12 (cont.)

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

8-12
(cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	352.90	1000sqft	8.10	352,903.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

8-12 (cont.)

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with IS/MND's model.

Land Use - See SWAPE comments "Underestimated Parking Land Use Size," "Failure to Model All Proposed Land Uses," and "Failure to Consider Potential Cold Storage Requirements."

Construction Phase - See SWAPE comment on "Overestimated Building Construction Phase Length"

Off-road Equipment - Consistent with IS/MND's model.

Grading - See SWAPE comment on "Incorrect Amount of Material Import and Export"

Off-road Equipment - Consistent with IS/MND's model.

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Consistent with IS/MND's model.

Off-road Equipment -

Trips and VMT - Consistent with IS/MND's model.

Architectural Coating - See SWAPE comment on "Unsubstantiated Reductions to Architectural and Area Coating Emission Factors and Areas"

Vehicle Trips - Consistent with IS/MND's model.

Fleet Mix - Consistent with IS/MND's model

Road Dust - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Coating - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Construction Off-road Equipment Mitigation - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Water Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Waste Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

8-12 (cont.)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	300.00	217.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	12/12/2023	8/30/2023
tblConstructionPhase	PhaseEndDate	10/17/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	8/23/2022	8/31/2022
tblConstructionPhase	PhaseEndDate	11/14/2023	5/29/2023
tblConstructionPhase	PhaseStartDate	11/15/2023	8/1/2023
tblConstructionPhase	PhaseStartDate	8/24/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	7/13/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	10/18/2023	5/1/2023
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	60,000.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	352,900.00	352,903.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

8-12 (cont.)

2.0 Emissions Summary

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	6.4787	91.4262	54.4442	0.2137	20.7288	2.7899	23.5186	8.1907	2.5757	10.7665	0.0000	22,259.3158	22,259.3158	3.5110	2.1243	22,980.1259
2023	157.2299	48.6481	61.9422	0.1432	4.9127	1.9176	6.8303	1.3228	1.7857	3.1085	0.0000	14,311.5108	14,311.5108	2.4170	0.4778	14,514.3207
Maximum	**157.2299**	**91.4262**	**61.9422**	**0.2137**	**20.7288**	**2.7899**	**23.5186**	**8.1907**	**2.5757**	**10.7665**	**0.0000**	**22,259.3158**	**22,259.3158**	**3.5110**	**2.1243**	**22,980.1259**

8-12 (cont.)

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					
2022	6.4787	91.4262	54.4442	0.2137	20.7288	2.7899	23.5186	8.1907	2.5757	10.7665	0.0000	22,259.3158	22,259.3158	3.5110	2.1243	22,980.1259
2023	157.2299	48.6481	61.9422	0.1432	4.9127	1.9176	6.8303	1.3228	1.7857	3.1085	0.0000	14,311.5108	14,311.5108	2.4170	0.4778	14,514.3207
Maximum	**157.2299**	**91.4262**	**61.9422**	**0.2137**	**20.7288**	**2.7899**	**23.5186**	**8.1907**	**2.5757**	**10.7665**	**0.0000**	**22,259.3158**	**22,259.3158**	**3.5110**	**2.1243**	**22,980.1259**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
Mobile	1.4404	12.4842	19.2533	0.0980	6.9673	0.1007	7.0680	1.8817	0.0954	1.9770		10,361.9092	10,361.9092	0.4038	0.9945	10,668.3581
Total	**9.6829**	**12.5814**	**19.4149**	**0.0985**	**6.9673**	**0.1083**	**7.0756**	**1.8817**	**0.1030**	**1.9846**		**10,477.8343**	**10,477.8343**	**0.4064**	**0.9966**	**10,784.9824**

8-12 (cont.)

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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
Mobile	1.4404	12.4842	19.2533	0.0980	6.9673	0.1007	7.0680	1.8817	0.0954	1.9770		10,361.9092	10,361.9092	0.4038	0.9945	10,668.3581
Total	**9.6829**	**12.5814**	**19.4149**	**0.0985**	**6.9673**	**0.1083**	**7.0756**	**1.8817**	**0.1030**	**1.9846**		**10,477.8343**	**10,477.8343**	**0.4064**	**0.9966**	**10,784.9824**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Grading	Grading	6/1/2022	8/31/2022	5	66	
2	Building Construction	Building Construction	9/1/2022	6/30/2023	5	217	
3	Paving	Paving	5/1/2023	5/29/2023	5	21	
4	Architectural Coating	Architectural Coating	8/1/2023	8/30/2023	5	22	

8-12 (cont.)

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 297

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 180,202; Striped Parking Area: 23,510 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Off-Highway Tractors	2	8.00	124	0.44
Building Construction	Cranes	1	8.00	231	0.29
Grading	Rollers	2	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Welders	0	8.00	46	0.45
Grading	Scrapers	3	8.00	367	0.48
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50

8-12 (cont.)

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
Grading	11	28.00	0.00	8,750.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Building Construction	17	351.00	137.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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					16.9364	0.0000	16.9364	7.1539	0.0000	7.1539			0.0000			0.0000
Off-Road	5.5269	59.2128	41.1203	0.0891		2.5406	2.5406		2.3374	2.3374		8,624.4017	8,624.4017	2.7893		8,694.1344
Total	**5.5269**	**59.2128**	**41.1203**	**0.0891**	**16.9364**	**2.5406**	**19.4770**	**7.1539**	**2.3374**	**9.4913**		**8,624.4017**	**8,624.4017**	**2.7893**		**8,694.1344**

8-12 (cont.)

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	0.8549	32.1427	6.8741	0.1218	3.4794	0.2472	3.7267	0.9538	0.2365	1.1904		13,343.6785	13,343.6785	0.7138	2.1173	13,992.4710
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0969	0.0708	1.1036	2.8600e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		291.2356	291.2356	7.8800e-003	7.0100e-003	293.5206
Total	**0.9518**	**32.2134**	**7.9777**	**0.1246**	**3.7924**	**0.2492**	**4.0416**	**1.0368**	**0.2384**	**1.2752**		**13,634.9141**	**13,634.9141**	**0.7217**	**2.1243**	**14,285.9916**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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										lb/day					
Fugitive Dust					16.9364	0.0000	16.9364	7.1539	0.0000	7.1539			0.0000			0.0000
Off-Road	5.5269	59.2128	41.1203	0.0891		2.5406	2.5406		2.3374	2.3374	0.0000	8,624.4017	8,624.4017	2.7893		8,694.1343
Total	**5.5269**	**59.2128**	**41.1203**	**0.0891**	**16.9364**	**2.5406**	**19.4770**	**7.1539**	**2.3374**	**9.4913**	**0.0000**	**8,624.4017**	**8,624.4017**	**2.7893**		**8,694.1343**

8-12 (cont.)

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	0.8549	32.1427	6.8741	0.1218	3.4794	0.2472	3.7267	0.9538	0.2365	1.1904		13,343.6785	13,343.6785	0.7138	2.1173	13,992.4710
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0969	0.0708	1.1036	2.8600e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		291.2356	291.2356	7.8800e-003	7.0100e-003	293.5206
Total	**0.9518**	**32.2134**	**7.9777**	**0.1246**	**3.7924**	**0.2492**	**4.0416**	**1.0368**	**0.2384**	**1.2752**		**13,634.9141**	**13,634.9141**	**0.7217**	**2.1243**	**14,285.9916**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	3.3880	35.7109	38.3092	0.0649		1.6559	1.6559		1.5474	1.5474		6,259.2805	6,259.2805	1.7057		6,301.9224
Total	**3.3880**	**35.7109**	**38.3092**	**0.0649**		**1.6559**	**1.6559**		**1.5474**	**1.5474**		**6,259.2805**	**6,259.2805**	**1.7057**		**6,301.9224**

Unmitigated Construction Off-Site

8-12 (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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2696	6.7108	2.3009	0.0268	0.8775	0.0639	0.9415	0.2527	0.0612	0.3138		2,883.3239	2,883.3239	0.0964	0.4155	3,009.5494
Worker	1.2148	0.8869	13.8340	0.0359	3.9234	0.0251	3.9485	1.0405	0.0232	1.0636		3,650.8460	3,650.8460	0.0988	0.0878	3,679.4902
Total	**1.4844**	**7.5977**	**16.1349**	**0.0627**	**4.8009**	**0.0891**	**4.8900**	**1.2932**	**0.0843**	**1.3775**		**6,534.1699**	**6,534.1699**	**0.1952**	**0.5033**	**6,689.0396**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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										lb/day					
Off-Road	3.3880	35.7109	38.3092	0.0649		1.6559	1.6559		1.5474	1.5474	0.0000	6,259.2805	6,259.2805	1.7057		6,301.9224
Total	**3.3880**	**35.7109**	**38.3092**	**0.0649**		**1.6559**	**1.6559**		**1.5474**	**1.5474**	**0.0000**	**6,259.2805**	**6,259.2805**	**1.7057**		**6,301.9224**

8-12 (cont.)

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	0.0000
Vendor	0.2696	6.7108	2.3009	0.0268	0.8775	0.0639	0.9415	0.2527	0.0612	0.3138		2,883.3239	2,883.3239	0.0964	0.4155	3,009.5494
Worker	1.2148	0.8869	13.8340	0.0359	3.9234	0.0251	3.9485	1.0405	0.0232	1.0636		3,650.8460	3,650.8460	0.0988	0.0878	3,679.4902
Total	**1.4844**	**7.5977**	**16.1349**	**0.0627**	**4.8009**	**0.0891**	**4.8900**	**1.2932**	**0.0843**	**1.3775**		**6,534.1699**	**6,534.1699**	**0.1952**	**0.5033**	**6,689.0396**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	3.1661	32.9020	38.1640	0.0649		1.4631	1.4631		1.3666	1.3666		6,260.3521	6,260.3521	1.6998		6,302.8462
Total	**3.1661**	**32.9020**	**38.1640**	**0.0649**		**1.4631**	**1.4631**		**1.3666**	**1.3666**		**6,260.3521**	**6,260.3521**	**1.6998**		**6,302.8462**

8-12 (cont.)

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	0.0000
Vendor	0.1577	5.2585	2.0372	0.0255	0.8775	0.0264	0.9040	0.2527	0.0253	0.2780		2,743.8699	2,743.8699	0.0920	0.3945	2,863.7262
Worker	1.1240	0.7836	12.7193	0.0347	3.9234	0.0237	3.9470	1.0405	0.0218	1.0623		3,554.2709	3,554.2709	0.0885	0.0810	3,580.6242
Total	**1.2817**	**6.0422**	**14.7565**	**0.0602**	**4.8009**	**0.0501**	**4.8510**	**1.2932**	**0.0471**	**1.3403**		**6,298.1407**	**6,298.1407**	**0.1805**	**0.4755**	**6,444.3504**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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										lb/day					
Off-Road	3.1661	32.9020	38.1640	0.0649		1.4631	1.4631		1.3666	1.3666	0.0000	6,260.3521	6,260.3521	1.6998		6,302.8462
Total	**3.1661**	**32.9020**	**38.1640**	**0.0649**		**1.4631**	**1.4631**		**1.3666**	**1.3666**	**0.0000**	**6,260.3521**	**6,260.3521**	**1.6998**		**6,302.8462**

Mitigated Construction Off-Site

8-12 (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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1577	5.2585	2.0372	0.0255	0.8775	0.0264	0.9040	0.2527	0.0253	0.2780		2,743.8699	2,743.8699	0.0920	0.3945	2,863.7262
Worker	1.1240	0.7836	12.7193	0.0347	3.9234	0.0237	3.9470	1.0405	0.0218	1.0623		3,554.2709	3,554.2709	0.0885	0.0810	3,580.6242
Total	**1.2817**	**6.0422**	**14.7565**	**0.0602**	**4.8009**	**0.0501**	**4.8510**	**1.2932**	**0.0471**	**1.3403**		**6,298.1407**	**6,298.1407**	**0.1805**	**0.4755**	**6,444.3504**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714		1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**		**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.0320**	**0.0223**	**0.3624**	**9.9000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**101.2613**	**101.2613**	**2.5200e-003**	**2.3100e-003**	**102.0121**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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										lb/day					
Off-Road	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714	0.0000	1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**	**0.0000**	**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.0320**	**0.0223**	**0.3624**	**9.9000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**101.2613**	**101.2613**	**2.5200e-003**	**2.3100e-003**	**102.0121**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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					
Archit. Coating	156.8141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**157.0057**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2242	0.1563	2.5366	6.9300e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		708.8290	708.8290	0.0177	0.0162	714.0846
Total	**0.2242**	**0.1563**	**2.5366**	**6.9300e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**708.8290**	**708.8290**	**0.0177**	**0.0162**	**714.0846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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										lb/day					
Archit. Coating	156.8141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**157.0057**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

8-12
(cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2242	0.1563	2.5366	6.9300e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		708.8290	708.8290	0.0177	0.0162	714.0846
Total	**0.2242**	**0.1563**	**2.5366**	**6.9300e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**708.8290**	**708.8290**	**0.0177**	**0.0162**	**714.0846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.4404	12.4842	19.2533	0.0980	6.9673	0.1007	7.0680	1.8817	0.0954	1.9770		10,361.9092	10,361.9092	0.4038	0.9945	10,668.3581
Unmitigated	1.4404	12.4842	19.2533	0.0980	6.9673	0.1007	7.0680	1.8817	0.0954	1.9770		10,361.9092	10,361.9092	0.4038	0.9945	10,668.3581

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	48.70	11.05	3.50	118,757	118,757
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	614.05	614.05	614.05	2,631,627	2,631,627
Total	848.25	810.60	803.05	3,151,592	3,151,592

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
General Office Building	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

8-12 (cont.)

Historical Energy Use: N

5.1 Mitigation Measures Energy

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
NaturalGas Unmitigated	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	141.233	1.5200e-003	0.0139	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6156	16.6156	3.2000e-004	3.0000e-004	16.7144
Other Non-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
Parking Lot	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	11.1644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	831.497	8.9700e-003	0.0815	0.0685	4.9000e-004		6.2000e-003	6.2000e-003		6.2000e-003	6.2000e-003		97.8232	97.8232	1.8700e-003	1.7900e-003	98.4046
Total		**0.0106**	**0.0965**	**0.0810**	**5.8000e-004**		**7.3300e-003**	**7.3300e-003**		**7.3300e-003**	**7.3300e-003**		**115.7523**	**115.7523**	**2.2200e-003**	**2.1100e-003**	**116.4402**

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	0.141233	1.5200e-003	0.0139	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6156	16.6156	3.2000e-004	3.0000e-004	16.7144
Other Non-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
Parking Lot	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	0.0111644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	0.831497	8.9700e-003	0.0815	0.0685	4.9000e-004		6.2000e-003	6.2000e-003		6.2000e-003	6.2000e-003		97.8232	97.8232	1.8700e-003	1.7900e-003	98.4046
Total		**0.0106**	**0.0965**	**0.0810**	**5.8000e-004**		**7.3300e-003**	**7.3300e-003**		**7.3300e-003**	**7.3300e-003**		**115.7523**	**115.7523**	**2.2200e-003**	**2.1100e-003**	**116.4402**

8-12 (cont.)

6.0 Area Detail

6.1 Mitigation Measures Area

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Unmitigated	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841

6.2 Area by SubCategory

Unmitigated

8-12 (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
SubCategory	lb/day										lb/day					
Architectural Coating	0.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**8.2318**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**8.2318**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

8-12 (cont.)

7.0 Water Detail

7.1 Mitigation Measures Water

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	352.90	1000sqft	8.10	352,903.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

8-12 (cont.)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with IS/MND's model.

Land Use - See SWAPE comments "Underestimated Parking Land Use Size," "Failure to Model All Proposed Land Uses," and "Failure to Consider Potential Cold Storage Requirements."

Construction Phase - See SWAPE comment on "Overestimated Building Construction Phase Length"

Off-road Equipment - Consistent with IS/MND's model.

Grading - See SWAPE comment on "Incorrect Amount of Material Import and Export"

Off-road Equipment - Consistent with IS/MND's model.

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Consistent with IS/MND's model.

Off-road Equipment -

Trips and VMT - Consistent with IS/MND's model.

Architectural Coating - See SWAPE comment on "Unsubstantiated Reductions to Architectural and Area Coating Emission Factors and Areas"

Vehicle Trips - Consistent with IS/MND's model.

Fleet Mix - Consistent with IS/MND's model

Road Dust - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Coating - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Construction Off-road Equipment Mitigation - See SWAPE comment on "Incorrect Application of Construction-Related Mitigation"

Area Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Water Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

Waste Mitigation - See SWAPE comment on "Incorrect Application of Operational Mitigation Measures"

8-12 (cont.)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	300.00	217.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	12/12/2023	8/30/2023
tblConstructionPhase	PhaseEndDate	10/17/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	8/23/2022	8/31/2022
tblConstructionPhase	PhaseEndDate	11/14/2023	5/29/2023
tblConstructionPhase	PhaseStartDate	11/15/2023	8/1/2023
tblConstructionPhase	PhaseStartDate	8/24/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	7/13/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	10/18/2023	5/1/2023
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	60,000.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	352,900.00	352,903.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

8-12 (cont.)

2.0 Emissions Summary

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	6.4706	92.7211	53.3914	0.2136	20.7288	2.7902	23.5190	8.1907	2.5761	10.7668	0.0000	22,246.5591	22,246.5591	3.5103	2.1253	22,967.6417
2023	157.2466	48.9795	60.9488	0.1414	4.9127	1.9178	6.8304	1.3228	1.7859	3.1087	0.0000	14,123.4154	14,123.4154	2.4178	0.4845	14,328.2521
Maximum	**157.2466**	**92.7211**	**60.9488**	**0.2136**	**20.7288**	**2.7902**	**23.5190**	**8.1907**	**2.5761**	**10.7668**	**0.0000**	**22,246.5591**	**22,246.5591**	**3.5103**	**2.1253**	**22,967.6417**

8-12 (cont.)

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					
2022	6.4706	92.7211	53.3914	0.2136	20.7288	2.7902	23.5190	8.1907	2.5761	10.7668	0.0000	22,246.5591	22,246.5591	3.5103	2.1253	22,967.6417
2023	157.2466	48.9795	60.9488	0.1414	4.9127	1.9178	6.8304	1.3228	1.7859	3.1087	0.0000	14,123.4154	14,123.4154	2.4178	0.4845	14,328.2521
Maximum	**157.2466**	**92.7211**	**60.9488**	**0.2136**	**20.7288**	**2.7902**	**23.5190**	**8.1907**	**2.5761**	**10.7668**	**0.0000**	**22,246.5591**	**22,246.5591**	**3.5103**	**2.1253**	**22,967.6417**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
Mobile	1.3906	13.1030	18.5811	0.0958	6.9673	0.1010	7.0683	1.8817	0.0956	1.9773		10,138.5832	10,138.5832	0.4087	1.0031	10,447.7204
Total	**9.6331**	**13.2002**	**18.7427**	**0.0964**	**6.9673**	**0.1086**	**7.0759**	**1.8817**	**0.1032**	**1.9849**		**10,254.5083**	**10,254.5083**	**0.4114**	**1.0052**	**10,564.3447**

8-12 (cont.)

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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
Mobile	1.3906	13.1030	18.5811	0.0958	6.9673	0.1010	7.0683	1.8817	0.0956	1.9773		10,138.5832	10,138.5832	0.4087	1.0031	10,447.7204
Total	**9.6331**	**13.2002**	**18.7427**	**0.0964**	**6.9673**	**0.1086**	**7.0759**	**1.8817**	**0.1032**	**1.9849**		**10,254.5083**	**10,254.5083**	**0.4114**	**1.0052**	**10,564.3447**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Grading	Grading	6/1/2022	8/31/2022	5	66	
2	Building Construction	Building Construction	9/1/2022	6/30/2023	5	217	
3	Paving	Paving	5/1/2023	5/29/2023	5	21	
4	Architectural Coating	Architectural Coating	8/1/2023	8/30/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 297

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 180,202; Striped Parking Area: 23,510 (Architectural Coating – sqft)

8-12 (cont.)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Off-Highway Tractors	2	8.00	124	0.44
Building Construction	Cranes	1	8.00	231	0.29
Grading	Rollers	2	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Welders	0	8.00	46	0.45
Grading	Scrapers	3	8.00	367	0.48
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50

8-12 (cont.)

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
Grading	11	28.00	0.00	8,750.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Building Construction	17	351.00	137.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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					16.9364	0.0000	16.9364	7.1539	0.0000	7.1539			0.0000			0.0000
Off-Road	5.5269	59.2128	41.1203	0.0891		2.5406	2.5406		2.3374	2.3374		8,624.4017	8,624.4017	2.7893		8,694.1344
Total	**5.5269**	**59.2128**	**41.1203**	**0.0891**	**16.9364**	**2.5406**	**19.4770**	**7.1539**	**2.3374**	**9.4913**		**8,624.4017**	**8,624.4017**	**2.7893**		**8,694.1344**

8-12 (cont.)

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	0.8400	33.4301	6.9630	0.1218	3.4794	0.2476	3.7270	0.9538	0.2369	1.1907		13,346.3202	13,346.3202	0.7130	2.1178	13,995.2396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1037	0.0782	1.0132	2.7100e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		275.8373	275.8373	7.9800e-003	7.4900e-003	278.2678
Total	**0.9438**	**33.5083**	**7.9763**	**0.1245**	**3.7924**	**0.2496**	**4.0420**	**1.0368**	**0.2387**	**1.2755**		**13,622.1574**	**13,622.1574**	**0.7210**	**2.1253**	**14,273.5074**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 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										lb/day					
Fugitive Dust					16.9364	0.0000	16.9364	7.1539	0.0000	7.1539			0.0000			0.0000
Off-Road	5.5269	59.2128	41.1203	0.0891		2.5406	2.5406		2.3374	2.3374	0.0000	8,624.4017	8,624.4017	2.7893		8,694.1343
Total	**5.5269**	**59.2128**	**41.1203**	**0.0891**	**16.9364**	**2.5406**	**19.4770**	**7.1539**	**2.3374**	**9.4913**	**0.0000**	**8,624.4017**	**8,624.4017**	**2.7893**		**8,694.1343**

8-12 (cont.)

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	0.8400	33.4301	6.9630	0.1218	3.4794	0.2476	3.7270	0.9538	0.2369	1.1907		13,346.3202	13,346.3202	0.7130	2.1178	13,995.2396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1037	0.0782	1.0132	2.7100e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		275.8373	275.8373	7.9800e-003	7.4900e-003	278.2678
Total	**0.9438**	**33.5083**	**7.9763**	**0.1245**	**3.7924**	**0.2496**	**4.0420**	**1.0368**	**0.2387**	**1.2755**		**13,622.1574**	**13,622.1574**	**0.7210**	**2.1253**	**14,273.5074**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	3.3880	35.7109	38.3092	0.0649		1.6559	1.6559		1.5474	1.5474		6,259.2805	6,259.2805	1.7057		6,301.9224
Total	**3.3880**	**35.7109**	**38.3092**	**0.0649**		**1.6559**	**1.6559**		**1.5474**	**1.5474**		**6,259.2805**	**6,259.2805**	**1.7057**		**6,301.9224**

Unmitigated Construction Off-Site

8-12 (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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2664	6.9875	2.3804	0.0268	0.8775	0.0642	0.9417	0.2527	0.0614	0.3141		2,884.4072	2,884.4072	0.0961	0.4160	3,010.7846
Worker	1.3005	0.9800	12.7017	0.0340	3.9234	0.0251	3.9485	1.0405	0.0232	1.0636		3,457.8174	3,457.8174	0.1000	0.0939	3,488.2851
Total	**1.5669**	**7.9675**	**15.0822**	**0.0608**	**4.8009**	**0.0893**	**4.8902**	**1.2932**	**0.0845**	**1.3777**		**6,342.2245**	**6,342.2245**	**0.1961**	**0.5099**	**6,499.0697**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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										lb/day					
Off-Road	3.3880	35.7109	38.3092	0.0649		1.6559	1.6559		1.5474	1.5474	0.0000	6,259.2805	6,259.2805	1.7057		6,301.9224
Total	**3.3880**	**35.7109**	**38.3092**	**0.0649**		**1.6559**	**1.6559**		**1.5474**	**1.5474**	**0.0000**	**6,259.2805**	**6,259.2805**	**1.7057**		**6,301.9224**

8-12 (cont.)

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	0.0000
Vendor	0.2664	6.9875	2.3804	0.0268	0.8775	0.0642	0.9417	0.2527	0.0614	0.3141		2,884.4072	2,884.4072	0.0961	0.4160	3,010.7846
Worker	1.3005	0.9800	12.7017	0.0340	3.9234	0.0251	3.9485	1.0405	0.0232	1.0636		3,457.8174	3,457.8174	0.1000	0.0939	3,488.2851
Total	**1.5669**	**7.9675**	**15.0822**	**0.0608**	**4.8009**	**0.0893**	**4.8902**	**1.2932**	**0.0845**	**1.3777**		**6,342.2245**	**6,342.2245**	**0.1961**	**0.5099**	**6,499.0697**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	3.1661	32.9020	38.1640	0.0649		1.4631	1.4631		1.3666	1.3666		6,260.3521	6,260.3521	1.6998		6,302.8462
Total	**3.1661**	**32.9020**	**38.1640**	**0.0649**		**1.4631**	**1.4631**		**1.3666**	**1.3666**		**6,260.3521**	**6,260.3521**	**1.6998**		**6,302.8462**

8-12 (cont.)

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	0.0000
Vendor	0.1523	5.5056	2.1012	0.0255	0.8775	0.0266	0.9041	0.2527	0.0254	0.2781		2,748.4982	2,748.4982	0.0915	0.3955	2,868.6581
Worker	1.2076	0.8656	11.6911	0.0329	3.9234	0.0237	3.9470	1.0405	0.0218	1.0623		3,366.8858	3,366.8858	0.0897	0.0865	3,394.9146
Total	**1.3599**	**6.3712**	**13.7924**	**0.0584**	**4.8009**	**0.0503**	**4.8512**	**1.2932**	**0.0472**	**1.3404**		**6,115.3839**	**6,115.3839**	**0.1813**	**0.4821**	**6,263.5727**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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										lb/day					
Off-Road	3.1661	32.9020	38.1640	0.0649		1.4631	1.4631		1.3666	1.3666	0.0000	6,260.3521	6,260.3521	1.6998		6,302.8462
Total	**3.1661**	**32.9020**	**38.1640**	**0.0649**		**1.4631**	**1.4631**		**1.3666**	**1.3666**	**0.0000**	**6,260.3521**	**6,260.3521**	**1.6998**		**6,302.8462**

8-12 (cont.)

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	0.0000
Vendor	0.1523	5.5056	2.1012	0.0255	0.8775	0.0266	0.9041	0.2527	0.0254	0.2781		2,748.4982	2,748.4982	0.0915	0.3955	2,868.6581
Worker	1.2076	0.8656	11.6911	0.0329	3.9234	0.0237	3.9470	1.0405	0.0218	1.0623		3,366.8858	3,366.8858	0.0897	0.0865	3,394.9146
Total	**1.3599**	**6.3712**	**13.7924**	**0.0584**	**4.8009**	**0.0503**	**4.8512**	**1.2932**	**0.0472**	**1.3404**		**6,115.3839**	**6,115.3839**	**0.1813**	**0.4821**	**6,263.5727**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714		1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**		**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

Unmitigated Construction Off-Site

8-12 (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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.0344**	**0.0247**	**0.3331**	**9.4000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**95.9227**	**95.9227**	**2.5600e-003**	**2.4700e-003**	**96.7212**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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										lb/day					
Off-Road	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714	0.0000	1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**	**0.0000**	**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.0344**	**0.0247**	**0.3331**	**9.4000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**95.9227**	**95.9227**	**2.5600e-003**	**2.4700e-003**	**96.7212**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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					
Archit. Coating	156.8141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**157.0057**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2408	0.1726	2.3316	6.5600e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		671.4587	671.4587	0.0179	0.0173	677.0485
Total	**0.2408**	**0.1726**	**2.3316**	**6.5600e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**671.4587**	**671.4587**	**0.0179**	**0.0173**	**677.0485**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 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										lb/day					
Archit. Coating	156.8141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**157.0057**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

8-12 (cont.)

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2408	0.1726	2.3316	6.5600e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		671.4587	671.4587	0.0179	0.0173	677.0485
Total	**0.2408**	**0.1726**	**2.3316**	**6.5600e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**671.4587**	**671.4587**	**0.0179**	**0.0173**	**677.0485**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.3906	13.1030	18.5811	0.0958	6.9673	0.1010	7.0683	1.8817	0.0956	1.9773		10,138.5832	10,138.5832	0.4087	1.0031	10,447.7204
Unmitigated	1.3906	13.1030	18.5811	0.0958	6.9673	0.1010	7.0683	1.8817	0.0956	1.9773		10,138.5832	10,138.5832	0.4087	1.0031	10,447.7204

8-12 (cont.)

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	48.70	11.05	3.50	118,757	118,757
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	614.05	614.05	614.05	2,631,627	2,631,627
Total	848.25	810.60	803.05	3,151,592	3,151,592

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
General Office Building	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

8-12 (cont.)

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402
NaturalGas Unmitigated	0.0106	0.0965	0.0810	5.8000e-004		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		115.7523	115.7523	2.2200e-003	2.1200e-003	116.4402

8-12 (cont.)

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	141.233	1.5200e-003	0.0139	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6156	16.6156	3.2000e-004	3.0000e-004	16.7144
Other Non-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
Parking Lot	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	11.1644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	831.497	8.9700e-003	0.0815	0.0685	4.9000e-004		6.2000e-003	6.2000e-003		6.2000e-003	6.2000e-003		97.8232	97.8232	1.8700e-003	1.7900e-003	98.4046
Total		**0.0106**	**0.0965**	**0.0810**	**5.8000e-004**		**7.3300e-003**	**7.3300e-003**		**7.3300e-003**	**7.3300e-003**		**115.7523**	**115.7523**	**2.2200e-003**	**2.1100e-003**	**116.4402**

8-12 (cont.)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
General Office Building	0.141233	1.5200e-003	0.0139	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6156	16.6156	3.2000e-004	3.0000e-004	16.7144
Other Non-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
Parking Lot	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	0.0111644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	0.831497	8.9700e-003	0.0815	0.0685	4.9000e-004		6.2000e-003	6.2000e-003		6.2000e-003	6.2000e-003		97.8232	97.8232	1.8700e-003	1.7900e-003	98.4046
Total		**0.0106**	**0.0965**	**0.0810**	**5.8000e-004**		**7.3300e-003**	**7.3300e-003**		**7.3300e-003**	**7.3300e-003**		**115.7523**	**115.7523**	**2.2200e-003**	**2.1100e-003**	**116.4402**

8-12 (cont.)

6.0 Area Detail

6.1 Mitigation Measures Area

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Unmitigated	8.2318	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841

6.2 Area by SubCategory

Unmitigated

8-12 (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
SubCategory	lb/day										lb/day					
Architectural Coating	0.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**8.2318**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**8.2318**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

8-12 (cont.)

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

8-12 (cont.)

Construction				
2022			**Total**	
Annual Emissions (tons/year)	0.1665		Total DPM (lbs)	411.24
Daily Emissions (lbs/day)	0.912328767		Total DPM (g)	186538.464
Construction Duration (days)	214		Total Construction Days	517
Total DPM (lbs)	195.2383562		Emission Rate (g/s)	0.004176035
Total DPM (g)	88560.11836		Release Height (meters)	3
Start Date	6/1/2022		Total Acreage	19.06
End Date	1/1/2023		Max Horizontal (meters)	392.77
Construction Days	214		Min Horizontal (meters)	196.38
2023			Initial Vertical Dimension (meters)	1.5
Annual Emissions (tons/year)	0.1301		Setting	Urban
Daily Emissions (lbs/day)	0.712876712		Population	62,088
Construction Duration (days)	303		Start Date	6/1/2022
Total DPM (lbs)	216.0016438		End Date	10/31/2023
Total DPM (g)	97978.34564		Total Construction Days	517
Start Date	1/1/2023		Total Years of Construction	1.42
End Date	10/31/2023		Total Years of Operation	28.58
Construction Days	303			

8-12 (cont.)

Start date and time 12/21/21 12:25:18

AERSCREEN 21112

Beverly Boulevard Warehouse AERSCREEN (Construction)

Beverly Boulevard Warehouse AERSCREEN (Construction)

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.418E-02 g/s	0.331E-01 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	392.77 meters	1288.62 feet
Area Source Width:	196.38 meters	644.29 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	62088	
Dist to Ambient Air:	1.0 meters	3. feet

8-12 (cont.)

** BUILDING DATA **

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

8-12
(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:

 2021.12.21_BeverlyBoulevardWarehouse_AERSCREEN_Construction.out



 *** AERSCREEN Run is Ready to Begin




 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

8-12
(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

8-12
(cont.)

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 12/21/21 12:27:16

****

Running AERMOD

Processing Winter

Processing surface roughness sector 1

```
**************************************************

Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

8-12
(cont.)

```
**************************************************

Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

8-12

```
**************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

8-12 (cont.)

```
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES    ********

               ***  NONE  ***

 ******************************************

  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    ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5
```

8-12
(cont.)

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20
```

8-12
(cont.)

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   7


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30


    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************


  Running AERMOD

 Processing Summer


Processing surface roughness sector  1
```

8-12
(cont.)

```
**************************************************

Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

8-12
(cont.)

```
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   7
```

8-12
(cont.)

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 *****************************************

  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   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

8-12
(cont.)

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20


    ********   WARNING MESSAGES   ********
```

8-12
(cont.)

```
               ***  NONE  ***

**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

**************************************************

Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

FLOWSECTOR   ended 12/21/21 12:27:44

REFINE       started 12/21/21 12:27:44

 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********
```

8-12
(cont.)

```
                ***  NONE  ***


REFINE       ended 12/21/21 12:27:46


 **********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 **********************************************


 Ending date and time  12/21/21 12:27:49
```

8-12
(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			
0.19591E+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							
0.20579E+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							
0.21516E+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							
0.22371E+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							
0.23158E+01	100.00	0.00	0.0	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.23881E+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							
0.24549E+01	150.00	0.00	0.0	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.25174E+01	175.00	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							
* 0.25651E+01	200.00	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							
0.23248E+01	225.00	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							
0.17573E+01	250.00	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							
0.15115E+01	275.01	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							
0.13447E+01	300.00	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							
0.12141E+01	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							
0.11200E+01	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	310.0	2.0							
0.10382E+01	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							
0.96618E+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							
0.90203E+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							
0.84526E+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							
0.79387E+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							
0.74747E+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							
0.70589E+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							
0.66787E+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							
0.63313E+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							
0.60131E+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							
0.57240E+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
  0.54556E+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
  0.52082E+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
  0.49786E+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
  0.47655E+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
  0.45696E+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
  0.43877E+00     775.00     0.00  0.0      Winter    0-360   10011001   -1.30  0.043 -9.000  0.020 -999.   21.     6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.42150E+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
  0.40537E+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
  0.39038E+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
  0.37642E+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
  0.36308E+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
  0.35059E+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
  0.33889E+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
  0.32790E+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
  0.31747E+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
  0.30754E+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
  0.29805E+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
  0.28909E+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
  0.28061E+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
  0.27258E+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
  0.26497E+00    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
  0.25774E+00    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
  0.25087E+00    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
  0.24424E+00    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
  0.23789E+00    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
  0.23177E+00    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
  0.22593E+00    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
0.22035E+00 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
0.21502E+00 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
0.20992E+00 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
0.20503E+00 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
0.20035E+00 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
0.19586E+00 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
0.19154E+00 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
0.18733E+00 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
0.18328E+00 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
0.17938E+00 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
0.17563E+00 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
0.17202E+00 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 10.0 310.0 2.0
0.16855E+00 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
0.16519E+00 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
0.16193E+00 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
0.15878E+00 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
0.15573E+00 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
0.15279E+00 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
0.14995E+00 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
0.14720E+00 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
0.14454E+00 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
0.14196E+00 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
0.13947E+00 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
0.13702E+00 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
0.13465E+00 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
0.13235E+00 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
0.13012E+00 1975.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

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1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.12795E+00    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
  0.12585E+00    2025.00     0.00  0.0      Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.   21.     6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.12380E+00    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
  0.12182E+00    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
  0.11989E+00    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
  0.11802E+00    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
  0.11620E+00    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
  0.11442E+00    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
  0.11270E+00    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
  0.11102E+00    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
  0.10938E+00    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
  0.10779E+00    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
  0.10623E+00    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
  0.10471E+00    2325.00     0.00  0.0      Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.   21.     6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.10323E+00    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
  0.10177E+00    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
  0.10036E+00    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
  0.98976E-01    2425.00     0.00  0.0      Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.   21.     6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.97627E-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
  0.96311E-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
  0.95026E-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
  0.93771E-01    2525.00     0.00  0.0      Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.   21.     6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.92540E-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
  0.91327E-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
  0.90143E-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
  0.88985E-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
  0.87853E-01    2650.00     0.00  0.0      Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.   21.     6.0
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1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.86746E-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
  0.85663E-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
  0.84604E-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
  0.83568E-01    2750.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.82554E-01    2775.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.81561E-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
  0.80589E-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
  0.79641E-01    2850.00     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
  0.78715E-01    2875.00     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
  0.77802E-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
  0.76907E-01    2925.00     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
  0.76030E-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
  0.75171E-01    2975.00     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
  0.74329E-01    3000.00     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
  0.73501E-01    3025.00     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
  0.72689E-01    3050.00     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
  0.71892E-01    3075.00     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
  0.71111E-01    3100.00     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
  0.70345E-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
  0.69595E-01    3150.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.68859E-01    3175.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.68136E-01    3200.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.67427E-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
  0.66731E-01    3250.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.66047E-01    3275.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.65375E-01    3300.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.64715E-01    3325.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
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1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.64067E-01    3350.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.63431E-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
  0.62805E-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
  0.62190E-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
  0.61586E-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
  0.60991E-01    3475.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.60407E-01    3500.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.59833E-01    3525.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.59268E-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
  0.58709E-01    3575.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.58160E-01    3600.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.57619E-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
  0.57881E-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
  0.57343E-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
  0.56814E-01    3700.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.56293E-01    3725.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.55780E-01    3750.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.55275E-01    3775.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.54778E-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
  0.54289E-01    3825.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35  0.50  10.0  310.0  2.0
  0.53807E-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
  0.53333E-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
  0.52866E-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
  0.52406E-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
  0.51952E-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
  0.51506E-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
  0.51066E-01    4000.00     0.00  0.0      Winter    0-360  10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
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1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50633E-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
0.50206E-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
0.49785E-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
0.49370E-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 10.0 310.0 2.0
0.48961E-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
0.48558E-01 4150.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48161E-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
0.47769E-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
0.47383E-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
0.47002E-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
0.46626E-01 4275.00 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
0.46256E-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
0.45891E-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
0.45530E-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
0.45175E-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
0.44824E-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
0.44478E-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
0.44137E-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
0.43800E-01 4475.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43467E-01 4500.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43139E-01 4525.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.42815E-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
0.42495E-01 4575.00 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
0.42180E-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
0.41868E-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
0.41561E-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
0.41257E-01 4675.00 0.00 0.0 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

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1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.40957E-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
  0.40661E-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
  0.40369E-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
  0.40080E-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
  0.39795E-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
  0.39513E-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
  0.39235E-01    4850.00     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
  0.38960E-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
  0.38688E-01    4900.00     0.00  0.0      Winter     0-360   10011001   -1.30  0.043 -9.000  0.020 -999.   21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.38420E-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
  0.38155E-01    4950.00     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
  0.37893E-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
  0.37634E-01    5000.00     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
```

GHG CALCULATIONS: IS/MND Modeling

Line (L)	Value	Unit
Total Emissions From Passenger and Light Duty Vehicles		
1	1,699.97	Annual Mobile Emissions (MT CO2e/year)
2	69.00%	Passenger and Light-Duty VMT Fleet Mix
3	1,172.98	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) [Calc: (L1*L2)]
4	7,084.87	Passenger and Light-Duty Vehicle Emissions (lbs CO2e/day) [Calc: (L3 converted into lbs) / (365 days)]
5	128	Service Population [128 employees]
6	55.35	Per Capita Emissions (lbs CO2e/day/SP) [Calc: (L4/L5)]

8-12
(cont.)

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Santa Monica, CA 90405

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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

8-12 (cont.)

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);

- 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 100 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.

8-12 (cont.)

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.

- 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:

8-12 (cont.)

- 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.

- 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.

8-12 (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.

8-12 (cont.)

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).

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.

8-12
(cont.)

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.

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.

8-12
(cont.)

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.

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 examinations, 2009-2011.

8-12
(cont.)

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 oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. 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 also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

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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, creosote, 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 sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

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.

8-12
(cont.)

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.

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.

8-12 (cont.)

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.

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., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

8-12 (cont.)

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.

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.

8-12
(cont.)

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.

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.

8-12 (cont.)

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 Conferenc*e. 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.

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.

8-12
(cont.)

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

Deposition and/or Trial Testimony:

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, 5-14-2021
Trial, October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty, Plaintiff vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No.: No. 18-L-6845
Rosenfeld Deposition, 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe, Plaintiff vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail, Defendants
Case No.: No. 17-cv-8517
Rosenfeld Deposition, 5-25-2021

8-12 (cont.)

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al., Plaintiff vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case Number CV20127-094749
Rosenfeld Deposition: 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al *Plaintiffs*, vs. CNA Insurance Company et al.
Case Number 1:17-cv-000508
Rosenfeld Deposition: 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

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

8-12 (cont.)

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 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
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

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 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 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

8-12
(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 for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM
Rosenfeld Deposition: July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil Action No. CV 2008-2076
Rosenfeld Deposition: September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052
Rosenfeld Deposition: July 2009

EXHIBIT B

8-12
(cont.)

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Hector Hernandez
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, California 90660

24 December 2021

RE: Beverly Boulevard Warehouse

Dear Mr. Hernandez,

I write to comment on the Initial Study/Negative Mitigated Declaration (IS/MND) (City of Pico Rivera 2021) and biological resources study (Michael Baker International 2020) that were prepared in support of the proposed Beverly Boulevard Warehouse project, which I understand would include a 357,903 s.f. industrial distribution warehouse and a 2,500 s.f. shop building on 19.06 acres of open space between the San Gabriel River to the west and Interstate 605 to the east, and south of Beverly Boulevard.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-five years, including at many proposed project sites. My CV is attached.

8-12 (cont.)

SITE VISIT

Noriko Smallwood, a wildlife ecologist who earned her Master's Degree at California State University Los Angeles, visited the proposed project site (Photos 1 and 2) from 08:05 to 10:40 hours on 15 December 2021. She walked the site's perimeter near the railroad tracks, stopping to scan for wildlife with the use of binoculars. The sky was clear with no wind and temperatures of 40 to 50° F.

In her brief survey, Noriko detected 36 species of vertebrate wildlife at and near the site, including 4 special-status species (Table 1). At the site, she saw American kestrel and mourning dove (Photos 3 and 4), Cassin's kingbird and white-crowned sparrow (Photos 5 and 6), bushtit and common raven (Photos 7 and 8), California scrub-jay and Allen's

hummingbird (Photos 9 and 10), and house finch and black phoebe (Photos 11 and 12). Just offsite, she saw blue-gray gnatcatcher and black-and-white warbler (Photos 13 and 14), song sparrow and northern flicker (Photos 15 and 16), and great blue heron and American pipit (Photos 17 and 18) among others. Even though the site is disked for "weed abatement," its location as an island of open space increases its importance to wildlife for stopover and staging opportunities and as habitat.

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

8-12 (cont.)

Photos 1 and 2. *Views of the project site on 15 December 2021. Photos by Noriko Smallwood.*

Table 1. *Species of vertebrate wildlife seen by Noriko Smallwood at the project site on 15 December 2021.*

Species	***Scientific name***	**Status**[1]	**Notes**
Canada goose	*Branta canadensis*		On site, flyover
Mallard	*Anas platyrhynchos*		Just off site
Northern pintail	*Anas acuta*		Just off site
Great egret	*Ardea albas*		Just off site
Great blue heron	*Ardea herodius*		Just off site
Killdeer	*Charadrius vociferus*		On site, flyover
Ring-billed gull	*Larus delawarensis*		Just off site
Turkey vulture	*Cathartes aura*	BOP	On site, flyover
Red-tailed hawk	*Buteo jamaicensis*	BOP	Just off site
American kestrel	*Falco sparverius*	BOP	On site
Mourning dove	*Zenaida macroura*		On site
Rock pigeon	*Columba livia*	Non-native	On site, flyover
Northern flicker	*Colaptes auratus*		Just off site
Anna's hummingbird	*Calypte anna*		On site
Allen's hummingbird	*Selasphorus sasin*	BCC	On site
Say's phoebe	*Sayornis saya*		Just off site
Black phoebe	*Sayornis nigricans*		On site
Cassin's kingbird	*Tyrannus vociverans*		On site
Ruby-crowned kinglet	*Regulus calendula*		Just off site
Blue-gray gnatcatcher	*Polioptila caerulea*		Just off site
Bushtit	*Psaltriparus minimus*		On site
American pipit	*Anthus rubescens*		Just off site
European starling	*Sturnus vulgaris*	Non-native	On site
California scrub-jay	*Aphelocoma californica*		On site
American crow	*Corvus brachyrhynchos*		On site
Common raven	*Corvus corax*		On site
Northern mockingbird	*Mimus polyglottos*		Just off site
Yellow-rumped warbler	*Dendroica coronata*		Just off site
Black-and-white warbler	*Mniotilta varia*		Just off site
California towhee	*Melozone crissalis*		On site
Song sparrow	*Melospiza melodia*		Just off site
White-crowned sparrow	*Zonotrichia leucophrys*		On site
House finch	*Haemorphous mexicanus*		On site
House cat	*Felis catus*	Non-native	On site
Botta's pocket gopher	*Thomomys bottae*		Burrows on site
Desert cottontail	*Sylvilagus auduboni*		On site

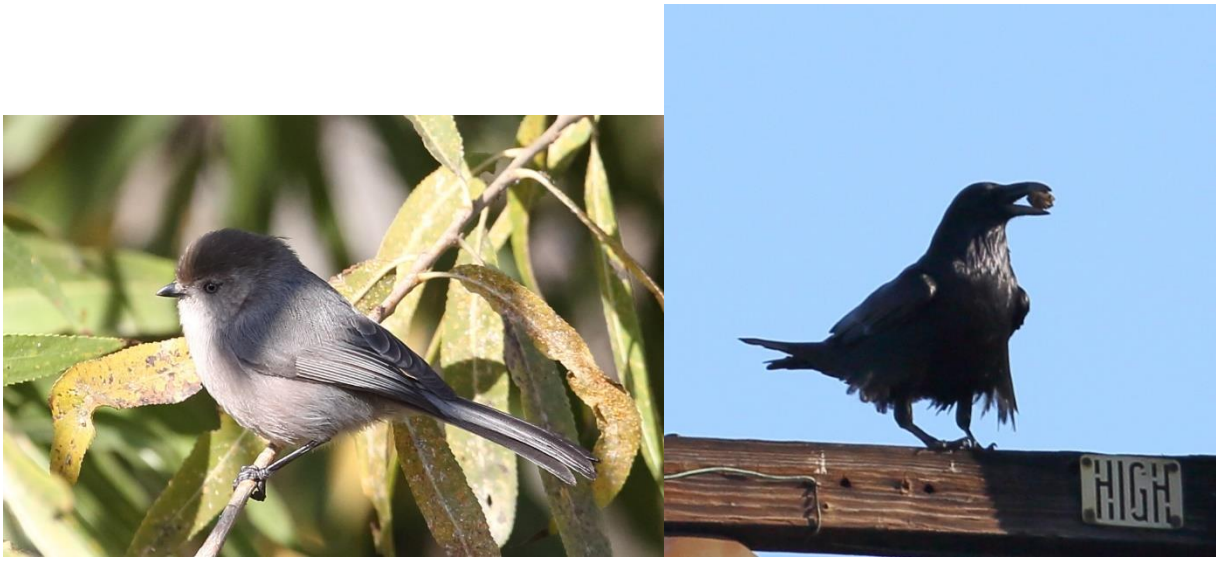
8-12 (cont.)

[1] BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, BOP = California Fish and Game Code 3503.5 (Birds of Prey).

Photos 3 and 4. *American kestrel (left) and mourning dove (right) seen at the project site, 15 December 2021. Photos by Noriko Smallwood.*

8-12 (cont.)

Photos 5 and 6. *Cassin's kingbird (left) and white-crowned sparrow (right) at the project site, 15 December 2021. Photos by Noriko Smallwood.*



Photos 7 and 8. *Bushtit (left) and common raven (right) at the project site, 15 December 2021. Photos by Noriko Smallwood.*

8-12
(cont.)

Photos 9 and 10. *California scrub-jay (left) and Allen's hummingbird (right) at the project site, 15 December 2021. Photos by Noriko Smallwood.*

Photos 11 and 12. *House finches (top) and black phoebe (bottom) at the project site, 15 December 2021. Photos by Noriko Smallwood.*

8-12
(cont.)

Photos 13 and 14. *Blue-gray gnatcatcher (left) and black-and-white warbler (right) next to the project site, 15 December 2021. Photos by Noriko Smallwood.*

Photos 15 and 16. *Song sparrow (left) and northern flicker (right) next to the project site, 15 December 2021. Photos by Noriko Smallwood.*

8-12
(cont.)

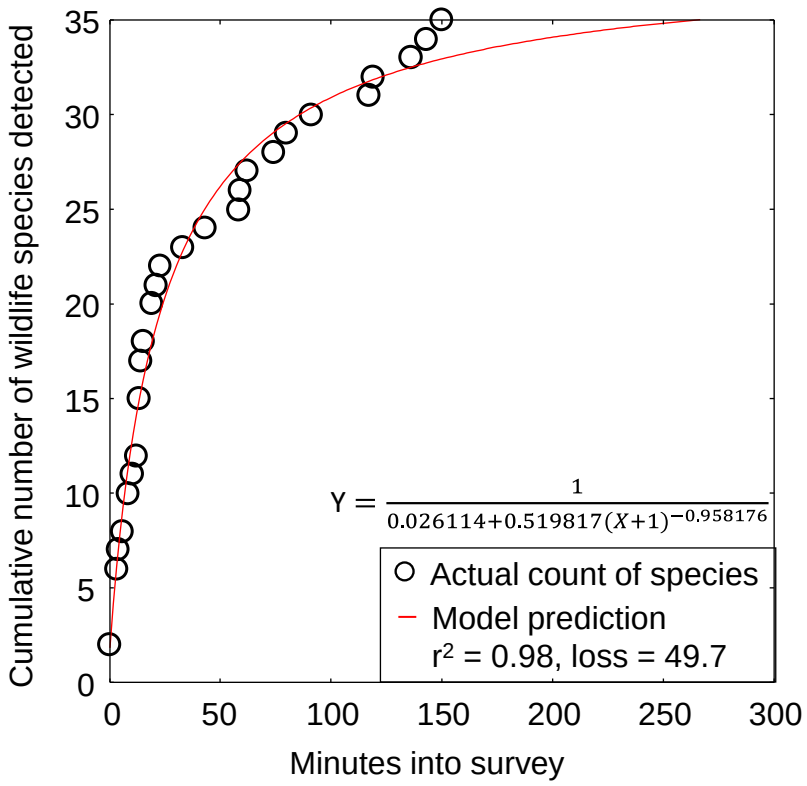
Photos 17 and 18. *Great blue heron (top) and American pipit (bottom) at the project site, 15 December 2021. Photos by Noriko Smallwood.*

8-12
(cont.)

Noriko's detection of 36 species of vertebrate wildlife needs to be interpreted within the context of her survey effort. No matter who performs a survey, the results of a reconnaissance-level survey qualify as thin empirical foundation for characterizing the environmental setting of any site, including one proposed for a project. Such a survey can serve only as a starting point toward characterization of a site's wildlife community.

There were only so many species Noriko was likely to detect within the short time she had available to perform a visual-scan survey on 15 December 2021. However, a focused survey effort in which the times of species detections are noted can inform of the number of species likely to be detected with a larger survey effort of the same methods and the same time of year (Figure 1). This potential is of critical importance when making determinations about occurrence likelihoods of special-status species.

Figure 1. *Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on Noriko Smallwood's visual scan survey on 15 December 2021. Note that the relationships would differ if the surveys were based on another method or during another season. Also note that the cumulative number of vertebrate species across all methods, times of day, and seasons would increase substantially.*



By recording when she detected each species, I could forecast the number of species that could have been detected with a longer effort using the same visual-scan method. Figure 1 shows Noriko's cumulative count of species detected at the site with increasing time into her survey. Just as I have seen for many other survey efforts, a nonlinear regression model fit the data very well, explaining 98% of the variation in the data. The pattern in the data showed progress towards the inevitable asymptote of the number of species detectable over a longer period of time using the same survey method. In Noriko's case, the model predicted Noriko would have detected 38 species that morning. Had she been able to continue her survey, she would have continued to detect species of wildlife.

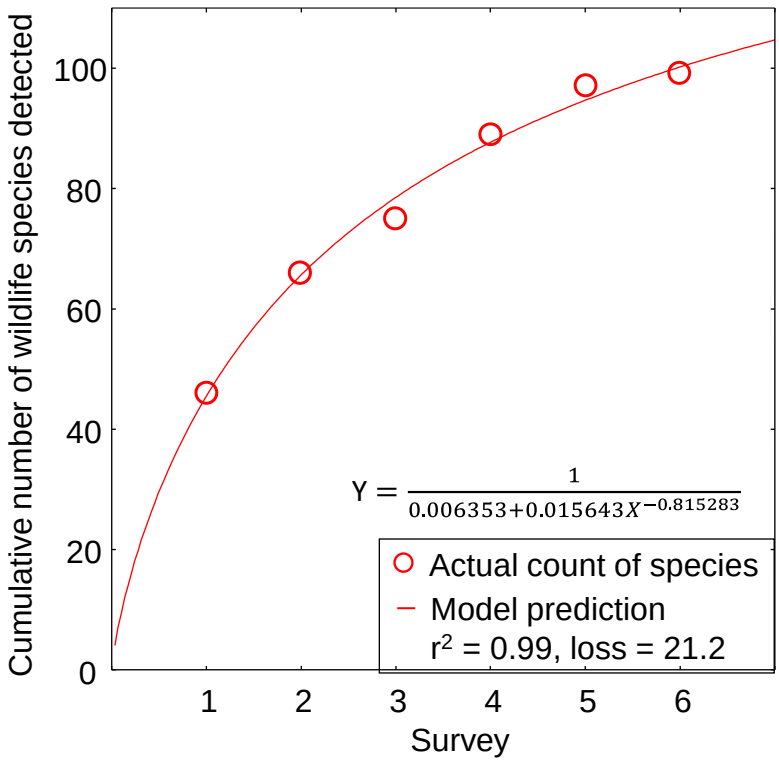
8-12 (cont.)

Noriko could have detected many more species than predicted had she also performed surveys at different times of day to detect diurnal, nocturnal and crepuscular species with appropriate methods and technology, or surveys in different seasons and years to detect migrants and species with multi-annual cycles of abundance. Her reconnaissance-level survey informs me that the site is richer in wildlife than the 36 species detected, but also that the environmental setting of the project remains insufficiently characterized as foundation for analysis of impacts to special-status species (more on this later). How many more species could Noriko have detected by simply repeating the visual-scan survey she performed, but on various dates through the year?

To answer the forgoing question, I repeated visual-scan surveys 6 times over the period of one year at a proposed project site near Sacramento, California. Survey outcomes

ranged 40 to 67 species per survey, but a least-squares regression model that I fit to the cumulative number of species detections predicted that 157 species of vertebrate wildlife would eventually be detected by continuing to repeat the visual-scan surveys (Figure 2). Repeated surveys achieved diminishing returns, but they were necessary to document the occurrences of the scarcer and more cryptic species. Given the example illustrated in Figure 2, and assuming the pattern of survey returns is robustly represented by Figure 2, the 36 species Noriko detected after her one survey at the project site likely represent 29% of the species likely to be detected after many visual-scan surveys. With many more repeat surveys, Noriko would likely detect $^{36}/_{0.29} = 124$ species of vertebrate wildlife at the site.

Figure 2. *Cumulative number of species detected as a function of the number of visual-scan surveys performed through one year at one site near Sacramento, California.*



8-12 (cont.)

There is no question that a larger survey effort would result in a longer list of species documented to use the project site, thereby changing our understanding of the current environmental setting. But which species have yet to be detected? And how many of them would be special-status species? And how many would be listed species? The likelihood of detecting special-status species is typically lower than that of more common species. This difference can be explained by the fact that special-status species tend to be rarer and thus less detectable than common species. Special-status species also tend to be more cryptic, fossorial, or active during nocturnal periods when reconnaissance surveys are not performed. Another useful relationship from careful recording of species detections and subsequent comparative analysis is the probability of detection of listed species as a function of an increasing number of vertebrate wildlife species detected (Figure 3). (Note that listed species number fewer than special-status species, which are inclusive of listed species. Also note that I include California Fully Protected species and federal Candidate species as listed species.)

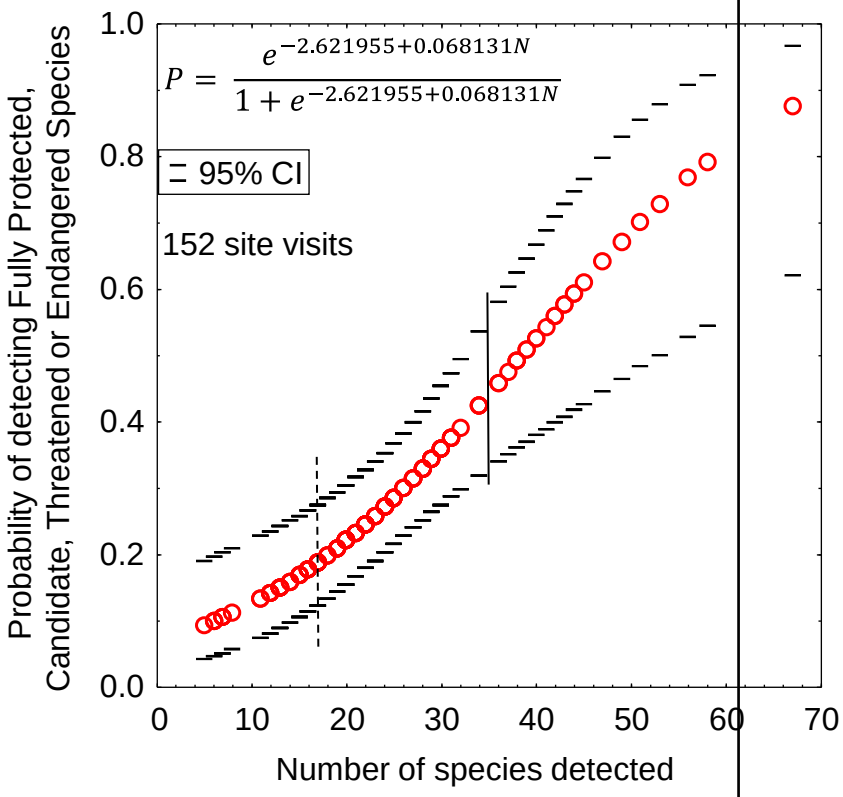


Figure 3. *Probability of detecting ≥1 Candidate, Threatened or Endangered Species of wildlife listed under California or federal Endangered Species Acts, based on survey outcomes logit-regressed on the number of wildlife species Noriko and I detected as expert witnesses during 152 site visits in California. The dashed vertical line represents the number of species detected by Michael Baker International and the solid vertical line represents the number detected by Noriko.*

As was demonstrated in Figures 1 and 2, the number of species detected is largely a function of survey effort. Greater survey effort also increases the likelihood that listed species will be detected (which is the first tenet of detection surveys for special-status species). Based on the outcomes of 152 previous surveys that Noriko and I performed at sites of proposed projects, Noriko's survey effort at the project site carried a 44% chance of detecting a listed species, whereas the survey effort of Michael Baker International (2020) carried an 19% chance of detecting a listed species. Neither Michael Baker nor Noriko detected a listed species, but either could have detected one with additional surveys. Listed species likely use the site, but documenting their use would take more than twice Noriko's survey effort or five times Michael Baker's survey effort to achieve reasonable likelihoods of detecting them. No reconnaissance-level survey is capable of detecting enough of the wildlife species that occur at a site to realistically characterize the site's wildlife community. This context bears on my comments regarding potential project impacts to biological resources, below.

8-12 (cont.)

CURRENT ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze project impacts. Methods to achieve this first step typically include

surveys of the site for biological resources and reviews of literature, databases and local experts for documented occurrences of special-status species. The IS/MND, however, is both incomplete and inaccurate in its characterization of the environmental setting as it relates to wildlife. A biological survey was provided, but it was inadequate. The supporting review of literature and databases is much too cursory. I found additional problems with the premises used to determine occurrence likelihoods, and with the interpretation of available information. I will comment on these problems, but first I will comment on the biological resources survey.

The biologists from Michael Baker International (2020) committed 4.33 person-hours to a survey of the site on 26 May 2020. During this brief survey to determine the likelihoods of occurrence of wildlife on the site, Michael Baker International (2020) detected only 17 species of vertebrate wildlife, including only 2 special-status species. In only 2.58 person-hours, Noriko detected twice the number of species detected by Michael Baker, and twice the number of special-status species. Perhaps one reason for the substantial difference in survey outcomes was given by Michael Baker International (2020:3), "Active tilling for weed abatement was occurring on-site during the field survey." In other words, Michael Baker International (2020) performed its reconnaissance-level survey for biological resources on the day of the year least likely to detect wildlife. The Michael Baker biologists should have selected a different day when active tilling was not underway, or they should have returned to the site on a later date after the tractor was long-gone. By relying on a survey during which a tractor tilled the soil of the site, Michael Baker International (2020) mischaracterized the wildlife community of the site.

8-12 (cont.)

Furthermore, as I demonstrated with Figures 1 through 3, more species would be detected with greater survey effort. The survey effort of Michael Baker International did not measure up to Noriko's, and Noriko's survey effort was itself only suitable as a starting point for the effort needed to realistically characterize the wildlife community at and around the project site. The surveys at the site provide some evidence of my point. Michael Baker's biologists detected 5 species of wildlife that Noriko did not, bringing the total detected between the two surveys to 41. Even more species likely would have been detected between the two surveys had Michael Baker's biologists surveyed on a day when no tractor was tilling the site's soil.

Similarly, results of a database review in the IS/MND do not comport with my review of available databases. Michael Baker International (2020) consulted only the California Natural Diversity Data Base (CNDDB) for wildlife occurrences (no other data sources were specifically cited, nor were any linked to wildlife observations), and in so doing, inappropriately used it to screen out many special-status species from further consideration. Occurrence likelihoods of 'Not expected' and 'Low' were specifically based on lack of CNDDB records. For this reason, the list of special-status species assessed for occurrence likelihood was much too short (Table 2). Of the 105 special-status species of wildlife I identified as potentially occurring at the site, the IS/MND addressed only 20 (19%) (Table 2). The IS/MND's characterization of the likelihoods of species occurrences is too incomplete to serve as a sound basis for analyzing project impacts to wildlife.

***Table 2**. Occurrence likelihoods of wildlife species at the project site, as determined in the IS/MND and as indicated by eBird/iNaturalist records (data base) and on-site survey findings. 'Very close' indicates sightings within about 1.5 miles of the site, 'nearby' indicates sightings within several miles, 'in region' indicates sightings within about 30 to 50 miles, and 'in range' means the species' geographic range overlaps the site.*

Common name	***Species name***	**Status[1]**	**Occurrence likelihoods**	
			IS/MND	**Data bases, site visits**
Monarch	*Danaus plexippus*	FC		Very close
Crotch's bumble bee	*Bombus crothcii*	CE (candidate)	Not expected	Nearby (obscured)
Blainville's horned lizard	*Phrynosoma blainvillii*	SSC	Low	Nearby
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	Low	Nearby
Southern California legless lizard	*Anniella stebbinsi*	SSC	Not expected	Nearby
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC		Very close
Western pond turtle	*Emys marorata*	SSC	Not expected	In region
Black swift	*Cypeseloides niger*	BCC		In region
Vaux's swift	*Chaetura vauxi*	SSC2		Very close
Costa's hummingbird	*Calypte costae*	BCC		Very close
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		On site
Snowy plover	*Charadrius nivosus*	BCC		Nearby
Long-billed curlew	*Numenius americanus*	BCC, WL		Very close
Marbled godwit	*Limosa fedoa*	BCC		Nearby
Short-billed dowitcher	*Limnodromus griseus*	BCC		Nearby
Willet	*Tringa semipalmata*	BCC		Nearby
Western gull	*Larus occidentalis*	BCC		Very close
California gull	*Larus californicus*	WL, BCC		Very close
Caspian tern	*Hydropogne caspia*	WL		Very close
Brant	*Branta bernicla*	SSC2		Nearby
Redhead	*Aythya americana*	SSC3		Very close
Western grebe	*Aechmophorus occidentalis*	BCC		Very close

8-12 (cont.)

Common name	*Species name*	Status[1]	Occurrence likelihoods	
			IS/MND	Data bases, site visits
Clark's grebe	*Aechmophorus clarkii*	BCC		Nearby
Double-crested cormorant	*Phalacrocorax auritus*	WL		Very close
Common loon	*Gavia immer*	SSC		In region
American white pelican	*Pelacanus erythrorhynchos*	SSC1		Very close
Least bittern	*Ixobrychus exilis*	SSC, BCC		Nearby
White-faced ibis	*Plegadis chihi*	WL		Very close
Turkey vulture	*Cathartes aura*	BOP		On site
Osprey	*Pandion haliaetus*	BOP, WL		Very close
White-tailed kite	*Elanus leucurus*	CFP, BOP		Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP		Nearby
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, BCC, CFP		Nearby
Northern harrier	*Circus cyaneus*	SSC3, BOP, BCC		Nearby
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		Very close
Cooper's hawk	*Accipiter cooperi*	WL, BOP	Low	Very close
Red-shouldered hawk	*Buteo lineatus*	BOP		Very close
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Not expected	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		Next to site
Ferruginous hawk	*Buteo regalis*	WL, BOP		Nearby
Barn owl	*Tyto alba*	BOP		Very close
Western screech-owl	*Megascops kennicotti*	BOP		Very close
Great horned owl	*Bubo virginianus*	BOP		Very close
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP	Low	Nearby
Long-eared owl	*Asio otus*	SSC, BOP, BCC		In region
Short-eared owl	*Asio flammeus*	BCC		In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Nearby
Nuttall's woodpecker	*Picoides nuttallii*	BCC		Very close
American kestrel	*Falco sparverius*	BOP		On site
Merlin	*Falco columbarius*	WL, BOP		Very close
Prairie falcon	*Falco mexicanus*	WL, BCC, BOP		In region
Peregrine falcon	*Falco peregrinus*	BCC, CFP, BOP		Very close

8-12 (cont.)

Common name	*Species name*	Status[1]	Occurrence likelihoods	
			IS/MND	Data bases, site visits
Olive-sided flycatcher	*Contopus cooperi*	SSC2		Nearby
Willow flycatcher	*Empidonax traillii*	BCC, CE		Very close
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Nearby
Least Bell' vireo	*Vireo belli pusillus*	FE, CE	Low	Very close
Loggerhead shrike	*Lanius ludovicianus*	BCC, SSC2		Nearby
Oak titmouse	*Baeolophus inornatus*	BCC		Nearby
Horned lark	*Eremophila alpestris actia*	WL		Nearby
Purple martin	*Progne subis*	SSC2		In region
Bank swallow	*Riparia riparia*	BLM:S	Not expected	Very close
Wrentit	*Chamaea fasciata*	BCC		Very close
Coastal California gnatcatcher	*Polioptila californica californica*	SSC	Low	Very close
California thrasher	*Toxostoma redivivum*	BCC		Very close
Lawrence's goldfinch	*Carduelis lawrencei*	BCC		Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC	Not expected	Very close
Black-chinned sparrow	*Spizella atrogularis*	BCC		In region
Brewer's sparrow	*Spizella breweri*	BCC		Very close
Bell's sage sparrow	*Amphispiza b. belli*	WL		In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2		In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	FSC, SSC	Not expected	Very close
Yellow-breasted chat	*Icteria virens*	SSC3	Low	Very close
Yellow-headed blackbird	*X. xanthocephalus*	SSC3		Very close
Bullock's oriole	*Icterus bullockii*	BCC		Very close
Tricolored blackbird	*Agelaius tricolor*	BCC, CT		Very close
Lucy's warbler	*Leiothypis luciae*	BLM:S, SSC, BCC		Nearby
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC		In region
Yellow warbler	*Dendroica petachia*	BCC, SSC2		Very close
Summer tanager	*Piranga rubra*	SSC1		Nearby
Western mastiff bat	*Eumops perotis californicus*	SSC, WBWG:H	Not expected	In region
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG:M	Not expected	In region

8-12 (cont.)

Common name	*Species name*	Status[1]	Occurrence likelihoods	
			IS/MND	Data bases, site visits
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH	Not expected	In region
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	Not expected	In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H		In region
Spotted bat	*Euderma maculatum*	SSC, WBWG:H		In range
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		In region
Hoary bat	*Lasiurus cinereus*	WBWG:M	Not expected	In region
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H	Not expected	In range
Western small-footed myotis	*Myotis ciliolabrum*	WBWG:M		In region
Fringed myotis	*Myotis thysanodes*	WBWG:H		In region
Miller's myotis	*Myotis evotis*	WBWG:M		In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range
Yuma myotis	*Myotis yumanensis*	SSC, WBWG:LM		In region

8-12 (cont.)

[1] FE and FT = federal endangered and threatened, BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, CE and CT = California endangered and threatened, CFP = California Fully Protected (FGC Code 3511), CSP = California Specially Protected, SSC = California species of special concern, SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively, and WL = Taxa to Watch List (Shuford and Gardali 2008), BOP = California Fish and Game Code 3503.5 (Birds of Prey), and WBWG = Western Bat Working Group with priority rankings, of low, moderate, and high.

Of the wildlife species addressed, the IS/MND determines 13 to not be expected, and 7 to have low occurrence potential. Of the 7 species assigned low occurrence potential, all were said to lack suitable habitat at the project site. According to Michael Baker International (2020:9), "it was determined that all special-status wildlife species identified by the CNDDB and IPaC databases either have low potential to occur or are not expected to occur within the project site." These findings are incredible. According to publicly available data, 45 of these species have been reported within 1.5 miles of the site ("On site," "Next to site," or "Very close" in Table 2), and another 24 have been reported within several miles of the site ("Nearby" in Table 2). Another 21 of the species have been documented within about 30 to 50 miles of the site ("in region" in Table 2). I find it hard to believe that for all these special-status species documented near the site, Michael Baker International and the IS/MND assert no habitat exists for them there.

Of the 7 species the IS/MND assigns low occurrence potential, I found occurrence records of 4 to be within 1.5 miles of the site and of another 2 within several miles. Of the 13 species the IS/MND concludes are not expected at the site, I found occurrence records of 4 to be within 1.5 miles of the site and of another 2 within several miles. The evidence does not comport most of the findings of occurrence likelihoods in the IS/MND.

8-12 (cont.)

The IS/MND determines low occurrence potential for burrowing owl partly because "no burrowing owls, sign (i.e., pellets, feathers, castings, or white wash), or suitable burrows capable of providing roosting and nesting opportunities were observed within the project site." However, Michael Baker International (2020) also reported seeing California ground squirrel burrows on the project site. California ground squirrels and their burrows are the most important habitat elements needed by burrowing owls (Smallwood et al. 2013, Smallwood and Morrison 2018).

Four of the special-status species not addressed in the IS/MND were seen at the project site by Noriko Smallwood during her brief survey. The site certainly provides habitat for these species. It also likely provides habitat for most of the species in Table 2, and most of these species likely use the site at one time or another.

Additional problems with determinations of occurrence likelihoods.--Earlier I mentioned additional problems with the premises used to determine occurrence likelihoods, and with the interpretation of available information. I add those comments below.

To my first problem, the IS/MND inappropriately relies on data bases to screen out special-status species occurrences at the project site. It relies on output from queries of USFWS's Information for Planning and Consultation (IPaC) and CNDDB to infer absences rather than to make use of the detection survey protocols that have been formulated to determine absence based on evidence. Data base q1ueries can be useful for confirming presence where evidence of presence was fortuitously available, and hence sparing the effort of gathering evidence to either detect the species or determine absence. Otherwise, data base queries should not be used as surrogates for the evidence-based approach – detection surveys – that so many experienced biologists

have contributed time and effort to formulate. I have many times detected special-status species where consulting biologists had inaccurately inferred from data base queries the species would be absent.

The IS/MND relies on absence of CNDDB records to assign 7 special-status species of wildlife low likelihoods of occurrence and to determine that 13 others are not expected to occur. Consistent with my comments in the preceding paragraph, CNDDB was not designed to support absence determinations or to screen out species from the characterization of the current environmental setting. Negative findings from CNDDB queries are inappropriate as a basis for narrowing a list of potentially occurring species. The limitations of CNDDB are well-known, and summarized by California Department of Fish and Wildlife in a warning presented on its CNDDB web site (https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data): "*We work very hard to keep the CNDDB and the Spotted Owl Database as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers…*" Similarly, iPac makes no claim of perfect knowledge of species occurrences at or near a site. The IS/MND's use of CNDDB records to filter out species from its characterization of the current environmental setting is therefore inconsistent with CNDDB's purpose.

8-12 (cont.)

It is a principle of ecology that lack of occurrence records at or within 5 miles of a site would not necessarily indicate the species is absent from the site. This principle goes to very well-established patterns of distribution and abundance of organisms. Spatial distributions of animal populations are aggregated and naturally dynamic, with centers of activity shifting every generation or so (Taylor and Taylor 1979). Hypotheses for spatially dynamic distributions of animal species include the need to exploit forage that accumulated outside activity areas while resting the forage within activity areas, the need to escape predator or parasite loads, and the need of young animals to leave natal areas to form new breeding populations. Whatever the reasons, animal populations are rarely static in their distribution, so past sightings records cannot entirely inform of a species' current distribution. A recorded presence of a species in CNDDB informs of the capacity of a site to support the species, but it does not mean the species is always present. Likewise, the reported absence of a species does not necessarily mean the site lacks the capacity to support members of the species nor that the species would continue to be absent from the site. A more realistic representation of occurrence likelihood would be a probability of occurrence of a given species on the *i*th survey date at a given site that is both within the species' geographic range and supports conditions typical of the species' habitat.

To develop a basis for quantifying probability of occurrences, CNDDB would need to provide the means for reporting study attributes related to survey effort and methodology. Toward developing this basis, CNDDB would also need to provide the means for reporting negative findings. Because there is no scientific sampling framework to CNDDB, and because CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever real properties they report from, and

because negative findings are not recorded in CNDDB, reports of species' detections can only be interpreted as confirmations of presence at a particular time and place. Many real properties have never been surveyed by biologists. Many real properties have been surveyed, but the survey outcomes never reported to CNDDB. Many real properties have been surveyed multiple times, but not all survey outcomes reported to CNDDB. For all these reasons, occurrence probabilities cannot be quantified from CNDDB.

To my second problem, which bridges the characterization of the environmental setting and the analysis of potential project impacts to wildlife, the IS/MND relies on the premise that only impacts to breeding habitat qualify as significant impacts. For species such as Cooper's hawk, the IS/MND contrives a distinction between nesting habitat and foraging habitat. The IS/MND then implies that because nesting habitat is unavailable at the project site, project impacts to the species would be less than significant. In reality, all of a species' habitat is of critical importance to the species regardless of where breeding sites are located. After all, no matter where a species breeds, members of the species cannot breed successfully without also surviving migration and the non-breeding season. Animals cannot breed successfully with insufficient forage or opportunities for stopover refugia during migration or opportunities for staging areas or for mate-selection and all the other functions the animal must perform to successfully breed. The occurrence likelihoods of species for which the IS/MND determines nesting habitat is unavailable on site are inaccurately and incompletely characterized as part of the wildlife community at the project site.

8-12 (cont.)

To the third problem, which is related to the second, the IS/MND pigeon-holes species into portions of the environment that are much narrower than the species' actual habitat. The IS/MND repeatedly mischaracterizes species as obligates of narrowly defined habitats that are not truly representative of the species. A table of such narrow characterizations of habitat is then cross-checked against conditions at the project site to systematically reduce or screen out the likelihoods of occurrence of one species after another, which is what the IS/MND did. To facilitate this process, the annual grassland at the site has been disked for "weed abatement" so that it does not resemble the "habitat" of any of the special-status species addressed in the CEQA review.

The approach used in the IS/MND represents a gross departure from the most efficient method known for characterizing habitat. The most efficient method is to observe which parts of the environment a species is using, hence relying on each species to inform of its habitat. After all, habitat is defined by a species' use of the environment (Hall et al. 1997, Morison et al. 1998, Krausman 2016). In fact, the main purpose of reconnaissance-level surveys is to document as many of the species using the site as reasonably feasible as a means to assess the site's role as habitat. Each species detected on site confirms the site's use as habitat by that species. A confirmation is much more reliable than assumed presence or absence each species. Actual sightings of members of a species cut through the guesswork and bypass the assumptions, because they go directly to sound interpretation of what is habitat.

The tabulated habitat characterizations used for cross-checking against observed conditions on the ground were presumably based on sightings of wildlife somewhere

else. Lest they be pure speculation, descriptions of habitat follow from observations of the species relative to measured environmental conditions. If habitats were assigned to species in the absence of observations, then there would be no need for reconnaissance-level surveys to inform CEQA reviews. But the survey at the project site was needed because it is the species' unique use of the environment that informs of its habitat. No canned table of habitats is going to capture the range of conditions in which any given species exists; the analyst must take a serious look at a proposed project site. But knowing that a reconnaissance-level survey is insufficient for detecting all of the wildlife species that use a site, the survey outcome must be interpreted carefully. Per the careful interpretation that is needed, the Precautionary Principle in risk assessment is essential. The analyst should more often assume presence of each conceivable species because, informed only be a reconnaissance-level survey, insufficient effort was made to prove absence. To prove absence, protocol-level detection surveys were formulated by natural resource agencies and other species' experts.

The current environmental setting described in the IS/MND differs from the one described by Noriko Smallwood, based on her brief survey visit. Noriko detected 24 species of wildlife that Michael Baker's biologists did not. She saw 2 special-status species of wildlife that Michael Baker's biologists did not. The photo montage at the beginning of this comment letter looks nothing like what the IS/MND would have the reader believe of the site – that few wildlife species use the site and the site provides no value to wildlife. Wildlife do use the site. The current environmental setting is other than what the IS/MND presents. Therefore, a fair argument can be made for the need to prepare an EIR to more carefully and more thoroughly characterize the current environmental setting as a basis of performing project impacts analysis. 8-12 (cont.)

BIOLOGICAL IMPACTS ANALYSIS

Determination of occurrence likelihoods of special-status species is not, in and of itself, an analysis of potential project impacts. An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, or the whole of a species. In the following, I analyze several types of impacts likely to result from the project, and none of which are analyzed in the IS/MND.

HABITAT LOSS

Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity (Smallwood 2015). For example, two study sites in grassland/wetland/woodland complexes had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. Applying as little as a third of this density to the project site, 11.42 nests/acre multiplied against 19.06 acres would predict a loss of 218 bird nests. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, then the project would prevent the production of 632 fledglings per year. After 100 years and assuming an average generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from the following formula: {(nests/year × chicks/nest × number of years) + ((2

adults/nest × nests/year) × (number of years ÷ years/generation))}. In the case of this project, and given my stated assumptions, this formula predicts **the project would deny California 71,920 birds over the next century due solely to loss of terrestrial habitat**. This predicted loss of 719 birds/year would be substantial, and would qualify as a significant impact that is not addressed in the IS/MND. A fair argument can be made for the need to prepare an EIR to appropriately analyze habitat loss as a potential project impact to birds.

WILDLIFE MOVEMENT

The IS/MND is misleading in its analysis of whether the project would interfere with wildlife movement in the region. According to the IS/MND (p. 4.4-4), "The project site is not located within any wildlife Corridors…" "the project site does not act as a corridor or linkage for wildlife species" …and therefore "would not interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors…" However, the premise of the City's conclusion is incorrect. The CEQA standard is whether a project will "Interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors…" The primary phrase of the standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. And anyhow, corridors are typically regarded in science as human-created landscape structures intended to reduce the effects of habitat fragmentation, and only infrequently as a channelization of wildlife movement caused by landscape structure (Smallwood 2015).

8-12 (cont.)

Wildlife movement in a region is often diffuse rather than channeled (Runge et al. 2014, Taylor et al. 2011) unless anthropogenic changes have forced channeling or targeting of "island" patches of habitat (Smallwood 2015). Wildlife movement includes stopover by birds and bats (Taylor et al. 2011), and staging (Warnock 2010) during dispersal, migration or home range patrol. Many species of wildlife likely use the site of the proposed project for movement across the region, and some species were seen doing so during Noriko Smallwood's survey. The project would cut wildlife off from stopover and staging opportunities, and would lengthen the distances that wildlife must travel before finding alternate stopover opportunities. The project, therefore, would interfere with wildlife movement in the region. A fair argument can be made for the need to prepare an EIR to appropriately analyze interference with wildlife movement in the region as a potential project impact to wildlife.

ROAD MORTALITY

With the proposed construction of 357,903 square feet of industrial warehouse floor-space, the IS/MND is deficient by providing no analysis of traffic impacts to wildlife. In fact, the IS/MND makes no mention of this potential impact. Various means to analyze the impact are available, one of which I implement below.

As will be described, a basis for predicting wildlife mortality can be found in the prediction of annual vehicle miles traveled (VMT). According to the IS/MND, the

project would generate a daily VMT of 4,207, which at an annual level would be 1,535,555. This mileage would kill wildlife (Photos 19 through 21). A fundamental shortfall of the IS/MND is its failure to analyze the impacts of the project's added road traffic on special-status species of wildlife, including species that might not occur at the project site, but which would occur along the roads that project-generated traffic would travel. Such species would include western pond turtle (*Actinemys pallida*), mountain lion (*Puma concolor*) and American badger (*Taxidea taxus*), among many others. Many animals that would be killed by the traffic generated from this project would be located far from the project's construction footprint; they would be crossing roads traversed from cars and trucks originating from or headed toward the project site. The project's impacts on wildlife would reach as far from the project as cars and trucks travel to or from the project site. Despite the obvious risk to wildlife, and despite the multiple papers and books written about this type of impact and how to mitigate them, the IS/MND does not address impacts to wildlife caused by vehicles traveling to and from the project site.

8-12 (cont.)

Photo 19. *A Gambel's quail dashes across a road* on *3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.*

Photo 20. *A mourning dove killed by vehicle traffic on a California road. Photo by Noriko Smallwood, 21 June 2020.*

Photo 21. *Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America, traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

The nearest study of traffic-caused wildlife mortality was performed along a 2.5 mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study right next to Vasco Road (Brown et al. 2016). The Brown et al. (2016) adjustment factors were similar to those for carcass persistence of road fatalities (Santos et al. 2011). Applying searcher detection rates estimated from carcass detection trials performed at a wind energy project immediately adjacent to this same stretch of road (Brown et al. 2016), the adjusted total number of fatalities was estimated at 12,187 animals killed by traffic on the road. This fatality number translates to a rate of 3,900 wild animals per mile per year killed along 2.5 miles of road in 1.25 years. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic on roads within the City of Pico Rivera and County of Los Angeles would similarly result in intense local impacts on wildlife.

8-12 (cont.)

Predicting project-generated traffic impacts to wildlife

The IS/MND predicts that the project would generate 1,535,555 vehicle miles traveled per year. This would be a lot of mileage to be driven at great peril to wildlife that must cross roads to go about their business of foraging, patrolling home ranges, dispersing and migrating. But it can also serve as a basis for predicting impacts to wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although despite the nearness of the Mendelsohn et al. (2009) study to the project site, it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 11.7% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species).

8-12 (cont.)

During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into the annual VMT predicted above, I predict the project would cause 841 wildlife fatalities per year. **Operations over 100 years would accumulate 84,100 wildlife fatalities**. It remains unknown whether and to what degree vehicle tires contribute to carcass removals from the roadway, thereby contributing a negative bias to the fatality estimates I made from the Mendelsohn et al. (2009) fatality counts.

Based on my assumptions and simple calculations, the project-generated traffic would cause substantial, significant impacts to wildlife. A fair argument can be made for the need to prepare an EIR to appropriately analyze traffic-caused road mortality as a potential project impact to wildlife.

CUMULATIVE IMPACTS

The IS/MND (p. 4.21-2) concludes, "Although the project may incrementally affect other resources that were determined to be less than significant [presumably including biological resources], the project's contribution to these effects is not considered "cumulatively considerable," in consideration of the relatively nominal impacts of the project and mitigation measures provided." The IS/MND implies that the preconstruction survey for nesting birds would prevent more than insubstantial cumulative impacts to biological resources. It follows, therefore, that the IS/MND further implies that cumulative impacts are really just residual impacts of incomplete mitigation. If that was CEQA's standard, then cumulative effects analysis would be

merely an analysis of mitigation efficacy. The IS/MND's implied standard is not the standard of analysis of cumulative effects. CEQA defines cumulative impacts, and it outlines two general approaches for performing the analysis. Neither approach is adopted in the IS/MND regarding biological resources.

A factor that heightens the project's contribution to cumulative impacts is its environmental setting as an island of open space in the middle of the greater Los Angeles megacity. The project's situation epitomizes the terminal stage of habitat fragmentation at which point it represents one of the last remaining patches of open space (Smallwood 2015). It presents migratory birds and bats and arthropods (e.g., Monarch) one of the final remaining opportunities for stopover, staging and foraging while crossing the megacity of greater Los Angeles. Given that North America has lost nearly a third of its birds over the past half century (Rosenberg et al. 2019), an appropriate cumulative effects analysis is warranted. A fair argument can be made for the need to prepare an EIR to appropriately analyze the project's contribution to potential cumulative impacts to wildlife.

MITIGATION MEASURES

Only one measure is proposed to mitigate project impacts to wildlife. This one measure would be grossly insufficient. 8-12 (cont.)

BIO 1 Preconstruction survey for nesting birds

Preconstruction surveys are proposed for nesting birds, as they ought to be. However, it should be understood that preconstruction surveys are really wildlife salvage surveys; they are intended as last-minute efforts to save the readily detectable birds or their nests from being crushed by heavy machinery. Because many birds will nest on site during the breeding season, and because the majority of these nests will be expertly constructed for concealment from predators, preconstruction surveys are assured to detect a tiny fraction of bird nests. Such surveys would save very few of the nesting birds in peril.

Furthermore, preconstruction surveys cannot estimate nor offset the permanent loss of breeding habitat and all of the productive capacity lost with that habitat. Far more effective than preconstruction surveys, project construction timed outside the breeding season would cause no direct mortality of breeding birds. However, this approach would likewise be unable to avoid habitat loss and the loss of breeding capacity.

MY RECOMMENDED MEASURES

Land should be strategically conserved in perpetuity as compensation for habitat loss at the project site. An EIR should be prepared to formulate appropriate mitigation.

Detection surveys for special-status species

Detection surveys are needed for each of the special-status species in Table 2. Detection surveys are needed for herpetofauna, nesting birds, and for burrowing owls (CDFW 2012). Qualified biologists should be recruited to perform the surveys.

Fund Wildlife Rehabilitation Facilities

Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Most of the injuries will likely be caused by the increased trip generation of cars and trucks. Many animals need treatment caused by collision injuries and an increasing number appear to be injured by the turbulence of passing trucks.

Thank you for your attention,

_____

Shawn Smallwood, Ph.D.

8-12
(cont.)

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Young, H. 1948. A comparative study of nesting birds in a five-acre park. The Wilson Bulletin 61:36-47.

Photo 22. *House finch at the project site, 15 December 2021. Photo by Noriko Smallwood.*

8-12
(cont.)

Kenneth Shawn Smallwood
Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

8-12 (cont.)

Experience

- 668 professional publications, including:
- 88 peer reviewed publications
- 24 in non-reviewed proceedings
- 554 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

8-12 (cont.)

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

8-12 (cont.)

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

8-12 (cont.)

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

8-12 (cont.)

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California. 8-12 (cont.)

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); doi:10.3390/d12030098.

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. Journal of Wildlife Management 84:852-864. DOI: 10.1002/jwmg.21863.

Smallwood, K. S., and D. A. Bell. 2020. Relating bat passage rates to wind turbine fatalities. Diversity 12(84); doi:10.3390/d12020084.

Smallwood, K. S., and D. A. Bell. 2020. Effects of wind turbine curtailment on bird and bat fatalities. Journal of Wildlife Management 84:684-696. DOI: 10.1002/jwmg.21844

Kitano, M., M. Ino, K. S. Smallwood, and S. Shiraki. 2020. Seasonal difference in carcass persistence rates at wind farms with snow, Hokkaido, Japan. Ornithological Science 19: 63 –

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Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

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May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine–wildlife interactions. Pages 255-276 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

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Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

Smallwood, K. S. 2015. Habitat fragmentation and corridors. Pages 84-101 in M. L. Morrison and H. A. Mathewson, Eds., Wildlife habitat conservation: concepts, challenges, and solutions. John Hopkins University Press, Baltimore, Maryland, USA.

Mete, A., N. Stephenson, K. Rogers, M. G. Hawkins, M. Sadar, D. Guzman, D. A. Bell, J. Shipman, A. Wells, K. S. Smallwood, and J. Foley. 2014. Emergence of Knemidocoptic mange in wild Golden Eagles (Aquila chrysaetos) in California. Emerging Infectious Diseases 20(10):1716-1718.

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Cain, J. W. III, K. S. Smallwood, M. L. Morrison, and H. L. Loffland. 2005. Influence of mammal activity on nesting success of Passerines. J. Wildlife Management 70:522-531.

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Morrison, M. L., K. S. Smallwood, and L. S. Hall. 2002. Creating habitat through plant relocation: Lessons from Valley elderberry longhorn beetle mitigation. Ecological Restoration 21: 95-100.

Zhang, M., K. S. Smallwood, and E. Anderson. 2002. Relating indicators of ecological health and integrity to assess risks to sustainable agriculture and native biota. Pages 757-768 *in* D.J. Rapport, W.L. Lasley, D.E. Rolston, N.O. Nielsen, C.O. Qualset, and A.B. Damania (eds.), Managing for Healthy Ecosystems, Lewis Publishers, Boca Raton, Florida USA.

Wilcox, B. A., K. S. Smallwood, and J. A. Kahn. 2002. Toward a forest Capital Index. Pages 285-298 *in* D.J. Rapport, W.L. Lasley, D.E. Rolston, N.O. Nielsen, C.O. Qualset, and A.B. Damania (eds.), Managing for Healthy Ecosystems, Lewis Publishers, Boca Raton, Florida USA.

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- Replies on UCSF Comprehensive Parnassus Heights Plan EIR (2021; 13);
- 14 Charles Hill Circle Design Review (2021; 11);
- SDG Commerce 217 Warehouse IS, American Canyon (2021; 26);
- Mulqueeney Ranch Wind Repowering Project DSEIR (2021; 98);
- Clawiter Road Industrial Project IS/MND, Hayward (2021; 18);
- Garnet Energy Center Stipulations, New York (2020);
- Heritage Wind Energy Project, New York (2020: 71);
- Ameresco Keller Canyon RNG Project IS/MND, Martinez (2020; 11);

- Cambria Hotel Project Staff Report, Dublin (2020; 19);
- Central Pointe Mixed-Use Staff Report, Santa Ana (2020; 20);
- Oak Valley Town Center EIR Addendum, Calimesa (2020; 23);
- Coachillin Specific Plan MND Amendment, Desert Hot Springs (2020; 26);
- Stockton Avenue Hotel and Condominiums Project Tiering to EIR, San Jose (2020; 19);
- Cityline Sub-block 3 South Staff Report, Sunyvale (2020; 22);
- Station East Residential/Mixed Use EIR, Union City (2020; 21);
- Multi-Sport Complex & Southeast Industrial Annexation Suppl. EIR, Elk Grove (2020; 24);
- Sun Lakes Village North EIR Amendment 5, Banning, Riverside County (2020; 27);
- 2nd comments on 1296 Lawrence Station Road, Sunnyvale (2020; 4);
- 1296 Lawrence Station Road, Sunnyvale (2020; 16);
- Mesa Wind Project EA, Desert Hot Springs (2020; 31);
- 11th Street Development Project IS/MND, City of Upland (2020; 17);
- Vista Mar Project IS/MND, Pacifica (2020; 17);
- Emerson Creek Wind Project Application, Ohio (2020; 64);
- Replies on Wister Solar Energy Facility EIR, Imperial County (2020; 12);
- Wister Solar Energy Facility EIR, Imperial County (2020; 28);
- Crimson Solar EIS/EIR, Mojave Desert (2020, 35) not submitted;
- Sakioka Farms EIR tiering, Oxnard (2020; 14);
- 3440 Wilshire Project IS/MND, Los Angeles (2020; 19);
- Replies on 2400 Barranca Office Development Project EIR, Irvine (2020; 8);
- 2400 Barranca Office Development Project EIR, Irvine (2020; 25);
- Replies on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 4);
- 2nd comments on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 8);
- Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 3);
- Lots 4-12 Oddstad Way Project IS/MND, Pacifica (2020; 16);
- Declaration on DDG Visalia Warehouse project (2020; 5);
- Terraces of Lafayette EIR Addendum (2020; 24);
- AMG Industrial Annex IS/MND, Los Banos (2020; 15);
- Replies to responses on Casmalia and Linden Warehouse (2020; 15);
- Clover Project MND, Petaluma (2020; 27);
- Ruby Street Apartments Project Env. Checklist, Hayward (2020; 20);
- Replies to responses on 3721 Mt. Diablo Boulevard Staff Report (2020; 5);
- 3721 Mt. Diablo Boulevard Staff Report (2020; 9);
- Steeno Warehouse IS/MND, Hesperia (2020; 19);
- UCSF Comprehensive Parnassus Heights Plan EIR (2020; 24);
- North Pointe Business Center MND, Fresno (2020; 14);
- Casmalia and Linden Warehouse IS, Fontana (2020; 15);
- Rubidoux Commerce Center Project IS/MND, Jurupa Valley (2020; 27);
- Haun and Holland Mixed Use Center MND, Menifee (2020; 23);
- First Industrial Logistics Center II, Moreno Valley IS/MND (2020; 23);
- GLP Store Warehouse Project Staff Report (2020; 15);
- Replies on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 29);
- 2nd comments on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 34);

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- Beale WAPA Interconnection Project EA & CEQA checklist (2020; 30);
- Levine-Fricke Softball Field Improvement Addendum, UC Berkeley (2020; 16);
- Greenlaw Partners Warehouse and Distribution Center Staff Report, Palmdale (2020; 14);
- Humboldt Wind Energy Project DEIR (2019; 25);
- Sand Hill Supplemental EIR, Altamont Pass (2019; 17);
- 1700 Dell Avenue Office Project, Campbell (2019, 28);
- 1180 Main Street Office Project MND, Redwood City (2019; 19:
- Summit Ridge Wind Farm Request for Amendment 4, Oregon (2019; 46);
- Shafter Warehouse Staff Report (2019; 4);
- Park & Broadway Design Review, San Diego (2019; 19);
- Pinnacle Pacific Heights Design Review, San Diego (2019; 19);
- Pinnacle Park & C Design Review, San Diego (2019; 19);
- Preserve at Torrey Highlands EIR, San Diego (2019; 24);
- Santana West Project EIR Addendum, San Jose (2019; 18);
- The Ranch at Eastvale EIR Addendum, Riverside County (2020; 19);
- Hageman Warehouse IS/MND, Bakersfield (2019; 13);
- Oakley Logistics Center EIR, Antioch (2019; 22);
- 27 South First Street IS, San Jose (2019; 23);
- 2nd replies on Times Mirror Square Project EIR, Los Angeles (2020; 11);
- Replies on Times Mirror Square Project EIR, Los Angeles (2020; 13);
- Times Mirror Square Project EIR, Los Angeles (2019; 18);
- East Monte Vista & Aviator General Plan Amend EIR Addendum, Vacaville (2019; 22);
- Hillcrest LRDP EIR, La Jolla (2019; 36);
- 555 Portola Road CUP, Portola Valley (2019; 11);
- Johnson Drive Economic Development Zone SEIR, Pleasanton (2019; 27);
- 1750 Broadway Project CEQA Exemption, Oakland (2019; 19);
- Mor Furniture Project MND, Murietta Hot Springs (2019; 27);
- Harbor View Project EIR, Redwood City (2019; 26);
- Visalia Logistics Center (2019; 13);
- Cordelia Industrial Buildings MND (2019; 14);
- Scheu Distribution Center IS/ND, Rancho Cucamonga (2019; 13);
- Mills Park Center Staff Report, San Bruno (2019; 22);
- Site visit to Desert Highway Farms IS/MND, Imperial County (2019; 9);
- Desert Highway Farms IS/MND, Imperial County (2019; 12);
- ExxonMobil Interim Trucking for Santa Ynez Unit Restart SEIR, Santa Barbara (2019; 9);
- Olympic Holdings Inland Center Warehouse Project MND, Rancho Cucamonga (2019; 14);
- Replies to responses on Lawrence Equipment Industrial Warehouse, Banning (2019; 19);
- PARS Global Storage MND, Murietta (2019; 13);
- Slover Warehouse EIR Addendum, Fontana (2019; 16);
- Seefried Warehouse Project IS/MND, Lathrop (2019; 19)
- World Logistics Center Site Visit, Moreno Valley (2019; 19);
- Merced Landfill Gas-To-Energy Project IS/MND (2019; 12);
- West Village Expansion FEIR, UC Davis (2019; 11);
- Site visit, Doheny Ocean Desalination EIR, Dana Point (2019; 11);

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- Replies to responses on Avalon West Valley Expansion EIR, San Jose (2019; 10);
- Avalon West Valley Expansion EIR, San Jose (2019; 22);
- Sunroad – Otay 50 EIR Addendum, San Diego (2019; 26);
- Del Rey Pointe Residential Project IS/MND, Los Angeles (2019; 34);
- 1 AMD Redevelopment EIR, Sunnyvale (2019; 22);
- Lawrence Equipment Industrial Warehouse IS/MND, Banning (2019; 14);
- SDG Commerce 330 Warehouse IS, American Canyon (2019; 21);
- PAMA Business Center IS/MND, Moreno Valley (2019; 23);
- Cupertino Village Hotel IS (2019; 24);
- Lake House IS/ND, Lodi (2019; 33);
- Campo Wind Project DEIS, San Diego County (DEIS, (2019; 14);
- Stirling Warehouse MND site visit, Victorville (2019; 7);
- Green Valley II Mixed-Use Project EIR, Fairfield (2019; 36);
- We Be Jammin rezone MND, Fresno (2019; 14);
- Gray Whale Cove Pedestrian Crossing IS/ND, Pacifica (2019; 7);
- Visalia Logistics Center & DDG 697V Staff Report (2019; 9);
- Mather South Community Masterplan Project EIR (2019; 35);
- Del Hombre Apartments EIR, Walnut Creek (2019; 23);
- Otay Ranch Planning Area 12 EIR Addendum, Chula Vista (2019; 21);
- The Retreat at Sacramento IS/MND (2019; 26);
- Site visit to Sunroad – Centrum 6 EIR Addendum, San Diego (2019; 9);
- Sunroad – Centrum 6 EIR Addendum, San Diego (2018; 22);
- North First and Brokaw Corporate Campus Buildings EIR Addendum, San Jose (2018; 30);
- South Lake Solar IS, Fresno County (2018; 18);
- Galloo Island Wind Project Application, New York (not submitted) (2018; 44);
- Doheny Ocean Desalination EIR, Dana Point (2018; 15);
- Stirling Warehouse MND, Victorville (2018; 18);
- LDK Warehouse MND, Vacaville (2018; 30);
- Gateway Crossings FEIR, Santa Clara (2018; 23);
- South Hayward Development IS/MND (2018; 9);
- CBU Specific Plan Amendment, Riverside (2018; 27);
- 2nd replies to responses on Dove Hill Road Assisted Living Project MND (2018; 11);
- Replies to responses on Dove Hill Road Assisted Living Project MND (2018; 7);
- Dove Hill Road Assisted Living Project MND (2018; 12);
- Deer Ridge/Shadow Lakes Golf Course EIR, Brentwood (2018; 21);
- Pyramid Asphalt BLM Finding of No Significance, Imperial County (2018; 22);
- Amáre Apartments IS/MND, Martinez (2018; 15);
- Petaluma Hill Road Cannabis MND, Santa Rosa (2018; 21);
- 2nd comments on Zeiss Innovation Center IS/MND, Dublin (2018: 12);
- Zeiss Innovation Center IS/MND, Dublin (2018: 32);
- City of Hope Campus Plan EIR, Duarte (2018; 21);
- Palo Verde Center IS/MND, Blythe (2018; 14);
- Logisticenter at Vacaville MND (2018; 24);
- IKEA Retail Center SEIR, Dublin (2018; 17);

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- Merge 56 EIR, San Diego (2018; 15);
- Natomas Crossroads Quad B Office Project P18-014 EIR, Sacramento (2018; 12);
- 2900 Harbor Bay Parkway Staff Report, Alameda (2018; 30);
- At Dublin EIR, Dublin (2018; 25);
- Fresno Industrial Rezone Amendment Application No. 3807 IS (2018; 10);
- Nova Business Park IS/MND, Napa (2018; 18);
- Updated Collision Risk Model Priors for Estimating Eagle Fatalities, USFWS (2018; 57);
- 750 Marlborough Avenue Warehouse MND, Riverside (2018; 14);
- Replies to responses on San Bernardino Logistics Center IS (2018; 12);
- San Bernardino Logistics Center IS (2018; 19);
- CUP2017-16, Costco IS/MND, Clovis (2018; 11);
- Desert Land Ventures Specific Plan EIR, Desert Hot Springs (2018; 18);
- Ventura Hilton IS/MND (2018; 30);
- North of California Street Master Plan Project IS, Mountain View (2018: 11);
- Tamarind Warehouse MND, Fontana (2018; 16);
- Lathrop Gateway Business Park EIR Addendum (2018; 23);
- Centerpointe Commerce Center IS, Moreno Valley (2019; 18);
- Amazon Warehouse Notice of Exemption, Bakersfield (2018; 13);
- CenterPoint Building 3 project Staff Report, Manteca (2018; 23);
- Cessna & Aviator Warehouse IS/MND, Vacaville (2018; 24);
- Napa Airport Corporate Center EIR, American Canyon (2018, 15);
- 800 Opal Warehouse Initial Study, Mentone, San Bernardino County (2018; 18);
- 2695 W. Winton Ave Industrial Project IS, Hayward (2018; 22);
- Trinity Cannabis Cultivation and Manufacturing Facility DEIR, Calexico (2018; 15);
- Shoe Palace Expansion IS/MND, Morgan Hill (2018; 21);
- Newark Warehouse at Morton Salt Plant Staff Report (2018; 15);
- Northlake Specific Plan FEIR "Peer Review", Los Angeles County (2018; 9);
- Replies to responses on Northlake Specific Plan SEIR, Los Angeles County (2018; 13);
- Northlake Specific Plan SEIR, Los Angeles County (2017; 27);
- Bogle Wind Turbine DEIR, east Yolo County (2017; 48);
- Ferrante Apartments IS/MND, Los Angeles (2017; 14);
- The Villages of Lakeview EIR, Riverside (2017; 28);
- Data Needed for Assessing Trail Management Impacts on Northern Spotted Owl, Marin County (2017; 5);
- Notes on Proposed Study Options for Trail Impacts on Northern Spotted Owl (2017; 4);
- Pyramid Asphalt IS, Imperial County (Declaration) (2017; 5);
- San Gorgonio Crossings EIR, Riverside County (2017; 22);
- Replies to responses on Jupiter Project IS and MND, Apple Valley (2017; 12);
- Proposed World Logistics Center Mitigation Measures, Moreno Valley (2017, 2019; 12);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12);
- PG&E Company Bay Area Operations and Maintenance HCP (2017; 45);
- Central SoMa Plan DEIR (2017; 14);
- Suggested mitigation for trail impacts on northern spotted owl, Marin County (2016; 5);
- Colony Commerce Center Specific Plan DEIR, Ontario (2016; 16);

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- Fairway Trails Improvements MND, Marin County (2016; 13);
- Review of Avian-Solar Science Plan (2016; 28);
- Replies on Pyramid Asphalt IS, Imperial County (2016; 5);
- Pyramid Asphalt IS, Imperial County (2016; 4);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14);
- Santa Anita Warehouse MND, Rancho Cucamonga (2016; 12);
- CapRock Distribution Center III DEIR, Rialto (2016: 12);
- Orange Show Logistics Center IS/MND, San Bernardino (2016; 9);
- City of Palmdale Oasis Medical Village Project IS/MND (2016; 7);
- Comments on proposed rule for incidental eagle take, USFWS (2016, 49);
- Replies on Grapevine Specific and Community Plan FEIR, Kern County (2016; 25);
- Grapevine Specific and Community Plan DEIR, Kern County (2016; 15);
- Clinton County Zoning Ordinance for Wind Turbine siting (2016);
- Hallmark at Shenandoah Warehouse Project Initial Study, San Bernardino (2016; 6);
- Tri-City Industrial Complex Initial Study, San Bernardino (2016; 5);
- Hidden Canyon Industrial Park Plot Plan 16-PP-02, Beaumont (2016; 12);
- Kimball Business Park DEIR (2016; 10);
- Jupiter Project IS and MND, Apple Valley, San Bernardino County (2016; 9);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18);
- Palo Verde Mesa Solar Project EIR, Blythe (2016; 27);
- Reply on Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 14);
- Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 41);
- Reply on Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 38);
- Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 31);
- Second Reply on White Pines Wind Farm, Ontario (2015, 6);
- Reply on White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 10);
- White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 9);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9);
- Replies on 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6);
- Willow Springs Solar Photovoltaic Project DEIR, Rosamond (2015; 28);
- Sierra Lakes Commerce Center Project DEIR, Fontana (2015, 9);
- Columbia Business Center MND, Riverside (2015; 8);
- West Valley Logistics Center Specific Plan DEIR, Fontana (2015, 10);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10);
- World Logistic Center Specific Plan FEIR, Moreno Valley (2015, 12);
- Elkhorn Valley Wind Power Project Impacts, Oregon (2015; 143);
- Bay Delta Conservation Plan EIR/EIS, Sacramento (2014, 21);
- Addison Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Addison Wind Energy Project DEIR, Mojave (2014, 15);
- Addison and Rising Tree Wind Energy Project FEIR, Mojave (2014, 12);
- Palen Solar Electric Generating System FSA (CEC), Blythe (2014, 20);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9);
- Seven Mile Hill and Glenrock/Rolling Hills impacts + Addendum, Wyoming (2014; 105);

8-12 (cont.)

- Rising Tree Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Rising Tree Wind Energy Project DEIR, Mojave (2014, 15);
- Soitec Solar Development Project PEIR, Boulevard, San Diego County (2014, 18);
- Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3);
- Alta East Wind Energy Project FEIS, Tehachapi Pass (2013, 23);
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16);
- Clearwater and Yakima Solar Projects DEIR, Kern County (2013, 9);
- West Antelope Solar Energy Project IS/MND, Antelope Valley (2013, 18);
- Cuyama Solar Project DEIR, Carrizo Plain (2014, 19);
- Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49);
- Kingbird Solar Photovoltaic Project EIR, Kern County (2013, 19);
- Lucerne Valley Solar Project IS/MND, San Bernardino County (2013, 12);
- Tule Wind project FEIR/FEIS (Declaration) (2013; 31);
- Sunlight Partners LANDPRO Solar Project MND (2013; 11);
- Declaration in opposition to BLM fracking (2013; 5);
- Blythe Energy Project (solar) CEC Staff Assessment (2013;16);
- Rosamond Solar Project EIR Addendum, Kern County (2013; 13);
- Pioneer Green Solar Project EIR, Bakersfield (2013; 13);
- Replies on Soccer Center Solar Project MND (2013; 6);
- Soccer Center Solar Project MND, Lancaster (2013; 10);
- Plainview Solar Works MND, Lancaster (2013; 10);
- Alamo Solar Project MND, Mojave Desert (2013; 15);
- Replies on Imperial Valley Solar Company 2 Project (2013; 10);
- Imperial Valley Solar Company 2 Project (2013; 13);
- FRV Orion Solar Project DEIR, Kern County (PP12232) (2013; 9);
- Casa Diablo IV Geothermal Development Project (2013; 6);
- Reply on Casa Diablo IV Geothermal Development Project (2013; 8);
- Alta East Wind Project FEIS, Tehachapi Pass (2013; 23);
- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Rezoning Project DEIR, Petaluma (2013; 9);
- Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10);
- Campo Verde Solar project FEIR, Imperial Valley (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8);
- North Steens Transmission Line FEIS, Oregon (Declaration) (2012; 62);
- Summer Solar and Springtime Solar Projects Ism Lancaster (2012; 8);
- J&J Ranch, 24 Adobe Lane Environmental Review, Orinda (2012; 14);
- Replies on Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 8);
- Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 9);
- Desert Harvest Solar Project EIS, near Joshua Tree (2012; 15);
- Solar Gen 2 Array Project DEIR, El Centro (2012; 16);
- Ocotillo Sol Project EIS, Imperial Valley (2012; 4);
- Beacon Photovoltaic Project DEIR, Kern County (2012; 5);
- Butte Water District 2012 Water Transfer Program IS/MND (2012; 11);

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- Mount Signal and Calexico Solar Farm Projects DEIR (2011; 16);
- City of Elk Grove Sphere of Influence EIR (2011; 28);
- Sutter Landing Park Solar Photovoltaic Project MND, Sacramento (2011; 9);
- Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4);
- Ivanpah Solar Electric Generating System (ISEGS) (Declaration) (2011; 9);
- Draft Eagle Conservation Plan Guidance, USFWS (2011; 13);
- Niles Canyon Safety Improvement Project EIR/EA (2011; 16);
- Route 84 Safety Improvement Project (Declaration) (2011; 7);
- Rebuttal on Whistling Ridge Wind Energy Power DEIS, Skamania County, (2010; 6);
- Whistling Ridge Wind Energy Power DEIS, Skamania County, Washington (2010; 41);
- Klickitat County's Decisions on Windy Flats West Wind Energy Project (2010; 17);
- St. John's Church Project DEIR, Orinda (2010; 14);
- Results Radio Zone File #2009-001 IS/MND, Conaway site, Davis (2010; 20);
- Rio del Oro Specific Plan Project FEIR, Rancho Cordova (2010;12);
- Results Radio Zone File #2009-001, Mace Blvd site, Davis (2009; 10);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009; 9);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Second Declaration) (2008; 17);
- Draft 1A Summary Report to CAISO (2008; 10);
- Hilton Manor Project Categorical Exemption, County of Placer (2009; 9);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142);
- Delta Shores Project EIR, south Sacramento (2009; 11 + addendum 2);
- Declaration in Support of Care's Petition to Modify D.07-09-040 (2008; 3);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Declaration) (2008; 16);
- Colusa Generating Station, California Energy Commission PSA (2007; 24);
- Rio del Oro Specific Plan Project Recirculated DEIR, Mather (2008: 66);
- Replies on Regional University Specific Plan EIR, Roseville (2008; 20);
- Regional University Specific Plan EIR, Roseville (2008: 33);
- Clark Precast, LLC's "Sugarland" project, ND, Woodland (2008: 15);
- Cape Wind Project DEIS, Nantucket (2008; 157);
- Yuba Highlands Specific Plan EIR, Spenceville, Yuba County (2006; 37);
- Replies to responses on North Table Mountain MND, Butte County (2006; 5);

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- North Table Mountain MND, Butte County (2006; 15);
- Windy Point Wind Farm EIS (2006; 14 and Powerpoint slide replies);
- Shiloh I Wind Power Project EIR, Rio Vista (2005; 18);
- Buena Vista Wind Energy Project NOP, Byron (2004; 15);
- Callahan Estates Subdivision ND, Winters (2004; 11);
- Winters Highlands Subdivision IS/ND (2004; 9);
- Winters Highlands Subdivision IS/ND (2004; 13);
- Creekside Highlands Project, Tract 7270 ND (2004; 21);
- Petition to California Fish and Game Commission to list Burrowing Owl (2003; 10);
- Altamont Pass Wind Resource Area CUP renewals, Alameda County (2003; 41);
- UC Davis Long Range Development Plan: Neighborhood Master Plan (2003; 23);
- Anderson Marketplace Draft Environmental Impact Report (2003; 18);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003; 6);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002; 23);
- Replies on East Altamont Energy Center evidentiary hearing (2002; 9);
- Revised Draft Environmental Impact Report, The Promenade (2002; 7);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002; 3);
- UC Merced -- Declaration (2002; 5);
- Replies on Atwood Ranch Unit III Subdivision FEIR (2003; 22);
- Atwood Ranch Unit III Subdivision EIR (2002; 19);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002; 20);
- Silver Bend Apartments IS/MND, Placer County (2002; 13);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001; 26);
- Colusa County Power Plant IS, Maxwell (2001; 6);
- Dog Park at Catlin Park, Folsom, California (2001; 5);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000; 10);
- Metcalf Energy Center, California Energy Commission FSA (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000; 4);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9).
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Sunset Skyranch Airport Use Permit IS/MND (1999);
- Ballona West Bluffs Project Environmental Impact Report (1999; oral presentation);
- Draft Recovery Plan for Giant Garter Snake (Fed. Reg. 64(176): 49497-49498) (1999; 8);
- Draft Recovery Plan for Arroyo Southwestern Toad (1998);
- Pacific Lumber Co. (Headwaters) HCP & EIR, Fortuna (1998; 28);
- Natomas Basin HCP Permit Amendment, Sacramento (1998);

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- San Diego Multi-Species Conservation Program FEIS/FEIR (1997; 10);

Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8);
- Covell Village PEIR, Davis (2005; 19);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping (2003; 7.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7.);
- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

8-12 (cont.)

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No.

103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

8-12 (cont.)

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Dog detections of bat and bird fatalities at wind farms in the Altamont Pass Wind Resource Area. East Bay Regional Park District 2019 Stewardship Seminar, Oakland, California, 13 November 2019.

Repowering the Altamont Pass. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-

2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat Agency, Newark, California, 3 February 2017.

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

8-12 (cont.)

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife

Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa Barbara, 27 October 2006.

8-12 (cont.)

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association, Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

8-12 (cont.)

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

8-12 (cont.)

"No Surprises" -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993. 8-12 (cont.)

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion;

Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.
- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.
- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.
- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.
- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.
- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

8-12 (cont.)

Printed Mass Media

Smallwood, K.S., D. Mooney, and M. McGuinness. 2003. We must stop the UCD biolab now. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2002. Spring Lake threatens Davis. Op-Ed to the Davis Enterprise.

Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

8-12 (cont.)

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	**Journal**
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology

Journal	Journal
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

8-12
(cont.)

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of $553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines, Amherst Island, and Fairview Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

8-12 (cont.)

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

Representative Clients/Funders

Law Offices of Stephan C. Volker
Blum Collins, LLP
Eric K. Gillespie Professional Corporation
Law Offices of Berger & Montague
Lozeau | Drury LLP
Law Offices of Roy Haber
Law Offices of Edward MacDonald
Law Office of John Gabrielli
Law Office of Bill Kopper
Law Office of Donald B. Mooney
Law Office of Veneruso & Moncharsh
Law Office of Steven Thompson
Law Office of Brian Gaffney
California Wildlife Federation
Defenders of Wildlife
Sierra Club
National Endangered Species Network
Spirit of the Sage Council
The Humane Society
Hagens Berman LLP
Environmental Protection Information Center
Goldberg, Kamin & Garvin, Attorneys at Law
Californians for Renewable Energy (CARE)
Seatuck Environmental Association
Friends of the Columbia Gorge, Inc.
Save Our Scenic Area
Alliance to Protect Nantucket Sound
Friends of the Swainson's Hawk
Alameda Creek Alliance
Center for Biological Diversity
California Native Plant Society
Endangered Wildlife Trust
and BirdLife South Africa
AquAlliance
Oregon Natural Desert Association
Save Our Sound
G3 Energy and Pattern Energy
Emerald Farms
Pacific Gas & Electric Co.
Southern California Edison Co.
Georgia-Pacific Timber Co.
Northern Territories Inc.
David Magney Environmental Consulting
Wildlife History Foundation
NextEra Energy Resources, LLC
Ogin, Inc.
EDF Renewables
National Renewable Energy Lab
Altamont Winds LLC
Salka Energy
Comstocks Business (magazine)
BioResource Consultants
Tierra Data
Black and Veatch
Terry Preston, Wildlife Ecology Research Center
EcoStat, Inc.
US Navy
US Department of Agriculture
US Forest Service
US Fish & Wildlife Service
US Department of Justice
California Energy Commission
California Office of the Attorney General
California Department of Fish & Wildlife
California Department of Transportation
California Department of Forestry
California Department of Food & Agriculture
Ventura County Counsel
County of Yolo
Tahoe Regional Planning Agency
Sustainable Agriculture Research & Education Program
Sacramento-Yolo Mosquito and Vector Control District
East Bay Regional Park District
County of Alameda
Don & LaNelle Silverstien
Seventh Day Adventist Church
Escuela de la Raza Unida
Susan Pelican and Howard Beeman
Residents Against Inconsistent Development, Inc.
Bob Sarvey
Mike Boyd
Hillcroft Neighborhood Fund
Joint Labor Management Committee, Retail Food Industry
Lisa Rocca
Kevin Jackson
Dawn Stover and Jay Letto
Nancy Havassy
Catherine Portman (for Brenda Cedarblade)
Ventus Environmental Solutions, Inc.
Panorama Environmental, Inc.
Adams Broadwell Professional Corporation

8-12 (cont.)

Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	*Rana aurora draytonii*	Protocol searches; Many detections
Foothill yellow-legged frog	*Rana boylii*	Presence surveys; Many detections
Western spadefoot	*Spea hammondii*	Presence surveys; Few detections
California tiger salamander	*Ambystoma californiense*	Protocol searches; Many detections
Coast range newt	*Taricha torosa torosa*	Searches and multiple detections
Blunt-nosed leopard lizard	*Gambelia sila*	Detected in San Luis Obispo County
California horned lizard	*Phrynosoma coronatum frontale*	Searches; Many detections
Western pond turtle	*Clemmys marmorata*	Searches; Many detections
San Joaquin kit fox	*Vulpes macrotis mutica*	Protocol searches; detections
Sumatran tiger	*Panthera tigris*	Track surveys in Sumatra
Mountain lion	*Puma concolor californicus*	Research and publications
Point Arena mountain beaver	*Aplodontia rufa nigra*	Remote camera operation
Giant kangaroo rat	*Dipodomys ingens*	Detected in Cholame Valley
San Joaquin kangaroo rat	*Dipodomys nitratoides*	Monitoring & habitat restoration
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	Non-target captures and mapping of dens
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Habitat assessment, monitoring
Salinas harvest mouse	*Reithrodontomys megalotus distichlus*	Captures; habitat assessment
Bats		Thermal imaging surveys
California clapper rail	*Rallus longirostris*	Surveys and detections
Golden eagle	*Aquila chrysaetos*	Numerical & behavioral surveys
Swainson's hawk	*Buteo swainsoni*	Numerical & behavioral surveys
Northern harrier	*Circus cyaeneus*	Numerical & behavioral surveys
White-tailed kite	*Elanus leucurus*	Numerical & behavioral surveys
Loggerhead shrike	*Lanius ludovicianus*	Large area surveys
Least Bell's vireo	*Vireo bellii pusillus*	Detected in Monterey County
Willow flycatcher	*Empidonax traillii extimus*	Research at Sierra Nevada breeding sites
Burrowing owl	*Athene cunicularia hypugia*	Numerical & behavioral surveys
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Monitored success of relocation and habitat restoration
Analytical		
Arroyo southwestern toad	*Bufo microscaphus californicus*	Research and report.
Giant garter snake	*Thamnophis gigas*	Research and publication
Northern goshawk	*Accipiter gentilis*	Research and publication
Northern spotted owl	*Strix occidentalis*	Research and reports
Alameda whipsnake	*Masticophis lateralis euryxanthus*	Expert testimony

8-12 (cont.)

RESPONSE TO COMMENT LETTER NO. 8

Richard Drury,
Lozeau Drury
December 30, 2021

8-1 This comment provides an introduction to the comment letter and a summary of the project description. The comment also states that the Draft IS/MND fails as an informational document, and that there is a fair argument that the project may have adverse environmental impacts, and that an Environmental Impact Report (EIR) should be prepared. The responses to the individual technical comments below demonstrate that the conclusions in the Draft IS/MND are supported by substantial evidence, and the comments provided in this letter do not provide substantial evidence to support a fair argument that a subsequent EIR or MND is required.

8-2 This comment provides a summary of case law related to the preparation of EIRs and the fair argument standard. This comment is acknowledged. This comment does not address the content of the Draft IS/MND or raise any issues pertinent to the adequacy of the Draft IS/MND, and no further response is required.

8-3 This comment states that there is substantial evidence of a fair argument that the project may result in significant hazardous material, air quality, Diesel Particulate Matter, and greenhouse gas impacts. A response to each issue raised in this comment is provided in Responses 8-4.

8-4 Contaminated Soils: The commenter notes that the Draft IS/MND does not note the presence of arsenic within on-site soils as a result of previous uses, and that the presence of this contaminant represents a potentially significant impact. Section 4.9, *Hazards and Hazardous Materials*, of the Draft IS/MND includes a discussion on pages 4.9-3 and 4.9-4 of past uses on the project site, including agricultural and railroad activities, which may have impacted soil, soil gas and/or groundwater underlying the project site. Arsenic is a heavy metal, and the Draft IS/MND states on page 4.9-3 that "[s]oils along railroads could potentially be impacted by heavy metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and/or chlorinated herbicides." The Phase II Soil Investigation Memorandum, which was provided as part of Appendix H of the Draft IS/MND, notes that the collection of soil samples along the former railroad alignment on-site indicated elevated arsenic concentrations above the applicable U.S. Environmental Protection Agency (USEPA) Regional Screening Level (RSL), California Department of Toxic Substances Control (DTSC) Screening Level (SL), and/or California background level. The Draft IS/MND also states on page 4.9-3 that "[b]ased on the Phase I ESA, past uses include agricultural operations that may have involved the use of pesticides and herbicides to control and optimize vegetation typical of agricultural facilities." Due to the potential hazards associated with past uses, the Draft IS/MND then recommends inclusion of Mitigation Measure HAZ-1, which would require that a Phase II/Site Characterization Specialist define the extent of on-site contamination (including heavy metals) and provide a course of action for remediation, as necessary, per the applicable standards of the Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and other agencies, as applicable. The Draft IS/MND discloses this potential impact and Mitigation Measure HAZ-1 mitigates this impact to a level below significance. Preparation of an EIR is not required. In addition, the commenter also notes that the Draft IS/MND does not disclose that a Phase II Soil Investigation Memorandum that was prepared for the project. The Phase II Soil Investigation Memorandum was included as an Attachment to the Appendix H, *Phase I Environmental Site Assessment*, of the Draft IS/MND. The results of the Phase II Soil Investigation Memorandum were incorporated into the Phase I Environmental Site Assessment and the Draft IS/MND to support conclusions within the CEQA document. Although the Draft IS/MND adequately discloses impacts related to contaminated soils, it has been revised to include additional specifics related to regulatory agency requirements and oversight that would ensure that remediation is implemented in accordance with applicable Federal, State, and local standards. Revisions have been made to Section 4.9, *Hazards and Hazardous*

Materials, pages 4.9-3 and 4.9-4 of the Draft IS/MND, and are reflected below and in Section 4.0, *Errata*, of the Final IS/MND.

Draft IS/MND Section 4.9, *Hazards and Hazardous Materials*, Page 4.9-3

Railroad Activities

Based on the Phase I ESA prepared for the site, a Union Pacific Railroad (UPRR) right-of-way is located adjacent to the site, and has been in existence since at least 1923. A rail spur extending from the UPRR right-of-way previously traversed the site in a north to south orientation, but was removed in the early 2000s. Soils along railroads could potentially be impacted by heavy metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and/or chlorinated herbicides. Construction debris associated with the railroad spur removal, including ballast and railroad ties, is still located on-site and may also be impacted by hazardous materials. Accordingly, Mitigation Measure HAZ-1 is recommended to reduce potential impacts to less than significant levels. Mitigation Measure HAZ-1 would require that a Phase II/Site Characterization Specialist is retained to define the extent of on-site contamination and recommend appropriate coordination with UPRR and remediation, as necessary, for implementation of the proposed project. The Phase II/Site Characterization Specialist would be required to prepare a Soil Management Plan that identifies necessary sampling efforts and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan would also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading within railroad right-of-way. The Soil Management Plan would be prepared in consultation with applicable regulatory agencies (e.g., Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board) and is anticipated to include contaminated soil removal to ensure compliance with existing U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSL), California Department of Toxic Substances Control (DTSC) Screening Levels (SL), and California background levels. As noted above in Response 4-2, it is anticipated that approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil would be exported to the Kettleman Hills Facility in Kettleman City, California in support of remediation activities. Thus, with implementation of Mitigation Measure HAZ-1, impacts would be reduced to less than significant levels.

Draft IS/MND Section 4.9, *Hazards and Hazardous Materials*, Page 4.9-4

Mitigation Measures:

HAZ-1 The project applicant shall retain a Phase II/Site Characterization Specialist to prepare a Soil Management Plan prior to the issuance of any grading permit for the proposed project. The Phase II/Site Characterization Specialist shall define the extent of on-site contamination associated with the Recognized Environmental Condition (REC) and Other Environmental Features (OEFs) identified in the *Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California* prepared by Roux Associates, Inc. (dated July 2, 2021). These REC and OEFs pertain to railroad activities and historical uses. The Specialist shall recommend remediation, as necessary, per the standards of, the Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and other agencies as applicable. The Soil Management Plan shall identify necessary sampling efforts, and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan shall also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. The Soil Management Plan would be prepared in consultation with applicable regulatory agencies (e.g., Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board) and is anticipated to include contaminated soil removal to ensure compliance with existing U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSL), California Department of Toxic Substances Control (DTSC) Screening Levels (SL), and California background levels. The handling and/or disposal of contaminated soils shall comply with all federal, state, and local laws and regulations.

8-5 Unsubstantiated Input Parameters Used to Estimate Project Emissions: The comment states that the Draft IS/MND 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 Draft IS/MND relies on emissions calculated from CalEEMod.2020.4.0, and the CalEEMod output files are provided in Appendix A of the Draft IS/MND. The comment states that eight of the values input into the CalEEMod modeling were inconsistent with information provided in the Draft IS/MND or are otherwise unjustified. Each of these input values are discussed below.

- Unsubstantiated Parking Land Use Size (Ex. A, p. 4-5): The commenter states that the CalEEMod modeling of the project underestimated the total number of parking spaces by 19 spaces. This comment is acknowledged, and the correct number of parking spaces (i.e., 422 parking spaces in total) was included in the revised CalEEMod model, and the updated results are included in Attachment B. Refer to Response No. 4-2, above, for a discussion of the updated emission results. This revision to the number of total parking spaces and CalEEMod modeling does not represent "significant new information" as defined in CEQA Guidelines Section 15088.5 because the revision does not change the level of significance or the conclusions in the Draft IS/MND.

- Failure to Model All Proposed Land Uses (Ex. A, p. 5): The commenter states that the project incorrectly modeled the 5,000 square feet of office space as "Unrefrigerated Warehouse-No Rail," which may underestimate the project's construction and operational emissions. It should be noted that the land use type modeled in the Draft IS/MND does not affect the project's construction emissions, as the model used

project-specific inputs instead of CalEEMod defaults. The land use types and sizes, and average daily trips modeled for the project in the Draft IS/MND are accurate and consistent with the traffic study prepared for the project. In addition, the Unrefrigerated Warehouse-No Rail land use type has higher energy usage emission factors than the Office land use type. Therefore, the project's emissions presented in the Draft IS/MND represent a conservative analysis and adequately disclose the potential impacts of the project.

- Failure to Consider Potential Cold Storage Requirements (Ex. A, p. 6-7): The commenter states that the project failed to model potential cold storage requirements. However, the project would not be designed to accommodate cold storage warehouse tenants. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

- Unsubstantiated Reductions to Architectural and Area Coating Emissions Factors and Areas (Ex. A, p. 7-8): The commenter states that the Draft IS/MND incorrectly includes reductions to the default architectural and area coating emission factors. SCAQMD Rule 1113 primarily requires 50 grams per liter (g/L) VOC limits for coating applications applicable to the proposed project, including flat coatings, non-flat coatings, and building envelope coatings. The coatings with more than 50 g/L VOC limits are specialty coatings and would not be used by the proposed project. The project's emissions associated with architectural and area coatings were accurately calculated in the CalEEMod model in accordance with the methodology prescribed by the SCAQMD, and the results are included in Section 4.3, *Air Quality*, and Appendix A of the Draft IS/MND. The commenter also states that despite the claim in the Draft IS/MND that the project would include a large number of prefinished panels or masonry, the Draft IS/MND fails to substantiate the actual square footage of the coating area; however, this is incorrect. Appendix A states on pages 3, 36 and 63 that the project would include 100,000 square feet of architectural coating, and that all other surfaces would be prefinished panels or masonry. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

- Overestimated Building Construction Phase Length (Ex. A, p. 8): The commenter states that the Draft IS/MND incorrectly overestimated the building construction phase length. This comment is acknowledged, and the building construction phase has been updated to 10 months in the revised CalEEMod model, consistent with the project description. Refer to Response to Comment No. 4-2 for the updated emission results. This change provides a minor update and does not result in any substantive change in impacts and does not represent "significant new information" as defined in CEQA Guidelines Section 15088.5.

- Incorrect Amount of Material Import and Export (Ex. A, p. 8-9): The commenter states that the project underestimated the material import and export volume by 3,000 cubic yards. The commenter calculated total material import and export by directly adding up cut and fill volumes. However, the project would partially balance soil on-site, resulting in less total material import and export volumes. The Draft IS/MND states on page 4.3-8 that project construction would include approximately 60,000 cubic yards of cut and 10,000 cubic yards of fill, resulting in approximately 65,000 cubic yards of import and 2,000 cubic yards of export. However, as discussed under Response to Comment No. 4-2, the import and export volumes were updated to conservatively account for contaminated soil generated from cleanup activities. The CalEEMod modeling was updated to assume that soil cleanup activities would result in approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil export and the same amount of regular soil import for backfilling. Refer to Response to Comment No. 4-2 for the details on this update and the updated emission results. This change provides a minor update and does not result in any substantive change in impacts and does not represent "significant new information" as defined in CEQA Guidelines Section 15088.5.

- Incorrect Application of Construction-Related Mitigation (Ex. A, p. 9-11): The commenter states that the Draft IS/MND incorrectly includes construction-related mitigation measures, including Replace Ground Cover, Water Exposed Area, and Reduce Vehicle Speed on Unpaved Roads. As discussed in Tables 4.3-2 and 4.3-4 on pages 4.3-9 and 4.3-14, respectively, the reductions/credits for construction emissions are based on the construction-related "mitigation" measures applied in CalEEMod as required by SCAQMD Rule 403. The project would comply with SCAQMD Rule 403, so the measures were not regarded as mitigation measures, contrary to the commenter's claim. The provisions of SCAQMD Rule 403 apply to any activity or man-made condition capable of generating fugitive dust. SCAQMD Rule 403 requires projects to comply with fugitive dust Best Available Control Measures. Reduction/credits based on the application of dust control techniques identified in the Draft IS/MND are consistent with SCAQMD Rule 403 fugitive dust Best Available Control Measures. Fugitive dust emission reductions are based on SCAQMD recommend values in combination with SCAQMD Rules 403, 1186, and 1166. The commenter subsequently states that simply because the Draft IS/MND references SCAQMD Rule 403 does not justify the inclusion of the reductions/credits in the model, because not all of these measures are explicitly required by SCAQMD Rule 403. However, the Draft IS/MND, in Tables 4.3-2 and 4.3-4 on pages 4.3-9 and 4.3-14, respectively, lists the specific measures under SCAQMD Rule 403 that the project would comply with, including the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Watering exposed areas three times per day is required by SCAQMD Rule 403 and committed by the project applicant. With the combination of watering unpaved roads twice daily and restricting vehicle speeds to 15 miles per hour on unpaved roads, the 12% unpaved road moisture content applied in CalEEMod is reasonable. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

- Incorrect Application of Operational Mitigation Measures (Ex. A, p. 11-13): The commenter states that the Draft IS/MND incorrectly includes water, waste, and area related operational mitigation measures. The project would comply with 2019 CALGreen Code and 2019 Title 24 standards which include water efficient irrigation systems, as well as water reducing features and plumbing fixtures. CalEEMod version 2020.4.0 does not account for water conserving reductions required by the 2019 CALGreen Code and 2019 Title 24 standards that would be implemented by the project and therefore was adjusted to account for these water conservation measures.

  The California Integrated Waste Management Act mandated that state agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50 percent of their solid waste from disposal facilities. Assembly Bill (AB) 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020. CalEEMod does not account for AB 341 reductions. Although the project would not include waste diversion programs, the local agencies and waste handling companies serving the project would be required to comply with AB 341 and achieve 75 percent disposal reduction. Therefore, to provide a conservative estimate, a 50 percent waste reduction was accounted for in CalEEMod.

  Refer to Response to Comment No.4 above for the validation of the area coating emissions factors used in the modeling.

  As such, all the operational measures applied are consistent with the latest statewide regulations and requirements and supported by substantial evidence. Since the project would comply with these existing regulations and requirements, these measures are not considered mitigation measures. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

8-6 The commenter states that their updated modeling and analysis demonstrates that the ROG/VOC and emissions associated with project construction would exceed the SCAQMD thresholds and the project would result in a potentially significant air quality impact. However, the commenter's CalEEMod modeling and analysis is inaccurate for a number of reasons. Specifically, the commenter's modeled construction duration is incorrect as the commenter modeled construction to occur over 15 months. As noted in Response to Comment No. 8-5, construction would occur over 17 months. Additionally, the commenter relies on CalEEMod default architectural coating VOC limits. As summarized in Response to Comment No. 8-5, the project would primarily utilize including flat coatings, non-flat coatings, and building envelope coatings which have a VOC limit of 50 grams per liter (g/L) per SCAQMD Rule 1113. The underestimated construction duration and architectural coating VOC limits modeled by the commenter contributes to the incorrect exceedance of construction VOC emissions. As discussed in the responses above, all the CalEEMod inputs are verified accurate with substantial evidence. Notwithstanding, CalEEMod has been updated to account for potential cleanup activities and disposal of contaminated soil, total parking spaces, and building construction phase length. As discussed in Response to Comment No. 4-2, above, emissions associated with project construction and operation would not exceed SCAQMD thresholds and the air quality impacts would remain less than significant. These changes provide a minor update and do not result in any substantive change in impacts and does not represent "significant new information" as defined in CEQA Guidelines Section 15088.5.

8-7 Diesel Particulate Matter Health Risk Emissions: The commenter states that the evaluation of the project's potential health risk impacts and the less than significant impact conclusion is incorrect because the Draft IS/MND fails to discuss the health risk impacts associated with toxic air contaminant emissions, and the commenter's updated analysis indicates a significant health risk impact.

The commenter states that the project should prepare a construction Health Risk Assessment (HRA). The primary purpose of an HRA is to determine long-term health risks, such as cancer risks over, for example, a 30-year residency or 70-year lifetime. Construction of the project would take place over 17 months and would not create long-term health effects to adjacent sensitive receptors. Additionally, the City follows SCAQMD guidance for the preparation of CEQA air quality analyses. SCAQMD's Health Risk Assessment procedures recommend evaluating risk from extended exposures measured across several years and not for short-term construction exposures.

Nonetheless, the construction diesel particulate matter (DPM) emissions calculation performed by the commenter is flawed. The commenter incorrectly used the total DPM emissions during construction, which included both on-site and off-site emissions. However, off-site emissions should be excluded from the analysis because it would not cause localized impacts or health risk impacts on sensitive receptors near the project site. The commenter's methodology overestimates DPM emissions and associated health risks. Furthermore, the commenter used potential health risks on infants to conclude the significant impacts, which is inappropriate. Because cancer risk is defined as the likelihood of contracting cancer, only looking at infants does not accurately show the overall likelihood of contracting cancer for the entire population in the project area.

In addition, the commenter combined construction and operational health risks. This methodology is inaccurate. First, the commenter used total operational DPM emissions to calculate operational health risks. However, the majority of the project's operational emissions would occur off-site because the project is a warehouse development and would not cause substantial on-site emissions. Off-site emissions would not cause localized impacts or health risk impacts on sensitive receptors near the project site. Second, Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual does not require or recommend adding construction and operational cancer risks. It should also be noted that project construction and operation would not occur simultaneously, and sensitive receptors would not be exposed to both construction

and operational toxic air contaminants at the same time. Therefore, adding construction and operational cancer risks together causes double-counting and overestimates the cancer risks that nearby sensitive receptors would be exposed to.

In conclusion, the project is not anticipated to cause significant health risk impacts, and a construction HRA is not deemed necessary. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

8-8 The commenter states that the quantitative GHG analysis is unsubstantiated as the CalEEMod inputs are incorrect. As discussed in the responses above, all the CalEEMod inputs are verified accurate with substantial evidence. Notwithstanding, CalEEMod has been updated to account for potential cleanup activities and disposal of contaminated soil, and the total number of parking spaces and building construction phase length has been updated as well. As discussed in Response to Comment No. 4-2, GHG emissions associated with project construction and operation would not exceed SCAQMD's 10,000 $MTCO_2e$/year threshold, and the GHG impacts would remain less than significant. As such, these changes do not result in any substantive change in impacts and do not represent "significant new information" as defined in CEQA Guidelines Section 15088.5.

The commenter also notes that the proposed project's GHG emissions would exceed the SCAQMD Population Efficiency 2035 Target. The California Supreme Court's decision published on November 30, 2015, in the Center for Biological Diversity v. California Department of Fish and Wildlife (Case No. 217763) (also known as the "Newhall Ranch Case") reviewed the methodology used to analyze GHG emissions in an EIR prepared for a large residential project to be developed in multiple phases over a period of many years. The EIR used a "Business as Usual" (BAU) approach to determine whether the project would impede the state's compliance with statutory emissions reduction mandate established by the AB 32 Scoping Plan. The Court did not invalidate the BAU approach entirely but did hold that "the Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects." Additionally, the Governor's Office of Planning and Research acknowledged that the correlation between project-level GHG percent reduction and the statewide goals may be difficult to achieve and may not be readily implemented.

The California Supreme Court suggested regulatory consistency as a pathway to compliance, by stating that a lead agency might assess consistency with AB 32's goal in whole or in part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities. The Court recognized that, due to the extent that a project's design features could comply with or exceed the regulations that are outlined in the Scoping Plan and/or adopted by CARB or other state agencies, a lead agency could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill a statewide plan for the reduction or mitigation of GHG emissions. This approach is consistent with CEQA Guidelines Section 15064, which provides that a determination that an impact is not cumulatively considerable may be based on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of GHG emissions.

The Draft IS/MND acknowledged that the City has not adopted a numerical GHG threshold and therefore relies on SCAQMD's adopted threshold for industrial facilities, as well as consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions; refer to page 4.8-5 of the Draft IS/MND.

No "service population efficiency" GHG threshold for individual land use projects has been adopted by SCAQMD as part of its CEQA Handbook or in any of its regulatory mechanisms, and no such threshold, at any level, has been adopted by the City, as noted above. The 2035 GHG reduction target calculated by the

commenter, based on Senate Bill 32, has been incorporated in the 2017 Scoping Plan. As such, the project's consistency with SB 32 is analyzed in Table 4.8-4 of the Draft IS/MND. Further, as discussed above, the Scoping Plan did not demonstrate a correlation between the statewide level of GHG reduction and individual projects. Therefore, the Draft IS/MND fully considered GHG impacts and its conclusions are adequate under CEQA.

8-9 Consideration of Performance-Based Standards Under SCAG's RTP/SCS: The commenter states that the project is inconsistent with specific performance-based goals underlying SCAG's RTP/SCS and SB 375, such as the per capita GHG emission targets. The commenter compared project emissions with the SB 375 Per Capita GHG Emission Goals. It should be noted that the SB 375 goals are statewide goals and do not directly apply to local development projects. Statewide goals include emissions and service populations from all sectors, while individual development projects each have unique considerations, and should not be directly compared against the statewide goals. Neither the SCAQMD nor the City has adopted these SB 375 statewide goals as thresholds for local development projects. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

8-10 This comment provides concerns related to a range of issues related to biological resources. A response to each item identified within this comment is provided below.

- Characterization of Existing Setting Related to Wildlife: The commenter claims that the Draft IS/MND inadequately characterizes the existing environmental setting of the site within the context of biological resources. Specifically, the commenter claims that the baseline of existing conditions was inadequate given that the site visit conducted by Michael Baker International in May 2020 occurred when active tilling for weed abatement was occurring on-site and, thus, resulted in fewer observed wildlife species in the area. The commenter supports this argument based on a site visit conducted by a wildlife biologist (Noriko Smallwood) on December 15, 2021, during which she observed the presence of 36 species in the project area. As detailed in the Biological Resources Assessment of the Beverly Boulevard Warehouse Project (Biological Report), prepared by Michael Baker International and dated June 12, 2020, and included as Draft IS/MND Appendix B, *Biological Resources Analysis*, Michael Baker International biologists conducted the site visit from 7:00 a.m. to 9:10 a.m. The tilling activities on-site did not begin until the biological field survey was almost complete (closer to 9:00 a.m.). The tilling activities are conducted routinely at the project site for weed abatement and, thus, wildlife species in the area are acclimated to this type of urban activity. As such, the presence of tilling activities during the field survey does not result in an inadequate characterization of the existing site conditions. It should also be noted that the site is nearly entirely disturbed and surrounded by urban development on all sides.

  The commenter also claims that the Draft IS/MND relies only on a literature review of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) to identify special status species with the potential to occur in the project area and that additional databases, such as eBird and iNaturalist, should have been utilized to obtain a more comprehensive list of species. The commenter is incorrect in stating that the Draft IS/MND only relied on literature review of the CNDDB. Based on the Biological Report, literature reviews and records searches were conducted for special-status biological resources potentially occurring on or within the vicinity of the project site within the U.S. Geological Survey (USGS) El Monte, Baldwin Park, La Habra, Whittier, Los Angeles, and South Gate, California 7.5-minute quadrangles through a query of the CDFW CNDDB, the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), California Native Plant Society (CNPS) Online Inventory, and the Calflora Database. It is acknowledged that eBird and iNaturalist may include additional species than those in the databases utilized in the Biological Report; however, eBird and iNaturalist are publicly managed databases based on observations made by the public and can include potential errors that are not reviewed and confirmed by resource agencies (e.g., CDFW and

USFWS). In conclusion, the Draft IS/MND and Biological Report provide an adequate description of existing site conditions with regards to biological resources.

- Lost Breeding Capacity: The commenter claims that the Draft IS/MND fails to analyze the project's impact on lost breeding capacity due to habitat loss and fragmentation exacerbated by the project. As analyzed in Draft IS/MND Section 4.4, *Biological Resources*, and the Biological Report, existing vegetation communities and land cover types on-site include disturbed areas, bare ground, and developed areas. No suitable habitat would be lost due to project development and there are no existing sensitive habitats in the project area that would be fragmented by the project. While the San Gabriel River is located further west of the site, it is separated from the site by Union Pacific Railroad tracks. As such, the project would not result in habitat loss or fragmentation that could lead to lost breeding capacity.

- Wildlife Movement: The commenter states that the Draft IS/MND fails to analyze the project's impact to wildlife movement by utilizing a false CEQA standard. As analyzed in Draft IS/MND Section 4.4, *Biological Resources*, and the Biological Report, wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land. The project site is not located within any wildlife corridors or habitat conservation plans. The site is a previously disturbed area that is surrounded by developed and urban land on all sides, including the Union Pacific Railroad to the west and I-605 to the east. Although the San Gabriel River is located further to the west across the railroad, wildlife movement into or out of the site is likely minimal given the presence of the freeway and railroad bounding the site on its eastern and western ends, respectively. Additionally, the project site is fenced off along the western and southern boundaries and is regularly tilled for weed abatement. Moreover, development on the project site is not anticipated to have adverse effects on bird or bat movement, given the urbanized and developed nature of the site and surrounding area (e.g., noise from vehicle traffic along I-605, train traffic along the Union Pacific Railroad alignment, human activity associated with surrounding residential development). Therefore, the proposed development would not substantially interfere with wildlife movement in the area.

- Traffic-Related Impacts to Wildlife: The commenter claims, without evidence, that project-generated VMT would result in substantial vehicular collisions with special-status species in the project area. All vehicles entering and exiting the project site would travel on paved roadways. There is always potential for vehicular collisions with wildlife species on roadways, particularly in urban areas. However, the proposed project and project area are not unique in nature and it is speculative to assume that drivers traveling to and from the site would collide into wildlife species on nearby roadways, and no evidence has been provided to support such a claim. It is also speculative to assume that any wildlife species hit by drivers would be special-status species. Overall, potential impacts from project trips resulting in accidental vehicular collisions with special-status wildlife species is highly speculative and cannot be accurately analyzed under CEQA, particularly in the highly developed and urbanized environment which the project site is located in. Public Resources Code Section 21082.2 provides that "[a]rgument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly inaccurate or erroneous…is not substantial evidence." Accordingly, this comment is not supported by substantial evidence.

- Cumulative Impact to Biological Resources: The commenter states that the project's cumulative impacts to biological resources is inadequately addressed in the Draft IS/MND. As stated in the responses above and in the Draft IS/MND and Biological Report, the project would result in less than significant impacts to biological resources and, thus, would not substantially contribute towards cumulatively considerable

impacts under CEQA. The commenter also states that Mitigation Measure BIO-1 related to pre-construction nesting bird clearance surveys is a last-ditch effort to save readily detectable birds or nests and that, instead, land should be conserved in perpetuity to make up for the habitat loss caused by the project. As stated above, no existing sensitive habitats in the project area would be fragmented or lost by development of the project. As such, the project would not result in significant habitat loss or fragmentation in a manner that would justify the need to conserve land elsewhere in perpetuity. The commenter also states that detection surveys for each of the special-status species identified by the commenter be required as mitigation in the Draft IS/MND. Based on the Biological Report and responses provided above, the project would not result in potentially significant impacts to any special-status species known to occur in the project vicinity and, thus, no detection survey mitigation would be required under

8-11 This comment provides a closing to the comment letter. It does not raise specific issues pertinent to the adequacy of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is required.

8-12 These attachments pertain to the comments related to hazardous materials, air quality, greenhouse gases, and biological resources that have been responded to as part of Response to Comment Nos. 8-3 through 8-10, above. No further response is required.

From: Andy Lee [mailto:andywlee1@gmail.com]
Sent: Friday, December 31, 2021 12:13 PM
To: Hector Hernandez <HHernandez@pico-rivera.org>
Subject: Beverly Blvd Warehouse Project

Dear Mr. Hernandez:

I'm emailing because you're listed as the senior planner for the "Beverly Blvd. Warehouse Project," also known as the "605 Warehouse Project" in Pico Rivera. I had a few questions regarding the project:

1) The project includes a large warehouse. What will be the ultimate use of the warehouse? For example, will it be used to store food, or for e-commerce, or for something else? 9-1

2) At this point, are there any companies who will be, or may become, tenants, lessees or users of the warehouse? 9-2

Please let me know if you have the answers to these questions. Thank you.

Sincerely,

Andy Lee
(213) 442-9233
andywlee1@gmail.com

RESPONSE TO COMMENT LETTER NO. 9

Andy Lee
January 3, 2022

9-1 The commenter is inquiring regarding the ultimate use of the proposed warehouse. A specific end-user of the proposed warehouse has not been identified at this time. However, the proposed warehousing use would be consistent with the General Plan land use designation ("I; General Industrial") and zoning designation ("IPD; Industrial Planned Development") proposed for the project site. The commenter does not raise any new CEQA issues or directly challenge information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

9-2 Refer to Response 9-1, above. A specific end-user of the proposed warehouse has not been identified at this time. However, the proposed warehousing use would be consistent with the General Plan land use designation ("I; General Industrial") and zoning designation ("IPD; Industrial Planned Development") proposed for the project site. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

BLUM COLLINS & HO, LLP
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January 2, 2022

Hector Hernandez, Project Planner
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, California 90660

VIA EMAIL TO:
hhernandez@pico-rivera.org

Subject: Comments on Beverly Blvd. Warehouse MND (SCH NO. 2021120053)

Dear Mr. Hernandez

Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the proposed Beverly Boulevard Warehouse Project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance (GSEJA). Also, GSEJA formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 10-1

1.0 Summary

The project proposes the construction and operation of an approximately 357,903 square foot (sf) warehouse distribution facility and a 2,500 sf print shop facility on a 19.06 acre site. The warehouse building proposes 393 parking spaces and the print shop proposes 29 parking spaces. A General Plan Land Use amendment and Zoning designation change are proposed to change part of the Project site's land use designations from "PF-Public Facilities" to "I: General Industrial." The project will construct new roadway access to the project site from Beverly Boulevard; existing access to the site is taken solely from the residential street Eduardo Avenue. As a condition of approval, the project will also accommodate a future 10-foot wide, 500-foot long trail segment that would traverse the project site in an east-west orientation.

2.0 Project Description

The MND does not include a floor plan, grading plan, or detailed site plan. The basic components of a Planning Application include a site plan, floor plan, conceptual grading plan, and elevations. The site plan provided in Exhibit 2-4 does not provide any detailed information such as the earthwork quantity notes, parking requirements, site coverage, floor area ratio, etc. The MND has excluded the proposed floor plans, 10-2

details from the site plan, and a grading plan from public review, which does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121 and 21003(b)). Incorporation by reference (CEQA § 15150 (f)) is not appropriate as the floor plan, grading plan, building elevations, and detailed site plan contribute directly to analysis of the problem at hand. Providing this information is vital as the Project Description states, "On-site grading activities would occur for a duration of three months and would include 60,000 cubic yards of cut and 10,000 cubic yards of fill," and there is no method for public verification of this statement in the MND. Additionally, the Project Description states that, "as a condition of approval the project proposes to accommodate a future 10-foot wide, 500-foot long trail segment that would traverse the project site in an east-west orientation, generally along the easterly and southerly boundaries of the site; refer to Exhibit 2-4." However, Exhibit 2-4 does not call out or depict the trail. An EIR must be prepared to include all application items for review, analysis, and comment by the public and decision makers.

10-2 (cont.)

4.3 Air Quality, 4.6 Energy, and 4.8 Greenhouse Gases

Please refer to attachments from SWAPE for a complete technical commentary and analysis.

The MND does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project. This is especially significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.0[1], CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6037500403) ranks in the 99th percentile for pollution burden, meaning that the impacts from pollution are among the highest in the state. The surrounding community, including sensitive receptors such as the residences adjacent to the south of the project site on Eduardo Avenue, bears the impact of multiple sources of pollution and is more polluted than average on every pollution indicator measured by CalEnviroScreen. For example, the project census tract ranks in the 66th percentile for ozone burden, 76th percentile for particulate matter 2.5 burden, the 92nd percentile for diesel particulate matter, and the 99th percentile for environmental impacts related to traffic; all of these environmental factors are typically attributed to heavy truck activity in the area. The census tract ranks in the 85th percentile for drinking water, which indicates that it ranks with the worst quality drinking water in the state. The census tract also bears more impacts from cleanup sites than 80% of the state and more solid waste impacts than 90% of the state.

10-3

Further, the census tract is a diverse community including 86% Hispanic and 7% Asian-American residents, which are especially vulnerable to the impacts of pollution. The community has a high rate of low educational attainment, meaning 65% of the census tract over age 25 has not attained a high school diploma, which is an indication that they may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 84th percentile for incidence of cardiovascular disease and 60th percentile for incidence of asthma. The community also has a high rate of linguistic isolation, meaning 35% of the census tract speaks little to no English.

[1] CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

Additionally, the project's census tract is identified as a SB 535 Disadvantaged Community[2], which is not discussed or presented for analysis in the MND. 10-3 (cont.)

The State of California lists three approved compliance modeling softwares[3] for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. Appendix A provides a spreadsheet-based modeling analysis of energy impacts, which is not one of the listed approved softwares. The modeling provided in the MND does not comply with the 2019 Building Energy Efficiency Standards and under reports the project's potentially significant GHG and Energy impacts to the public and decision makers. Since the MND did not accurately or adequately model the Energy impacts in compliance with Title 24, a finding of significance must be made. An EIR with modeling in one of the approved software types must be prepared and circulated for public review in order to adequately analyze the project's potentially significant environmental impacts. This is vital as the MND's spreadsheet modeling utilizes CalEEMod assumptions for construction equipment/operational sources, which is clearly not one of the approved softwares. 10-4

4.11 Land Use and Planning

The Project requires a General Plan Land Use amendment and Zoning designation change to change part of the Project site's land use designation from "PF-Public Facilities" to "I: General Industrial." The MND concludes that the project will not result in any significant impacts because "Upon the City's approval of the General Plan Amendment for the project, impacts in regard to consistency with the General Plan would be less than significant. Additionally, the project would be consistent with goals and policies of the General Plan in regard to air quality, energy, greenhouse gases, and noise." The MND does not discuss the General Plan Amendment required for the proposed lot line adjustment of the project site boundaries and the SCE property to allow the construction of an access roadway to the project site from Beverly Boulevard by connecting to the proposed vehicular/bicycle/pedestrian bridge, as noted in the Project Description. Further, regarding the Zoning designation change, the MND concludes that the project will not result in any significant impacts because "approval of the CUP and zone reclassification for the proposed project, the project would be consistent with the City's Zoning Code and a less than significant impact would occur in this regard." These conclusions are not supported by meaningful evidence or any analysis, including a consistency analysis with General Plan policies in context of the proposed amendments. The MND has not provided any technical analysis to support the approval of a General Plan Amendment and Zoning designation change, in violation of CEQA's requirements for meaningful disclosure (CEQA § 21003(b)). The MND is inadequate as an informational document and an EIR must be prepared with this technical analysis and a consistency analysis with all General Plan goals and policies. It must also provide a quantified analysis of the project's additional growth beyond Table 3-3: General Plan Estimated Development Potential of the City's General Plan Land Use Element. 10-5

4.14 Population and Housing

[2] OEHHA SB 535 Census Tracts https://oehha.ca.gov/calenviroscreen/sb535
[3] 2019 Building Energy Efficiency Standards Approved Computer Compliance Programs, California Energy Commission. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency-2

The MND states that the project "would generate approximately 128 employees" without providing a methodology or calculation for this estimate. There is no information or calculation given regarding construction employees. This does not comply with CEQA's requirements for meaningful disclosure. Appendix B of the City's General Plan[4] provides the following applicable employment generation rates:

General Industrial
Warehouse: 0.8 employees per 1,000 square feet
Light Manufacturing: 1 employee per 1,000 square feet

Applying these ratios results in the following calculation:

Warehouse: 286 employees
Print Shop: 3 employees
Total: 289 employees

Utilizing the City's General Plan employment generation ratios, the proposed project will generate 289 employees during project operations. The MND utilizes uncertain and misleading language which does not provide any meaningful analysis of the project's population and employment generation. In order to comply with CEQA's requirements for meaningful disclosure, an EIR must be prepared to provide an accurate estimate of employees generated by all uses of the proposed project. It must also provide demographic and geographic information on the location of qualified workers to fill these positions.

Additionally, the MND concludes "housing opportunities exist for the project's future employees in the communities surrounding the City" without providing any meaningful evidence to support this claim, such as current vacancy rates or number of housing units available in the City. The MND utilizes the City's average household size of 3.76 to calculate the potential population increase generated by the project. Using the General Plan employment calculation of 289 employees, project implementation would result in a population increase of approximately 1,087 persons.

10-5 (cont.)

SCAG's Connect SoCal Demographics and Growth Forecast[5] notes that the City will add 2,300 jobs between 2016 - 2045. Utilizing the City's General Plan calculation of 289 employees, the project represents 12.5% of the City's employment growth from 2016 - 2045. SCAG's Growth Forecast notes that the City's population will increase by 3,900 residents between 2016 - 2045. Utilizing the City's General Plan calculation of 289 employees, the project represents 7.4% of the City's population growth from 2016 - 2045. The total population increase of 1,087 people generated by the project represents 27.8% of the City's population growth from 2016 - 2045.

[4] Pico Rivera General Plan Appendix B https://www.pico-rivera.org/documents/CEDD/General%20Plan/Appendices.pdf
[5] SCAG Connect SoCal Demographics and Growth Forecast adopted September 3, 2020 https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579

A single project accounting for more than 12% of the projected employment growth and more than 27% of population growth over 29 years represents a significant amount of growth. An EIR must be prepared to include this analysis, and also provide a cumulative analysis discussion of projects approved since 2016 and projects "in the pipeline" to determine if the project will exceed SCAG's employment growth forecast for the City. This is vital as the project requires General Plan Land Use and Zoning designation amendments to proceed and by nature the project's growth exceeds any established projections and represents unplanned growth. Additionally, the document must also provide a quantified analysis of the project's additional growth beyond Table 3-3: General Plan Estimated Development Potential of the City's General Plan Land Use Element due to the required General Plan Land Use and Zoning designation amendments. 10-5 (cont)

Additionally, an EIR must be prepared with demographic and geographic information on the location of qualified workers to fill these positions in order to provide an accurate environmental analysis. It must also provide a detailed construction worker population and employment analysis.

4.17 Transportation/Traffic

Appendix F: VMT/Traffic did not include an analysis of construction traffic (passenger car and truck) impacts. This analysis is vital as all construction traffic will be required to cut-through the existing single family neighborhood and traverse Eduardo Avenue to access the project site. Eduardo Avenue is not depicted as a truck route in the City's General Plan Figure 5-3: Truck Route. Appendix F utilizes uncertain and misleading language in stating that "construction is *relatively* short-term at only 14 months. Construction traffic is *projected* to be lower than *anticipated* Project traffic." Appendix F states that construction traffic is "projected" to be lower than operational traffic, but these projections are not included for public review. An EIR must be prepared to include a quantified construction traffic analysis in order to adequately and accurately determine potentially significant impacts, with particular emphasis on the utilization of a residential street (Eduardo Avenue) for construction access. Additionally, the Project Description states that construction will occur over 16 months while this analysis states it will only occur over 14 months, which renders the MND internally inconsistent in its analysis. 10-6

The VMT analysis does not adequately or accurately represent the VMT impacts of the proposed project and an EIR must be prepared to reflect this. The operational nature of industrial/warehouse uses involves high rates of truck/trailer VMT due to traveling from large regional distribution centers to smaller industrial parks and then to their final delivery destinations. Table 4.2 Trip Summary of the Air Quality Appendix CalEEMod output sheets indicates that the project will generate approximately 808 average daily trips and 3,070,121 annual VMT (3,070,121 / 365 days = 8,412 daily total VMT). This is exponentially higher than the VMTs reported in Appendix F. The project's truck/trailer activity is unable to utilize public transit or active transportation and it is misleading to the public and decision makers to exclude the truck/trailer activity from VMT analysis. An EIR must be prepared to reflect a quantified VMT analysis that includes truck/trailer activity to adequately and accurately analyze the potentially significant project transportation impacts. 10-7

Conclusion

For the foregoing reasons, GSEJA believes the MND is flawed and an EIR must be prepared for the proposed project and circulated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 10-8

Sincerely,

Gary Ho
Blum Collins & Ho, LLP

RESPONSE TO COMMENT LETTER NO. 10

Gary Ho
Bum Collins & Ho, LLP, Golden State Environmental Justice Alliance
January 2, 2022

10-1 This comment provides an introduction to the comment letter and a summary of the project. It does not raise issues pertinent to the adequacy of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is required.

10-2 The commenter states that the Draft IS/MND does not include a floor plan, grading plan or a detailed site plan, and therefore does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure under Public Resources Code Section 21003(b) and CEQA Guidelines Section 15121. However, the project description included in the Draft IS/MND includes a detailed description of the project's location/environmental setting, existing and proposed General Plan and Zoning designations, description of the proposed project and ancillary infrastructure, construction duration/activities/earthwork quantities, and required permits and approvals.

Relative to the description of the proposed project's improvements, the Draft IS/MND provides a conceptual site plan in Exhibit 2-4 on page 2-7 depicting the proposed warehousing building/print shop, proposed parking, and access. In addition, elevations are provided that depict the maximum building height and architectural characteristics of both the warehousing building and print shop. The project description of the Draft IS/MND provides square footages for on-site development, including the warehouse (with a breakdown of floor area for office/mezzanine use), print shop, and associated parking spaces, lighting, landscaping, and fencing. A detailed description of access/circulation improvements is also provided, including provision of Exhibit 2-6, which depicts the proposed bridge over the Union Pacific Railroad alignment. A description of construction duration, timing, and sequencing is also provided.

It should be noted that, while the proposed project does accommodate a future 500-foot long trail segment along the easterly and southerly boundaries of the site, the Draft IS/MND also clearly indicates that this right-of-way would be reserved for implementation of a future trail by others. As noted in the Draft IS/MND, "The implementation of this trail connection is not a part of this proposed project, and would be a future, separate action subject to standalone environmental review under CEQA at a later time." The implementation of this separate, future trail segment is not an improvement that is required for the proposed warehouse project to move forward. Rather, it represents an unfunded recreational trail enhancement proposed by others that would traverse the project site as part of a separate action.

10-3 The commenter provides socioeconomic information regarding residents within the project site vicinity. This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND's environmental analysis. Therefore, no further response is warranted. Nevertheless, this comment is acknowledged and will be considered by the City of Pico Rivera decision-makers.

10-4 The commenter also claims the Draft IS/MND incorrectly utilized CalEEMod and Excel spreadsheet to model energy consumption, and instead CBECC-Com, EnergyPro, or IES VE computer software should be used. The three software programs referenced by the commenter are for Building Energy Efficiency Standards compliance modeling and are not suitable for CEQA compliance analysis. CalEEMod and Excel spreadsheet are the most appropriate modeling tools to estimate the project's energy consumption for CEQA compliance purposes. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

10-5 The comment states that the conclusion in the Draft IS/MND that the project would be consistent with the City's General Plan and zoning code is not supported by meaningful evidence or any analysis, which is incorrect. The Draft IS/MND comprehensively evaluates the project's consistency with the General Plan and zoning code in Section 4.11, *Land Use and Planning*, of the Draft IS/MND. The vast majority of the project site is designated as "I; General Industrial" by the City's General Plan. The project is fully consistent with the General Industrial designation, which allows for a range of industrial businesses including manufacturing and assembly, large-scale warehousing and distribution uses, contractors' storage yards, and wholesale activities. However, there is an existing abandoned rail alignment that traverses the site that is designated "PF; Public Facilities" under the General Plan. The proposed project would require a General Plan Amendment to redesignate this Public Facilities corridor to be consistent with the remainder of the site (General Industrial). The existing rail alignment traversing the site has been abandoned for many years, and the former railroad ties/tracks have been removed. The General Plan Amendment would resolve a land use inconsistency by removing a Public Facilities designation intended for a railroad alignment that no longer exists, and create a contiguous site with a General Industrial designation that is conducive to a high-quality development project that would benefit the local economy. The Draft IS/MND concludes on pages 4.11-1 and 4.11-2 that impacts related to consistency with applicable land use plans, policies and regulations would be less than significant. In addition, the Draft IS/MND includes a comprehensive analysis of the project's consistency with goals and policies of the General Plan related to air quality, energy, GHGs, and noise in Sections 4.3, 4.6, 4.8, and 4.13 of the Draft IS/MND, respectively, and concludes that the project is consistent with all applicable General Plan goals and policies.

The number of employees generated by the proposed project (128) is consistent with the employee estimate provided in the Vehicle Miles Traveled (VMT) Assessment prepared for the project (provided as Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report* of the Draft IS/MND). As indicated in the VMT Assessment, employee forecasts for the warehouse were based on the ratio of trips generated based on area versus trips generated per employee. Employee forecasts for the print shop are based on information from individuals familiar with operations of such uses. This forecast are based on the ITE Trip Generation Manual, 10th Edition (ITE Trip Generation Manual). Data from the ITE Trip Generation Manual is based on data substantially newer than that used in the source study for the General Plan rates, which was a study published in 2001. Additionally, this employee forecast was developed in consultation with City of Pico Rivera staff through preparation of the VMT Assessment. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

As noted in Response to Comment No. 14-3 below, based on input from the Southern California Association of Governments (SCAG), minor refinements to the City's population forecasts were performed to ensure consistency with SCAG's adopted 2020 Connect SoCal Regional Growth Forecasts. As noted in the response, the project's anticipated population increase would represent approximately 0.7 percent of the City's projected population by 2045. This minor increase in population is not anticipated to result in any significant impacts related to population and housing, as identified in the Draft IS/MND.

In addition, this comment notes that the Draft IS/MND does discuss a General Plan Amendment required for the lot line adjustment required for the project. The requirement for a General Plan Amendment as part of the lot line adjustment is clearly indicated on pages 2-6, 2-10, and 4.3-5 of the Draft IS/MND. As noted in the Draft IS/MND, the proposed lot line adjustment would allow the construction of an access roadway to the project site from Beverly Boulevard by connecting to the proposed vehicular/bicycle/pedestrian bridge, which would limited to the confines of the project site. This proposed action would not have the potential to physically divide an established community or cause a significant impact due to a conflict with a land use plan, policy, or regulation.

10-6 The commenter states that Appendix F of the Draft IS/MND did not include an analysis of construction traffic impacts, and that an EIR must be prepared to include a quantified construction traffic analysis with particular emphasis on construction traffic along Eduardo Avenue. This is incorrect, as the Draft IS/MND comprehensively analyzes construction traffic, including construction traffic along Eduardo Avenue. The Draft IS/MND states on page 2-12 that construction access would be provided along Eduardo Avenue for a maximum of four months until the vehicular/bicycle/pedestrian bridge is constructed providing access from Beverly Boulevard. The Draft IS/MND analyzes construction traffic impacts in Section 4.17, *Transportation*. The Draft IS/MND states on page 4.17-7 that project construction activities could result in short-term temporary impacts to street traffic along Beverly Boulevard. To address this temporary issue, Mitigation Measure TR-1 would be implemented, which is set forth on page 4.17-7. Mitigation Measure TR-1 would require implementation of a Transportation Management Plan (TMP), which would include various provisions to ensure continuous and adequate access during the construction process and minimize cut-through traffic on residential streets. All other project impacts related to transportation were determined to be less than significant. This comment does not provide any substantial evidence that further review under CEQA is required or that the project may have a significant environmental impact. As analyzed in the Draft IS/MND, the whole of the record supports the conclusion that the project's traffic impacts are less than significant with the incorporation of mitigation.

In addition, Section 4.13, *Noise*, of the Draft IS/MND includes a detailed, quantitative analysis of potential impacts related to construction access along Eduardo Avenue. As noted in the Draft IS/MND, a maximum of 60 trips per day (i.e., construction worker trips, vendor trips, and truck hauling trips) are anticipated to occur along Eduardo Avenue, between the hours of 7:00 a.m. to 7:00 p.m. in compliance with Pico Rivera Municipal Code Section 18.42.050 and Los Angeles County Code Section 12.08.440. The Draft IS/MND provided a quantitative analysis of potential noise impacts due to truck trips during the construction process. The analysis concludes that noise impacts at residential receptors along Eduardo Avenue would not exceed identified County of Los Angeles thresholds. As such, the Draft IS/MND adequately discloses the potential impacts of the project in this regard.

10-7 The commenter states that the VMT transportation impact analysis requires an EIR and inclusion of truck/trailer activity, and also cites CalEEMod VMT data. The project analysis was based on the appropriate vehicle type consistent with agency guidance. Specifically, the VMT impact analysis for the project utilized the Los Angeles County Public Works Traffic Impact Analysis Guidelines (LA County VMT Guidelines) dated July 23, 2020 as guidance. As stated in the LA County VMT Guidelines: "The term vehicle refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty trucks should only be included in a traffic impacts analysis for modeling convenience and ease of calculation (e.g., where models or data provide combined auto and heavy-freight VMT) but should not contribute to a finding of significant traffic impact under any circumstances." This guideline is consistent with the Governor's Office of Planning and Research's (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018. Additionally, the SCAG RTP/SCS Travel Demand Forecasting Model, which was utilized in the project analysis, is identified in the LA County VMT Guidelines as an appropriate analysis tool. The transportation analysis in the Draft IS/MND is in compliance with the current methodology required by the County and OPR. Given the consistency with the appropriate guidance, and no further response is necessary.

Regarding CalEEMod VMT data, the commenter notes the CalEEMod output sheets indicate that the project will generate approximately 808 average daily trips and 3,070,121 annual VMT (3,070,121 / 365 days = 8,412 daily total VMT). As the VMT Memorandum lists 4,207 daily VMT, the commenter is concerned that the modeled 8,412 daily VMT in CalEEMod is misleading and does not include truck/trailer activity. The CalEEMod fleet mix was adjusted to project-specific fleet mix data from the Traffic Operations Report Beverly Boulevard Warehouse Project. Therefore, truck/trailer activity is accounted for in CalEEMod. Further, VMT is conservatively modeled in CalEEMod and is primarily based on default CalEEMod factors. CalEEMod uses

multiple default factors to calculate VMT including average daily trip rate (trip generation rate x land use); trip type (commercial-customer, commercial-work, and commercial-nonwork); and trip link types (primary, pass-by and diverted). Therefore, as truck/trailer activity was accounted for and VMT was conservatively modeled in CalEEMod, no changes are necessary.

10-8 This comment provides a closing to the comment letter. It does not raise specific issues pertinent to the adequacy of the Draft IS/MND, and the City of Pico Rivera decision makers will consider all comments on the proposed project. Thus, no further response is required. The comment will be added to the distribution list for future notices as required under CEQA.

From: A S [mailto:asalcido.07@gmail.com]
Sent: Monday, January 03, 2022 8:04 PM
To: Hector Hernandez <HHernandez@pico-rivera.org>
Cc: Unknown <jbourg2271@aol.com>; jbourgeois029@gmail.com; Terrance Lucio <t.lucio57@gmail.com>; PATRICK HANINGER <phaninger1@gmail.com>
Subject: Beverly Boulevard Warehouse Project

Good Morning Mr. Hernandez,

Please provide any updates to the above mentioned project.

I am requesting under Public Resource Code Section 21092.2 to add the email addresses and mailing address below to the notification list, regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project.

t.lucio57@gmail.com

phaninger1@gmail.com

jbourg2271@aol.com

jbourgeois029@gmail.com

asalcido.07@gmail.com

11-1

Mailing Address:

P.O. Box 79222

Corona, CA 92877

Please confirm receipt of this email.
Thank You,
Adam Salcido

RESPONSE TO COMMENT LETTER NO. 11

Adam Salcido
January 3, 2022

11-1 The commenter requests that numerous contacts are included on the notification list for subsequent environmental documents, public notices, public hearings, and notices of determination for the proposed project. This comment has been acknowledged, and the email addresses and mailing address listed will be included on future notices as required under CEQA for this project. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

January 3, 2022

Hector Hernandez
City of Pico Rivera
6615 Passons Blvd
Pico Rivera, CA 90660

sent via email: hhernandez@pico-rivera.org

Re: Beverly Boulevard Warehouse Project
SCH 2021120053 — ***Mitigated Negative Declaration***

Dear Mr. Hernandez:

The California Public Utilities Commission (Commission/CPUC) has jurisdiction over rail crossings (crossings) in California. CPUC ensures that crossings are safely designed, constructed, and maintained. The Commission's Rail Crossings Engineering Branch (RCEB) is in receipt of the Mitigated Negative Declaration (MND) for the proposed Beverly Boulevard Warehouse Project (Project). The City of Pico Rivera (City) is the lead agency.

The proposed project would include construction of a warehousing/distribution building and a print shop facility on a 19.06 acre site between the San Gabriel River and Interstate 605, south of Beverly Boulevard. Ancillary facilities would include landscaping, lighting, paving, circulation, and utility improvements. A new, private grade-separated railroad crossing (crossing) is proposed to span from Beverly Boulevard to the project site over the Union Pacific Railroad (UPRR) Los Angeles Subdivision, at approximately milepost 11.05.

The proposed new private crossing is subject to minimum vertical and horizontal clearance requirements outlined in CPUC General Order (G.O.) 26-D, Section 2, Section 3, and Section 4. Clearance between parallel tracks is governed by G.O. 26-D, Section 5. Public roads, highways, and streets crossing over tracks are subject to G.O. 26-D, Section 13. 12-1

The City coordinated a field diagnostic meeting on October 27, 2021 with CPUC, UPRR, and City staff in attendance. The diagnostic team discussed crossing designs and construction coordination between the City and UPRR. Proposed ultimate horizontal and vertical clearances meet or exceed CPUC GO 26-D requirements. CPUC will require the City to request authorization for the temporary vertical clearance of 21'-6" proposed during construction and notify UPRR of the requested variance.

UPRR designated the proposed new crossing as CPUC Crossing No. 003-11.05-AX and DOT No. 978171E.

Within 30 days after completion of the work under this order, UPRR shall notify the Federal Railroad Administration of the existence of the private, grade-separated, highway-rail crossing by submitting a United States Department of Transportation Crossing Inventory Form (FRA F6180.71) for the crossing. Concurrently UPRR shall provide a copy of the inventory form to CPUC Rail Safety Division (RSD), RCEB. The copies of the form may be submitted electronically to rceb@cpuc.ca.gov.

Within 30 days after construction of the new crossing, the City shall notify RCEB by submitting a completed Commission Standard Form G titled Report of Changes at Highway Grade Crossings and Separation. Form G requirements and forms can be obtained at the CPUC web site Form G page at www.cpuc.ca.gov/crossings. This report may be submitted electronically to rceb@cpuc.ca.gov as outlined on the web page.

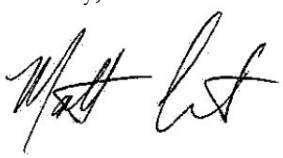
Hector Hernandez
SCH 2021120053
January 3, 2022

RCEB representatives are available to discuss any concerns or requirements regarding the proposed new, private, grade-separated crossing. Please continue to keep RCEB informed of the project's development. More information can be found at: http://www.cpuc.ca.gov/crossings.

12-1 (cont.)

Please continue to keep RCEB informed of the project's development. If you have any questions or require clarification on CPUC's role in rail crossings projects, you may contact Matthew Cervantes at matthew.cervantes@cpuc.ca.gov.

Sincerely,



Matthew Cervantes, PE
Senior Utilities Engineer - Specialist
Rail Crossings and Engineering Branch
Rail Safety Division

CC: Peggy Ygbuhay, pygbuhay@cpuc.ca.gov

RESPONSE TO COMMENT LETTER NO. 12

Matthew Cervantes, PE, Senior Utilities Engineer
California Public Utilities Commission
January 3, 2022

12-1 The commenter summarizes the proposed project, describes consultation that has already occurred between the project applicant, City, Union Pacific Railroad, and California Public Utilities Commission (CPUC), and notes the various procedures and approvals that the project will be subject to as it pertains to the proposed railroad crossing. The comment is acknowledged, and the project would comply with all applicable CPUC requirements prior to the construction of the rail overcrossing.

The commenter did not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

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COMMENT LETTER 13

LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

January 3, 2022

Ref. DOC 6393177

Mr. Hector Hernandez, Project Planner
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, CA 90660

Dear Mr. Hernandez:

NOI Response to Beverly Boulevard Warehouse Project

The Los Angeles County Sanitation Districts (Districts) received a Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration (MND) for the subject project on December 3, 2021. The proposed project is located within the jurisdictional boundaries of District No. 18. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Broadway Trunk Sewer, located in Broadway at Washington Boulevard. The Districts' 15-inch diameter trunk sewer has a capacity of 1.4 million gallons per day (mgd) and conveyed a peak flow of 0.5 mgd when last measured in 2019. 13-1

2. The expected average wastewater flow from the project site, described in the MND as a 2,500 square feet (sf) copy, print, and express ship store and a 357,903 sf warehouse/distribution building, which includes 5,000 sf of office space and 5,000 sf of mezzanine, is 9,948 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Program and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link. 13-2

3. The wastewater generated by the proposed project will be treated at the Los Coyotes Water Reclamation Plant located in the City of Cerritos, which has a capacity of 37.5 mgd and currently processes an average flow of 23.1 mgd, or the Joint Water Pollution Control Plant located in the City of Carson, which has a capacity of 400 mgd and currently processes an average flow of 249.8 mgd.

4. The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the Districts for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public Counter at (562) 908-4288, extension 2727. 13-3

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of the Districts' facilities. 13-4

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh

RESPONSE TO COMMENT LETTER NO. 13

Mandy Huffman, Environmental Planner
Los Angeles County Sanitation Districts
January 3, 2022

13-1 This comment provides information pertaining to the existing wastewater infrastructure that serves the project site. The commenter notes that the Los Angeles County Sanitation Districts (Districts') Broadway Trunk Sewer (located in Broadway at Washington Boulevard) is a 15-inch diameter trunk sewer that has a capacity of 1.4 million gallons per day (mgd) and conveyed a peak flow of 0.5 mgd. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

13-2 The commenter notes that the proposed project would generate 9,948 gallons of wastewater per day (gpd), based on the Districts' average wastewater generation factors. Section 4.19, *Utilities and Service Systems*, of the Draft IS/MND states that the project would result in 9,0973 gpd; this administrative/clerical error acknowledged and will be updated in the Final IS/MND. An increase to 9,948 gpd would not result in any substantive changes in the analysis or on the project's impacts related to the provision of wastewater services for the proposed project, nor would it have any substantive effect on the available treatment capacity at the Districts' wastewater treatment facilities.

The commenter has also indicated that the wastewater generated by the proposed project would be treated at either the Los Coyotes Water Reclamation Plant, located in the City of Cerritos, or the Joint Water Pollution Control Plant, located in the City of Carson. The commenter notes the capacity and average flow of both reclamation plants. This comment is acknowledged and accepted, and Section 4.19 of the Draft IS/MND has been updated to reflect these minor refinements for consistency. As such, impacts related to wastewater treatment facilities would continue to be less than significant.

These minor refinements have been made to Section 4.19, on page 4.19-2, and is reflected below and in Section 4.0, *Errata*, of the Final IS/MND. These minor changes will not result in new or substantially more severe impacts that would require the preparation of a supplemental MND or EIR.

Draft IS/MND Section 4.19, *Utilities and Service Systems* Pages 4.19-2

> The Los Angeles County Sanitation District (LACSD) oversees treatment facilities that serve the City of Pico Rivera. Wastewater generated by the proposed project would be treated at either the Los Coyotes Water Reclamation Plant (WRP) or the Joint Water Pollution Control Plant (JWPCP). WRP is located in the City of Cerritos, and provides primary, secondary, and tertiary treatment at a capacity of 37.5 million gallons of wastewater per day (mgd). JWPCP is located in the City of Carson, and provides primary, secondary, and tertiary treatment at a capacity of 400 mgd.
>
> As mentioned above, the project would entail the construction and development of a new warehouse and print shop facility on vacant land requiring new pipelines and utilities to accommodate the proposed new development. Given the current ~~remaining~~ capacity ~~of 37.4 mgd~~ available at the WRP and the JWPCP, and ~~an~~ the estimated increase of average water waste flow from the project site of approximately ~~9,0973~~ 9,948 gallons per day (gpd), sufficient capacity exists to serve the project.

13-3 It is acknowledged that payment of a sewer connection fee will be required before this project is permitted to discharge to the Districts' Sewerage System. This requirement is noted within Section 4.19, *Utilities and Service Systems* of the Draft IS/MND, which states that the project would be required to pay the standard wastewater connection fees and ongoing user fees to LACSD. The commenter does not raise any new CEQA

issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

13-4 This comment provides information regarding the Districts' basis for wastewater treatment capacities and policies related to regional growth within their service area. This comment is noted; the commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

SCAG
INNOVATING FOR A BETTER TOMORROW

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017
T: (213) 236-1800
www.scag.ca.gov

January 3, 2022

Mr. Hector Hernandez, Project Planner
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, California 90660
Phone: (562) 801-4340
E-mail: hhernandez@pico-rivera.org

RE: SCAG Comments on the Initial Study/Mitigated Negative Declaration for the Beverly Boulevard Warehouse Project [SCAG NO. IGR10539]

Dear Mr. Hernandez,

Thank you for submitting the Notice of Intent to adopt a Mitigated Negative Declaration (IS/MND) for the Beverly Boulevard Warehouse Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. The proposed project includes consists of the construction of a 357,903 square foot (sf) building that includes warehouse, distribution, and office facilities, a 2,500-sf print shop facility, and a total of 422 surface parking spaces on a 19.06-acre site.

14-1

Based on SCAG staff's review, the proposed project generally supports overall the goals of the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). SCAG staff comments are detailed in the attachment to this letter.

When available, please send project related documents and notices to IGR@scag.ca.gov. If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or IGR@scag.ca.gov. Thank you.

Sincerely,

Frank Wen, Ph.D.
Manager, Planning Strategy Department

COMMENTS ON THE NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR BEVERLY BOULEVARD WAREHOUSE PROJECT [SCAG NO. IGR10539]

SUMMARY

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies.

Based on SCAG staff review, the proposed project generally supports the applicable goals of the 2020 Connect SoCal, but the analysis in the IS/MND is not based on the growth forecasts adopted as part of the 2020 Connect SoCal.

CONNECT SOCAL GOALS

The SCAG Regional Council fully adopted Connect SoCal in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

SCAG CONNECT SOCAL GOALS	
Goal #1:	*Encourage regional economic prosperity and global competitiveness*
Goal #2:	*Improve mobility, accessibility, reliability and travel safety for people and goods*
Goal #3:	*Enhance the preservation, security, and resilience of the regional transportation system*
Goal #4:	*Increase person and goods movement and travel choices within the transportation system*
Goal #5:	*Reduce greenhouse gas emissions and improve air quality*
Goal #6:	*Support healthy and equitable communities*
Goal #7:	*Adapt to a changing climate and support an integrated regional development pattern and transportation network*
Goal #8:	*Leverage new transportation technologies and data-driven solutions that result in more efficient travel*
Goal #9:	*Encourage development of diverse housing types in areas that are supported by multiple transportation options*
Goal #10:	*Promote conservation of natural and agricultural lands and restoration of habitats*

14-1 (cont.)

Connect SoCal Strategies

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. To view Connect SoCal and the accompanying technical reports, please visit the Connect SoCal webpage. Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration. 14-1 (cont.)

The 2020 Connect SoCal also identifies a goods movement system in the SCAG region and develops strategies to address expected growth trends and demands in goods movement. For further information on the goods movement strategies, please see the 2020 Connect SoCal Goods Movement Technical Report.

For further information on industrial development and warehousing in Southern California, please see "Industrial Warehousing in the SCAG Region".

SCAG Staff Comments

Table 4.8-3 Project Consistency with the 2020-2045 RTP/SCS on page 4.8-11 of the IS/MND describes how the project goals are aligned or not aligned with 2020 Connect SoCal goals and strategies.

DEMOGRAPHICS AND GROWTH FORECASTS

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG's 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California's GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal's Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the Connect SoCal Demographics and Growth Forecast Technical Report. The growth forecasts for the region and applicable jurisdictions are below. 14-2

	Adopted SCAG Region Wide Forecasts				Adopted City of Pico Rivera Forecasts			
	Year 2020	**Year 2030**	**Year 2035**	**Year 2045**	**Year 2020**	**Year 2030**	**Year 2035**	**Year 2045**
Population	19,517,731	20,821,171	21,443,006	22,503,899	63,905	65,131	65,745	67,387
Households	6,333,458	6,902,821	7,170,110	7,633,451	16,778	17,526	17,858	18,475
Employment	8,695,427	9,303,627	9,566,384	10,048,822	25,294	25,892	26,194	27,150

14-2 (cont.)

SCAG Staff Comments

The fourth paragraph of Section 4.14 Population and Housing on page 4.14-1 of the IS/MND indicates that the population, housing, and employment trends and forecasts were not based on the most recently adopted SCAG 2020 Connect SoCal Regional Growth Forecasts. SCAG staff suggests revisiting this paragraph and citation to reference the above forecasts, as are included in the Demographics and Growth Forecast Technical report of the 2020 Connect SoCal.

MITIGATION

SCAG Staff Comments

14-3

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG's Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the PEIR webpage and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

RESPONSE TO COMMENT LETTER NO. 14

Frank Wen, Ph. D
Southern California Association of Governments
January 3, 2022

14-1 This comment provides introductory language and summarizes the applicable goals of the Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as 2020 Connect SoCal, and states that, based on SCAG staff's review, the proposed project generally supports the goals of 2020 Connect SoCal. The commenter also provides information regarding land use and transportation strategies identified by SCAG to implement the 2020 Connect SoCal policies. This comment is noted; the commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. Nevertheless, the City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

14-2 This comment summarizes the formative steps taken by SCAG to project the demographics and growth forecasts of the region through the year 2045. It provides information regarding the development of forecasts with a range of local jurisdictions and interested parties to project demographics at the neighborhood and regional levels. It also provides data from 2020 Connect SoCal specific to the City of Pico Rivera. This comment is acknowledged. The commenter does not raise any new CEQA issues or directly challenge any information provided in the Draft IS/MND. Nevertheless, the City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

14-3 This comment correctly states that the population, housing, and employment trends and forecasts used in the Draft IS/MND were not based on the most recently adopted SCAG 2020 Connect SoCal Regional Growth Forecasts. Revisions have been made to reflect the data from 2020 Connect SoCal in Section 4.14, *Population and Housing*, on pages 4.14-1 and 4.14-2, and is reflected below and in Section 4.0, *Errata*, of the Final IS/MND. These changes create consistency with SCAG's 2020 Connect SoCal. These refinements would not have a substantive effect on the project's potential to induce substantial unplanned growth within the project area, either directly or indirectly, and do not change any analyses or conclusions in the Draft IS/MND. Impacts related to population, housing and employment would continue to be less than significant.

Draft IS/MND Section 4.14, *Population and Housing*, Pages 4.14-1 and 4.14-2

> Potential population growth impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. The Southern California Association of Governments (SCAG) growth forecasts estimate the City's population to reach ~~69,100~~ 67,387 persons by ~~2040~~ 2045, representing a total increase of ~~5,700~~ 3,482 between ~~2016~~ 2020 and ~~2040~~ 2045.[3] SCAG's regional growth forecasts are based upon long-range development assumptions (i.e., General Plans) of the relevant jurisdiction. The project's anticipated population increase (481 persons) would represent approximately ~~8.4~~ 13.8 percent of the City's anticipated population growth by ~~2040~~ 2045, or ~~0.6~~ 0.7 percent of the City's projected population by ~~2040~~ 2045.
>
> Although the proposed project would result in direct population growth, project would not induce substantial population growth exceeding existing local conditions (~~0.7~~ 0.8 percent) or regional projections (~~0.5~~ 0.6 percent). The project does not eliminate a barrier to growth, but rather complies with the City's planned growth within the project area since it is consistent with the General Plan land use designation and Municipal Code zoning for the majority of the project site. As such, impacts in this regard would be less than significant.

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January 3rd, 2022

City of Pico Rivera
Attn: Hector Hernandez - Senior Planner

RE: 605 Warehouse Project - Initial Study and Mitigated Negative Declaration

These comments are being submitted in response to the proposed warehouse project between the San Gabriel River and Interstate 605, south of Beverly Boulevard.

The proposed mitigated negative declaration (MND) is insufficient substantively and as a matter of law, is inappropriate given the likelihood of significant environmental impacts that are not adequately studied or mitigated by the proposed mitigation measures. Therefore, the City should either reject the proposed MND or send the proposal back to the staff and the applicant to prepare a full environmental impact report (EIR). 15-1

<u>The Use Characteristics of the Warehouse Facility are Inadequately Defined for Purposes of CEQA Transportation Analysis and a Conditional Use Permit</u>

The majority of the site is planned for a "warehouse/distribution" facility of approximately 360,000 square feet, but the particular nature of this use is not defined. The traffic study is based on an assumption that the ultimate use will be a warehouse–i.e., that the Institute for Transportation Engineers Trip Generation Manual land use code number 150 will be applicable. Land Use Code 150 is for a traditional warehouse use, i.e., a place where packages are stored for wholesale distribution or for distribution to producers or manufacturers. This is specifically a "long-term storage" facility, according to the ITE manual. 15-2

However, the *zoning* designation here is for a "distribution plant and warehouse," according to the municipal code designation. This is a significant distinction, because of the vast

disparity between warehouse/distribution uses even in the ITE trip generation manual itself. The trip-per-unit figure for code 150 warehouses is 0.19; the trip-per-unit figures for distribution-focused warehouses, i.e., codes 155 and 156 are 1.37 and 0.64 respectively, representing significantly higher trip generation characteristics. If these uses are being permitted by the issuance of a conditional use permit, then the transportation analysis is inadequate both substantively and as a matter of law.

The applicant has not further defined the precise end-user, or even a range of possible end-users, for the project site. At the same time, by adopting the MND and granting a conditional use permit, the City would allow an entire range of "distribution plants and warehouses," including those that fall under codes 155 and 156 of the ITE manual. This includes e-commerce-type distribution facilities that generate a significant volume of traffic, and traffic of a particular type: vehicle trips into residential areas.

15-2 (cont.)

While the initial study's transportation study includes a VMT analysis, it is nevertheless still based on the ITE's Code 150 trip generation estimate of 0.19 trips per 1,000 square feet. (See Appendix F, pages 17-19). But the range of uses that will be allowed by issuing a conditional use permit and adopting this MND would include distribution centers and "last-mile"-type delivery stations, which are more often evaluated as "high-cube" warehouses with significantly higher trip generation characteristics. Importantly, even these ITE land use code designations are not typically treated as adequate, because of the unique nature of these e-commerce facilities. In other California localities, e-commerce applicants have conducted bespoke studies based on existing facilities in order to provide CEQA-compliant data for purposes of transportation analysis.

The IS/MND transportation analysis falls far short of this requirement. It uses the lowest-level of traffic generation to justify an approval that would allow a significantly more intense type of use. This is precisely what MNDs should *not* do, given CEQA's purpose of providing decision-makers and the public with adequate information to make an informed decision on potential environmental impacts. To be adequate, the City needs to study the full range of allowed uses, or, alternatively, condition the approvals to allow only those uses that were actually studied in the IS/MND. This issue alone is sufficient to require a rejection of the IS/MND, or imposition of conditions on the approval that would preclude development on the property of those uses which are more intense but were not studied.

15-2 (cont.)

It should be noted that this development is in particular need of a robust analysis that encompasses all uses because it is not an infill development, but instead is adding hundreds of thousands of square feet of new industrial use to greenfield, currently not used and not having been previously developed. Therefore, there is less allowance for replacing existing traffic.

<u>The Inadequate Transportation Analysis Also Impacts the Health Risk Assessment</u>

A significant proportion of the health risk assessment relies on assumptions of truck traffic and the related emissions calculations. (See Appendix G, PDF Page 2, 10). This results in a knock-on effect of inadequacy, because the calculations do not account for permitted uses that were not studied.

15-3

There are however additional problems with this analysis. Specifically, if the ultimate end-user is an e-commerce facility, particularly a "last-mile" type delivery station, then the vehicle emissions will actually travel through residential neighborhoods, closer to sensitive

receptors (e.g., children and seniors). This requires additional study not only because of the additional contact with sensitive receptors, but because of the nature of last-mile delivery traffic.

Delivery to consumers in neighborhoods means that trucks will be driving slowly and idling near to homes, making frequent stops and starts, and otherwise emitting greenhouse gases and other particulates not only on the project site, but consistently throughout the day in residential areas that are otherwise not zoned to account for such emissions.

15-3 (cont.)

<u>The IS/MND's Air Quality Analysis is Inadequate for Failure to Study Impacts on Sensitive Receptors and for Including Faulty Assumptions</u>

Somewhat surprisingly, the IS/MND does not bother with an in-depth air quality analysis, based on an initial finding of no potential for significant impact.

The MND fails to present important contextual information related to air quality conditions on the Project site and in the vicinity. Accurate and complete information pertaining to the setting of the Project and surrounding uses is critical to an evaluation of a Project's impact on the environment. *San Joaquin Raptor/Wildlife Center v. Stanislaus County* (1994) 27 Cal.App.4th 713, 728; see also *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 875 (incomplete description of the Project's environmental setting fails to set the stage for a discussion of significant effects). Here, the MND's deficiencies in describing the Project's setting undermine its adequacy as an informational document.

15-4

The MND notes that two residential neighborhoods are located near the site, but do not detail the distance. It is particularly important that the MND evaluate the air quality and health impacts of the proposed project on these sensitive receptors. In fact, CEQA requires an EIR to discuss the specific human health effects that would occur as a result of a project's significant air pollutant emissions. *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517-522. However,

the MND's analysis of toxic air contaminants and their health risks addresses only the increased health risk caused by stationary sources—diesel generators—and on the site itself, ignoring the potential for emissions caused from vehicles that will traverse regularly through residential areas, should the site be developed into an e-commerce delivery facility, as is possible given the zoning entitlement being sought. The MND fails to consider other health impacts from NOx and particulate matter.

Moreover, even though the diesel truck traffic generated by the anticipated warehouse uses would be substantial and poses significant health risks, the MND provides no analysis of the health risks of this increased truck traffic on nearby sensitive uses themselves. The MND must assess the health impacts of this additional traffic, which can be expected to be diesel trucks on these sensitive receptors.

15-4 (cont.)

It should be noted that the faulty transportation analysis is directly tied to the air quality analysis as well, and that a knock-on effect exists here in terms of the inadequacy of the air quality analysis. The air quality study expressly incorporates the assumptions of the transportation analysis, and therefore that inadequacy infects the air quality analysis as well. (See IS/MND at 4.3-10).

Conclusion

For the foregoing reasons, we respectfully request that the City reject the proposed IS/MND and deny the conditional use permit for the project or impose conditions on the ultimate use of the property that would justify the assumptions in the IS/MND.

15-5

Sincerely,

15-5
(cont.)

RESPONSE TO COMMENT LETTER NO. 15

Workers and Families for Better Pico Rivera
January 3, 2022

15-1 This comment provides an introduction to the comment letter, and the commenter opines that the City should reject the Draft IS/MND or prepare an EIR. It does not raise specific issues pertinent to the adequacy of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is required.

15-2 This comment states that the use characteristics of the proposed warehouse are inadequately defined for purposes of the CEQA transportation analysis and conditional use permit approval. The commenter states that the transportation operations analysis and the VMT impact analysis were inadequate based on the chosen Institute of Transportation Engineer's trip generation code and resulting trip rate, specifically related to the uses that would be permitted with the proposed zoning code amendment and CUP. The future tenants of the buildings are not currently known, could not reasonably be known, and were not known when the Draft IS/MND was prepared. It is common practice to utilize ITE Land Use Code 150 (Warehouse) when the building occupant is unknown. The ITE Land Use Code 150 (Warehouse) is the most general land use type under the industrial warehouse uses. The other warehousing land use types (Codes 154, 155, 156, and 157) are further defined as various types of high-cube warehouses based on specific uses (transload/short-term storage, fulfillment center, parcel hub, and cold storage). Choosing a more specific category would imply knowledge of the anticipated tenant or planned operations. With a lack of detailed information regarding planned site operations, it is general practice to utilize the general land use code.

The ITE Trip Generation Manual contains four (4) warehouse categories (Codes 154, 155, 156, and 157) other than Land Use Code 150 (Warehouse) excluding Code 151 which is a mini-warehouse self-storage. Since Land Use Code 155 includes data for both sorting and non-sorting facilities, this means that there are fifteen (15) sample trip rate data points for the other land uses codes during the daily, AM Peak Hour, and PM Peak Hour time periods. Fifty three percent of those rate date points are less than the Land Use Code 150 rates, thus indicating that Land Use Code 150 (Warehouse) is a reasonable assumption for use in cases where the building occupant is unknown.

While the future tenant is not known at this time, the project would be reviewed to ensure that the trip generation estimates assumed in the project's traffic analysis are consistent with the operations of the tenant that occupies the project site. Based on PF-1, the proposed traffic and circulation improvements for the project shall be predicated on a post opening traffic study to analyze left turn movements in and out of the development and the general operation of the driveway. This traffic study will include a traffic count of site traffic, thus allowing for the evaluation that the estimated site trips are consistent with post-construction activities. Therefore, no revisions and no further response are required.

15-3 This comment states that the inadequate transportation analysis impacts the health risk assessment. The commenter notes a "knock-on effect of inadequacy," where incorrect assumptions for trip generation in the VMT impact analysis and transportation analysis result in flaws in the health risk assessment because the calculations do not account for permitted uses that were not studied. The future tenants of the buildings are not currently known, could not reasonably be known, and were not known when the Draft IS/MND was prepared. The contention that the proposed warehouse could be used as a last-mile/e-commerce facility is speculative at best. Public Resources Code Section 21082.2 provides that "[a]rgument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly inaccurate or erroneous…is not substantial evidence." Accordingly, this comment is not supported by substantial evidence. In addition, as discussed in Response to Comment No. 15-2, the ITE trip generation rates used for the project are considered appropriate and reasonable. In addition, while the future tenant is not known at this time, the project would be reviewed

to ensure that the trip generation estimates assumed in the project's traffic analysis are consistent with the operations of the tenant that occupies the project site. Based on PF-1, the proposed traffic and circulation improvements for the project shall be predicated on a post opening traffic study to analyze left turn movements in and out of the development and the general operation of the driveway. This traffic study will include a traffic count of site traffic, thus allowing for the evaluation that the estimated site trips are consistent with post-construction activities. As such, the health risk analysis provided in the Draft IS/MND is supported by substantial evidence, and no further response is required.

15-4 The commenter states the Draft IS/MND fails to present important contextual information related to the environmental setting of the project. The commenter also claims the Draft IS/MND fails to state the distance to the nearest sensitive receptor and does not address health risks associated with diesel truck traffic. Further, the commenter claims the Draft IS/MND transportation analysis is faulty and, therefore, the air quality analysis is also inadequate.

According to CEQA Guidelines, the environmental setting of the project is not required for MNDs; refer to CEQA Guidelines Section 15071. Rather, a description of the environmental setting is required for EIRs; refer to CEQA Guidelines Section 15125. The two court cases cited by the commenter (San Joaquin Raptor/Wildlife Center v. Stanislaus County (1994) 27 Cal.App.4th 713, 728 and Friends of the Eel River v. Sonoma County Water Agency (2003) 108 Cal.App.4th 859, 875) both involved EIRs, not MNDs. Regardless, the Draft IS/MND acknowledges the nearest sensitive receptor located adjacent to the south of the project site; refer to page 4.3-13. Additionally, health risks associated with project-generated diesel truck traffic are analyzed on Draft IS/MND pages 4.3-15 through 4.3-18. The Draft IS/MND concluded that, based on substantial evidence, potential health risks from project-generated diesel truck traffic would be less than significant. This comment does not provide any substantial evidence that further review under CEQA is required or that the project may have a significant environmental impact. As analyzed in the Draft IS/MND, the whole of the record supports the conclusion that the project's impacts are less than significant. Refer to Response to Comment No. 15-2, above, regarding the trip generation rates utilized in the transportation analysis.

15-5 This comment requests that, based on the foregoing comments, the City reject the proposed Draft IS/MND and deny the conditional use permit or impose conditions on the ultimate use of the property that would justify the assumptions in the Draft IS/MND. The responses to the individual technical comments above demonstrate that the analysis and conclusions in the Draft IS/MND are supported by substantial evidence. The comment does not raise specific issues pertinent to the content or adequacy of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is required.

From: Toan Duong [mailto:TDUONG@dpw.lacounty.gov]
Sent: Thursday, January 27, 2022 10:44 AM
To: Hector Hernandez; Daniel Keyribaryan
Cc: Aracely Lasso; Omar Ahmed; Eden (Mulu) Berhan; Jasper Junio; Sam Chinn
Subject: RE: RPPL2021012545 - Beverly Boulevard Warehouse Project - Notice of Intent IS/MND

COMMENT LETTER 16

Dear Mr. Hernandez:

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)
BEVERLY BOULEVARD WAREHOUSE PROJECT
CITY OF PICO RIVERA
ENVIRONMENTAL PLAN (RPPL2021012545)

I apologize for the delayed response for this project. As requested, Public Works reviewed the IS/MND for this project. The project proposes the construction of a warehousing/distribution building and a print shop facility on the 19.06-acre project site within the City of Pico Rivera. The new warehousing development would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility will be located within the northern portion of the site and would include29 surface parking spaces. Also proposed is a temporary construction and emergency access from the south using Eduardo Avenue in the unincorporated area.

Public Works has the following comments for your consideration. 16-1

1. The project proposes a future 10-foot wide, 500-foot-long trail segment along the easterly and southerly boundaries of the site for implementation of future trail improvements to connect the Whittier Greenway Trail to the San Gabriel River. The Los Angeles County Flood Control District (LACFCD) recommends a minimum 12-foot-wide trail to meet Public Works standard design guidelines for multi-use trails that accommodate bicycles.

2. Any modification to the LACFCD storm drains facilities will require a connection/construction permit from the LACFCD prior to construction commencing. If needed, a hydraulic analysis and hydrology should be submitted to Public Works for review and approval to ensure no adverse impacts to LACFCD downstream storm drain facilities. For flood permit information, please contact Eden Berhan of Public Works, Land Development Division, Flood Permit Section at (626) 458-4936 or eberhan@pw.lacounty.gov. 16-2

3. LACFCD shall not be responsible for the operations and maintenance of any onsite stormwater pretreatment systems proposed for water quality purposes. 16-3

For questions regarding comments 1 to 3 please contact Omar Ahmed of Public Works, Stormwater Planning Division at (626) 300-3927 or omahmed@dpw.lacounty.gov.

4. Any works affecting the public street within the unincorporated area of the County of Los Angeles will require road permit from Public Works. For road permit information, please contact Jasper Junio of Public Works, Land Development Division, Road Permit Section at (626) 607-6847 or jjunio@pw.lacounty.gov. 16-4

If you have any other questions or require additional information, please let me know.

16-4 (cont)

Regards,

Toan Duong
Civil Engineer
Los Angeles County Public Works
Office: (626) 458-4921

Public Works reopened its offices to the public. Our HQ office hours are Monday through Thursday, 7 a.m. – 5 p.m. ***Masks and distancing will be required*** *of all visitors and staff. You can avoid waiting in line by scheduling a virtual appointment now. Click* ***here*** *to schedule yours!*

RESPONSE TO COMMENT LETTER NO. 16

Toan Duong, Land Development
Los Angeles County Department of Public Works
January 27, 2022

16-1 The commenter summarizes the project description and also suggests to increase the width of the right-of-way for a planned future trail on the project site from 10 feet to 12 feet. This comment is acknowledged, and Section 2.0, *Project Description*, of the Draft IS/MND has been updated to reflect this minor revision, and is reflected below and in Section 4.0, *Errata*, of the Final IS/MND. This change would not result in new or substantially more severe impacts that would require the preparation of a supplemental MND or EIR. The commenter does not raise new environmental information or directly challenge information provided in the Draft IS/MND, and the commenter has not identified any basis for withdrawal, revision or recirculation of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

Draft IS/MND Section 2.0, *Project Description*, Page 2-11

> It should be noted that as a condition of approval the project proposes to accommodate a future ~~10~~12-foot wide, 500-foot long trail segment that would traverse the project site in an east-west orientation, generally along the easterly and southerly boundaries of the site; refer to Exhibit 2-4. This right-of-way would be reserved for implementation of future trail improvements intended to connect the existing Whittier Greenway Trail (a 4.5-mile commuter and recreational path and bikeway located in Whittier, east of the project site) to the San Gabriel River Trail (west of the project site). Additional improvements outside of project limits would be required to complete this connection, including overcrossings of I-605 and the UPRR alignment. The implementation of this trail connection is not a part of this proposed project, and would be a future, separate action subject to standalone environmental review under CEQA at a later time.

16-2 The commenter states that any modification to the Los Angeles County Flood Control District (LACFCD) storm drain facilities would require a connection/construction permit prior to construction, and, if needed, any hydraulic analysis/hydrology should be submitted to the Los Angeles County Department of Public Works for review and approval. This comment is acknowledged and accepted; any proposed storm drain connections would comply with existing LACFCD standards prior to construction. The commenter does not raise new environmental information or directly challenge information provided in the Draft IS/MND, and the commenter has not identified any basis for withdrawal, revision or recirculation of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

16-3 The commenter states that LACFCD shall not be responsible for the operations and maintenance of any on-site stormwater pretreatment systems, and provides a point of contact for any questions regarding comments 16-1 through 16-3. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft IS/MND, and the commenter has not identified any basis for withdrawal, revision or recirculation of the Draft IS/MND. The City of Pico Rivera decision makers will consider all comments on the proposed project. No further response is necessary.

16-4 The commenter notes that any work affecting public streets within unincorporated Los Angeles County would require a road permit from the County. This comment also provides the contact information for the Los Angeles County Department of Public Works, Land Development Division, Road Permit Section. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft IS/MND, and the commenter has not identified any basis for

withdrawal, revision or recirculation of the Draft IS/MND. The City of Pico Rivera decision makers will con consider all comments on the proposed project. No further response is necessary.

3.0 Mitigation Monitoring and Reporting Program

3.0 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring plan. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring plan must be designed to ensure compliance during project implementation (*Public Resources Code* Section 21081.6).

In compliance with *Public Resources Code* Section 21081.6, the attached *Mitigation Monitoring and Reporting Program* has been prepared for the Beverly Boulevard Warehouse Project. This *Mitigation Monitoring and Reporting Program* is intended to provide verification that all mitigation measures identified in the Initial Study prepared for the project are monitored and reported. Monitoring will include 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the project file.

This *Mitigation Monitoring and Reporting Program* delineates responsibilities for monitoring the project, but also allows the City of Pico Rivera and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the *Mitigation Monitoring and Reporting Program*, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. Such changes could include reassignment of monitoring and reporting responsibilities, plan redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in *CEQA Guidelines* Section 15162. No change will be permitted unless the *Mitigation Monitoring and Reporting Program* continues to satisfy the requirements of *Public Resources Code* Section 21081.6.

.

MITIGATION MONITORING AND REPORTING CHECKLIST

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
AESTHETICS							
AES-1	Construction equipment staging areas shall utilize appropriate screening (i.e., temporary fencing with opaque material) to shield public views of construction equipment and material. Prior to issuance of a grading permit, the City of Pico Rivera shall verify that staging locations are identified on final grading/development plans and that appropriate perimeter screening is included as a construction specification.	Review and Approval of Final Grading and Building Plans	Prior to Issuance of Grading Permit	City of Pico Rivera			
BIOLOGICAL RESOURCES							
BIO-1	If ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season (nesting season generally extends from January 1 - August 31), a pre-construction clearance survey for nesting birds shall be conducted within three days prior to any vegetation removal or ground disturbing activities. The biologist conducting the clearance survey shall document the negative results if no active bird nests are observed on the project site during the clearance survey with a brief letter report indicating that no impacts to active bird nests would occur before construction can proceed. If an active nest is found, the bird species should be identified, and a "no-disturbance" buffer should be established around the active nest. The size of the "no-disturbance" buffer should be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. A qualified biologist shall be present to monitor the active nest to	Completion of Pre-Construction Survey for Nesting Birds	No More Than Three Days Prior to the Start of Any Vegetation Removal or Ground Disturbing Activities	City of Pico Rivera; Project Biologist			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new nests in the restricted area. Results of the pre-construction survey and any subsequent monitoring shall be provided to the City of Pico Rivera, California Department of Fish and Wildlife (CDFW), and other appropriate agencies as required by Federal, state, and local requirements.						
CULTURAL RESOURCES							
CUL-1	During construction, archaeological and Native American monitoring shall be conducted to minimize impacts related to the potential discovery of previously unknown archaeological/tribal cultural resources. If evidence of subsurface cultural resources is found during excavation and other ground-breaking activities, all work within 50 feet of the discovery shall cease and the construction contractor shall contact the City of Pico Rivera. With direction from the City and in coordination with the Los Angeles County Archaeological Society and local Native American organizations, as necessary, the archaeologist shall evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted, and in consultation with the Native American monitor, the archaeologist shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.	During Construction Activities	During Construction, in the Event Archaeological Resources are Encountered	City of Pico Rivera; Project Archaeologist; Native American Tribes (as applicable); Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
GEOLOGY AND SOILS							
GEO-1	Prior to issuance of building permits and subject to Site Plan Review, the project applicant shall prepare a site-specific design-level geotechnical/soils report which addresses structural and geotechnical conditions at the project site that shall be subject to review and approval by the City of Pico Rivera City Engineer. The geotechnical report shall address soil stability, including liquefaction, and shall address potential impacts during earthquakes. Additionally, the City of Pico Rivera City Engineer shall ensure that all improvements conform to existing building requirements of the California Building Code (CBC) in order to minimize the potential for damage and major injury during a seismic event. The geotechnical/soils report shall include specific design measures, which are based on the determination of Site Classification and Seismic Design Categories, specific to the project site. Moreover, design and construction of the proposed project shall comply with existing City standards, including Chapter 15.42 (Referenced Standards Code) of Title 15 (Buildings and Construction), of the Pico Rivera Municipal Code.	Review and Approval of Geotechnical/ Soils Report	Prior to Issuance of Building Permits	City of Pico Rivera City Engineer, Project Applicant			
GEO-2	Prior to the start of ground-disturbing activities, a professional paleontologist who meets the qualification standards of the Society of Vertebrate Paleontology (project paleontologist) shall be retained to provide paleontological monitoring assistance, and this requirement shall be indicated on project plans and specifications. Construction monitoring shall be conducted by a qualified paleontological monitor overseen by the project paleontologist. Monitoring shall entail the visual inspection of excavated areas greater than eight feet below the ground surface (bgs) during project-related ground-disturbing activities.	Review and Approval of Paleontological Resource Mitigation and Monitoring Plan	Prior to During Ground-Disturbing Activities;	City of Pico Rivera; Project Paleontologist; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	Daily monitoring activities shall be documented on field forms accompanied with photographs of activities as well as photographs of soils, sediments, and fossils, if any. In the event a potentially significant paleontological resource is encountered during ground-disturbing activities, the contractor shall stop construction within 25 feet of the discovery and the project paleontologist shall evaluate the significance of the resource. Additional recommendations may be made at that time. If the resource is found to be significant, the paleontologist shall systematically remove it from the site for laboratory preparation, which may entail the stabilization of the resource with glues and consolidants, as needed, and separation from sedimentary matrix, if necessary. Following laboratory preparation, the resource would be identified to the lowest taxonomic level, cataloged, and inventoried in anticipation of curation. All collected and prepared resources would be curated and stored in an accredited repository, such as the Natural History Museum of Los Angeles County or the Western Science Center of Hemet. At the conclusion of all construction monitoring for the project, the project paleontologist shall prepare a report summarizing the monitoring efforts and results, including documentation of paleontological discoveries, if any. A final copy of the report shall be provided to the City of Pico Rivera and the accredited repository.						
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	The project applicant shall retain a Phase II/Site Characterization Specialist to prepare a Soil Management Plan prior to the issuance of any grading permit for the proposed project. The Phase II/Site Characterization Specialist shall define the	Prior to Site Plan Review	Prior to Issuance of Grading Permit	City of Pico Rivera; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	extent of on-site contamination associated with the Recognized Environmental Condition (REC) and Other Environmental Features (OEFs) identified in the *Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California* prepared by Roux Associates, Inc. (dated July 2, 2021). These REC and OEFs pertain to railroad activities and historical uses. The Specialist shall recommend remediation, as necessary, per the standards of, the Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and other agencies as applicable. The Soil Management Plan shall identify necessary sampling efforts, and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan shall also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. The Soil Management Plan would be prepared in consultation with applicable regulatory agencies (e.g., Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board) and is anticipated to include contaminated soil removal to ensure compliance with existing U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSL), California Department of Toxic Substances Control (DTSC) Screening Levels (SL), and California background levels. The handling and/or disposal of contaminated soils shall comply with all federal, state, and local laws and regulations.						
NOISE							

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
NOI-1	Prior to issuance of any grading or building permit, the project applicant shall demonstrate, to the satisfaction of the City of Pico Rivera City Engineer that the project complies with the following: • Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices • Property owners and occupants located within 1,000 feet of the project boundary shall be sent a notice, at least 15 days prior to commencement of construction, regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the City of Pico Rivera Public Works Department prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints. • The construction contractor shall provide evidence that a construction staff member will be designated as a Noise Disturbance Coordinator and will be present on-site during construction activities. The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City	Review and Approval of Grading Plan	Prior to Issuance of Grading or Building Permit	City of Pico Rivera City Engineer; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City of Pico Rivera Public Works Department. All notices that are sent to residential units immediately surrounding the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator. • The project applicant shall demonstrate to the satisfaction of the City of Pico Rivera City Engineer that construction noise reduction methods shall be used, including but not limited to, shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and the use of electric air compressors and similar power tools, to the extent feasible. • During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. • In compliance with Los Angeles County Code Section 12.08.440, construction shall only occur between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday, with no work permitted on Sundays or holidays.						
NOI-2	In order to reduce construction noise, a temporary noise barrier or enclosure shall be used along the southern and southwestern portion of the project site to	Review and Approval of Project Plans	During Construction Activities	City of Pico Rivera City Engineer;			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	break the line of sight between the construction equipment and the adjacent residences; Assessor's Parcel Number (APN) 8130-023-011, 8130-023-012, and 8130-023-017. The temporary noise barrier shall have a sound transmission class (STC) of 20 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. In order to achieve this, the barrier may consist of 3-inch steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch-thick fiberglass blanket, a half-inch-thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding with a heavy duct seal around the perimeter. The length, height, and location of noise control barrier walls shall be adequate to assure proper acoustical performance. In addition, to avoid objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with American Society for Testing and Materials Test Method C423. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion. A provision for this noise attenuation feature shall be indicated on project plans and specifications for verification by the City of Pico Rivera City Engineer.			Construction Contractor			
NOI-3	Prior to issuance of a grading permit, the project applicant shall prepare a paving control plan to ensure that the paving construction phase does not result in damage to existing residential structures to the south of the project site. The paving control plan shall be subject to approval by the City of Pico Rivera City Engineer. To reduce groundborne vibration levels, the paving control plan shall stipulate that static (non-	Review and Approval of Project Plans	Prior to Issuance of a Grading Permit	City of Pico Rivera City Engineer; Project Applicant			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	vibratory) rollers be used, as an alternative to vibratory rollers, within 26 feet of the southern residential structures (Assessor's Parcel Numbers [APNs] 8130-023-017, 8130-023-012, and 8130-023-011). Vibratory roller operations shall be prohibited within 26 feet of APNs 8130-023-017, 8130-023-012, and 8130-023-011.						
TRANSPORTATION							
TR-1	Prior to the initiation of construction, the City of Pico Rivera shall ensure that a Traffic Management Plan (TMP) has been prepared for the proposed project and incorporated into the final project plans, specifications, and estimates (PS&E). The TMP shall include measures to minimize the potential safety impact during the short-term construction process, when partial lane closures may be required. It shall include, but not be limited to, measures such as construction signage, pedestrian protection, limitations on timing for lane closures to avoid peak hours, temporary striping plans, construction vehicle routing plans, and the need for a construction flag person to direct traffic during heavy equipment use. The TMP shall be incorporated into project specifications for verification prior to final plan approval.	Review and Approval of Transportation Management Plan	Prior to Initiation of Construction	City of Pico Rivera; Project Applicant; Construction Contractor			
PF-1	The proposed traffic and circulation improvements for the project shall be predicated on a post opening traffic study provided by the applicant's traffic engineer or a traffic engineer selected by the City of Pico Rivera to analyze left turn movements in and out of the development and the general operation of the driveway. The study is to include a queuing analysis and gap study. If the study finds that left turn gaps are not adequate, left turn restrictions shall be implemented. A post opening traffic will also be required after construction of the I-605/Beverly	Review and Approval of Post Opening Traffic Study	After Project Opening	City of Pico Rivera; Caltrans; Project Applicant			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	Boulevard Interchange improvement project if the development opening day occurs prior to interchange improvement implementation.						

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4.0 Errata to the Draft IS/MND

4.0 ERRATA TO THE DRAFT IS/MND

The Draft IS/MND text changes resulting from public comments on the Draft IS/MND, or additional information received during the public review period, are detailed below. These changes do not affect the Draft IS/MND's overall conclusions, rather, provide clarification, amplification, and/or insignificant modifications. Further, the text changes do not warrant Draft IS/MND recirculation pursuant to CEQA Guidelines Section 15088.5. None of the changes or information provided in the comments reflect a new significant environmental impact, a substantial increase in the severity of an environmental impact for which mitigation is not proposed, or a new feasible alternative or mitigation measure that would clearly lessen significant environmental impacts but is not adopted. In addition, the changes do not reflect a fundamentally flawed or conclusory Draft IS/MND. Text changes are merely intended to clarify, amplify, or correct information in the Draft IS/MND, as initiated by the Lead Agency or due to environmental points raised in the comment letters. Therefore, this Final IS/MND is not subject to recirculation prior to adoption.

Draft IS/MND text changes are presented in a box, with added text indicated by double-underlining and deleted text indicated by strike through, as follows:

~~Deleted text~~ Added text

Draft IS/MND text changes are presented below according to Draft IS/MND section, page, and, where appropriate, paragraph.

SECTION 2.4 PROJECT CHARACTERISTICS

Draft IS/MND page 2-11, is revised in the Final IS/MND, as indicated below.

It should be noted that as a condition of approval the project proposes to accommodate a future ~~10~~12-foot wide, 500-foot long trail segment that would traverse the project site in an east-west orientation, generally along the easterly and southerly boundaries of the site; refer to Exhibit 2-4. This right-of-way would be reserved for implementation of future trail improvements intended to connect the existing Whittier Greenway Trail (a 4.5-mile commuter and recreational path and bikeway located in Whittier, east of the project site) to the San Gabriel River Trail (west of the project site). Additional improvements outside of project limits would be required to complete this connection, including overcrossings of I-605 and the UPRR alignment. The implementation of this trail connection is not a part of this proposed project, and would be a future, separate action subject to standalone environmental review under CEQA at a later time.

Draft IS/MND page 2-12, is revised in the Final IS/MND, as indicated below.

CONSTRUCTION

Project construction is anticipated to occur in one phase for a duration of ~~16~~ 17 months, starting in June 2022 and ending in October 2023. Construction staging would occur within project boundaries. Construction activities would include grading, paving, building construction, and painting. The first four months would include installation of the vehicular/bicycle/pedestrian bridge. Construction access would be provided along Eduardo Avenue for four months until the vehicular/bicycle/pedestrian bridge is constructed providing access from Beverly Boulevard. Once the bridge is constructed, Eduardo Avenue would no longer be used for construction access. On-site grading activities

would occur for a duration of three months and would include 60,000 cubic yards of cut and 10,000 cubic yards of fill. Building construction and ancillary improvements would continue during the remaining 10 months.

SECTION 4.1 AESTHETICS

Draft IS/MND page 4.1-2 is revised in the Final IS/MND, as indicates below.

Short Term Impacts

During the construction phase of the project, which is anticipated to occur for a duration of ~~16~~ 17 months, clearing, grading, and building activities would be visible to viewers from existing trails, surrounding land uses, and roadways. Construction sites are generally regarded as aesthetically unpleasant. As discussed in Section 2.4, Project Characteristics, construction staging would occur within project site boundaries. However, for pedestrians and bicyclists traveling along the San Gabriel River Bicycle Path, construction activities associated with the project could result in temporary impacts to the existing foreground views of the distant Santa Monica Mountains to the west and San Gabriel Mountains to the north. Although views towards the scenic resources and project site may temporarily be altered by ground disturbance, construction equipment, and supplies/stockpiles, these potential impacts would be short-term in nature and would cease upon completion of the construction phase. Mitigation Measure AES-1 would require construction staging areas include opaque screening materials to shield public views toward the site throughout the construction process. With implementation of this mitigation measure, short-term construction impacts would be less than significant.

SECTION 4.3 AIR QUALITY

Draft IS/MND pages 4.3-8 and 4.3-9, are revised in the Final IS/MND, as indicated below.

Short-Term Construction Emissions

The project involves construction activities associated with cleanup activities, grading, on-site earthwork, building construction, paving, and architectural coating. The project would be constructed over approximately 17 months. The proposed earthwork would involve approximately 60,000 cubic yards of cut and 10,000 cubic yards of fill, resulting in approximately 65,000 cubic yards of import and 2,000 cubic yards of export. As discussed in Section 4.9, Hazards and Hazardous Materials, the project site may include contaminated soil associated with on-site railroad activities and/or historical uses. Pursuant to Mitigation Measure HAZ-1, prior to the issuance of any grading permit for the project, the project applicant would retain a Phase II/Site Characterization Specialist to identify the extent of on-site contamination and necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. To provide a conservative analysis, it was assumed that soil cleanup activities would result in approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil export in addition to the 2,000 cubic yards of regular export and the same amount of regular soil import for backfilling. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site.[1] The analysis of daily construction emissions has been prepared utilizing CalEEMod. An individual

1 While Chapter 18.42 of the City's Municipal Code allows for construction activities to occur between seven a.m. and seven p.m., it is anticipated that construction equipment would not be used during every hour of the day. Rather, consistent with industry standards and typical construction practices, it is assumed that each piece of equipment listed would operate up to 8 total hours per day. For example,

CalEEMod run was compiled for the project's construction emissions; refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for the CalEEMod outputs and results. Table 4.3-2, *Construction Emissions*, presents the anticipated daily short-term construction emissions.

Table 4.3-2
Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Emissions[2,3]						
Year 1	~~7.056~~6.72	~~95.01~~82.03	51.06	~~0.23~~0.18	~~12.78~~11.33	~~6.29~~5.83
Year 2	~~70.34~~74.71	47.40	58.64	0.14	~~6.73~~7.07	3.03
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: ROG = reactive organic gases; NO_X = nitrous oxides; CO = carbon monoxide; SO_2 = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

1. Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case.
2. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.
3. The project's 17-month construction schedule would occur over two calendar years.

Refer to Appendix A, *Air Quality/Greenhouse Gas /Energy Data*, for assumptions used in this analysis.

Draft IS/MND page 4.3-11, is revised in the Final IS/MND, as indicated below.

Total Operational Emissions

As shown in Table 4.3-3, the total operational emissions for both summer and winter would not exceed established SCAQMD thresholds. Nevertheless, the project would be required to comply with SCAQMD Rule 2305 – Warehouse Indirect Source Rule, recently adopted in May 2021. Total operational emissions would be further reduced by implementing emission reduction measures established in Rule 2305. Therefore, impacts in this regard would be less than significant.

Draft IS/MND pages 4.3-13 and 4.3-14, are revised in the Final IS/MND, as indicated below.

Construction

Although the site is approximately 19 acres, the total acres disturbed per day is based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. Based off the CalEEMod results, the project would disturb approximately ~~297~~594 acres over ~~66~~132 days (4.5 acres per day). Therefore, the LST thresholds interpolated from the two acres and five acres thresholds were utilized for the construction LST analysis. As noted above, the closest sensitive receptor to the project site is a residential property adjacent to the south of the project's construction limits. This sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to

during grading operations, it can be reasonably inferred that water trucks would not operate continuously over a 12-hour period but would instead be used as necessary to minimize fugitive dust. In fact, most pieces of equipment likely would operate for fewer hours per day than indicated in the modeling.

sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD LST Methodology, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. As the nearest sensitive use is located adjacent to the project site, the lowest LST values of 25 meters were utilized. Table 4.3-4, *Localized Significance of Construction Emissions*, shows the construction-related emissions with incorporation of SCAQMD Rule 402 and 403. It is noted that the localized emissions presented in Table 4.3-4 are less than those in Table 4.3-1 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As seen in Table 4.3-4, on-site emissions with SCAQMD rules applied would not exceed the LSTs for SRA 5.

Table 4.3-4
Localized Significance of Construction Emissions

Source	Pollutant (pounds/day)[4]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 1				
On-Site Construction Emissions with SCAQMD Rules Applied[2]	~~62.92~~62.93	41.71	~~8.90~~8.88	~~5.07~~5.06
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Year 2				
On-Site Construction Emissions with SCAQMD Rules Applied[3]	31.37	35.93	1.39	1.30
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately 4.5 acres; therefore, thresholds interpolated from 2-acre and 5-acre thresholds were used), the distance to sensitive receptors, and the source receptor area (SRA 5).
2. For construction year 1, the grading phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
3. For construction year 2, the building construction phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
4. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.

Refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for detailed model input/output data.

SECTION 4.4 BIOLOGICAL RESOURCES

Draft IS/MND, page 4.4-3 and 4.4-4 is revised in the Final IS/MND, as indicated below.

As shown in Table 4.4-1, the project would permanently impact approximately 0.05-acre (382 linear feet) of Corps/RWQCB jurisdiction (non-wetland waters of the U.S.) and approximately 0.1~~8~~9-acre (382 linear feet) of CDFW Streambed, which would be removed as part of the project. These impacts would occur as part of impacts to Drainage 1. Due to its location at the northeastern perimeter of the project site, Drainage 2 would not be impacted by the project. Based on the analysis conducted for the project site and proposed improvements, the project applicant shall be required to obtain a Preliminary Jurisdictional Determination (PJD) from the Corps and obtain a Clean Water Act Section 404 Permit (Nationwide Permit No. 39), a Section 1602 Streambed Alteration Agreement from the CDFW, and a Clean Water Act Section 401 Water Quality Certification from the Corps or a Waste Discharge

Requirements (WDR) from the RWQCB. ~~Upon obtaining the required permits~~ Through the regulatory permitting process, the applicant would consult with the resource agencies to determine and implement applicable compensatory mitigation as required under existing Federal and State law; thus, impacts in this regard would be less than significant.

SECTION 4.6 ENERGY

Draft IS/MND, page 4.6-5 is revised in the Final IS/MND, as indicated below.

Less Than Significant Impact. The project's estimated energy consumption is summarized in Table 4.6-1, *Project and Countywide Energy Consumption*. As shown in Table 4.6-1, the project's energy usage would constitute an approximate 0.0031 percent increase over Los Angeles County's typical annual electricity consumption and an approximate 0.0002 percent increase over Los Angeles County's typical annual natural gas consumption. The project's construction and operational vehicle fuel consumption would increase Los Angeles County's consumption by ~~0.0221~~0.0259 percent and 0.0058 percent, respectively (Criterion 1).

Table 4.6-1
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	Los Angeles County Annual Energy Consumption[2]	Percentage Increase Countywide[2]
Electricity Consumption	1,460 MWh	46,556,118 MWh	0.0031%
Natural Gas Consumption	3,119 therms	1,812,591,714 therms	0.0002%
Fuel Consumption			
• Construction Fuel Consumption[3]	~~134,297~~157,856 gallons	608,470,142 gallons	~~0.0221~~0.0259%
• Operational Automotive Fuel Consumption[3]	224,447 gallons	3,873,708,021 gallons	0.0058%

Notes:
1. As modeled in CalEEMod version 2020.4.0.
2. The project increases in electricity and natural gas consumption are compared to the total consumption in Los Angeles County in 2019. The project increases in automotive fuel consumption are compared with the projected Countywide fuel consumption in 2022. Los Angeles County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms. energy.ca.gov/elecbycounty.aspx, accessed October 5, 2020. Los Angeles County natural gas consumption data source: California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy. ca.gov/gasbycounty.aspx, accessed October 5, 2020.
3. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2017 model.

Refer to Appendix A, for assumptions used in this analysis.

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading, building construction, paving, and architectural coating. As indicated in Table 4.6-1, the overall fuel consumption during project construction would be approximately ~~134,297~~157,856 gallons, which would result in a nominal increase

(~~0.0221~~0.0259 percent) in fuel use in the County. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (Criterion 2).

SECTION 4.8 GREENHOUSE GAS EMISSIONS

Draft IS/MND, page 4.8-6 is revised in the Final IS/MND, as indicated below.

Table 4.8-1
Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e
	Metric Tons/yr[1]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	
Direct Emissions						
• Construction • (total of ~~2,207.84~~2,366.40 $MTCO_2e$ amortized over 30 years)	~~72.13~~77.34	0.01	~~0.28~~0.34	<0.01	~~1.18~~1.20	~~73.59~~78.88
• Area Source	0.02	0.00	0.00	0.00	0.00	0.02
• Mobile Source	1,649.07	0.06	1.61	0.17	49.29	1,699.97
Total Direct Emissions[3]	***~~1,721.22~~1,726.43***	***0.08***	***~~1.89~~1.95***	***0.17***	***~~50.47~~50.49***	***~~1,773.58~~1,778.87***
Indirect Emissions						
• Energy	275.54	0.02	0.56	<0.01	0.88	276.98
• Solid Waste Generation	34.43	2.03	50.87	0.00	0.00	85.30
• Water Demand	179.14	2.18	54.39	0.05	15.70	249.23
Total Indirect Emissions[3]	***489.11***	***4.23***	***105.82***	***0.06***	***16.58***	***611.51***
Total Project-Related Emissions[3]	***~~2,385.09~~2,390.38 $MTCO_2e$/year***					
GHG Emissions Threshold	***10,000.00 $MTCO_2e$/year***					
GHG Emissions Exceed Threshold?	***No***					

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2020.4.0 (CalEEMod) computer model.
2. CO_2 Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed September 2020.
3. Totals may be slightly off due to rounding.
4. Emission reductions applied in the CalEEMod model include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code and the 2019 CALGreen Code. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources.

Refer to Appendix A, for detailed model input/output data.

Direct Project-Related Sources of Greenhouse Gases

- *Construction Emissions*. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[2] As shown in Table 4.8-1, the proposed

[2] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (SCAQMD). SCAQMD, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009.

project would result in ~~73.59~~78.88 $MTCO_2e$ per year (amortized over 30 years), which represents a total of ~~2,207.84~~2,366.40 $MTCO_2e$ from construction activities.

Draft IS/MND, page 4.8-7 is revised in the Final IS/MND, as indicated below.

Total Project-Related Sources of Greenhouse Gases

As shown in Table 4.8-1, the total amount of proposed project related GHG emissions from direct and indirect sources combined would total ~~2,385.09~~2,390.38 $MTCO_2e$ per year, which is below the SCAQMD GHG threshold of 10,000 $MTCO_2e$ per year. Thus, impacts in this regard would be less than significant.

SECTION 4.9 HAZARDS AND HAZARDOUS MATERIALS

Draft IS/MND page 4.9-3 is revised in the Final IS/MND, as indicated below.

Railroad Activities

Based on the Phase I ESA prepared for the site, a Union Pacific Railroad (UPRR) right-of-way is located adjacent to the site, and has been in existence since at least 1923. A rail spur extending from the UPRR right-of-way previously traversed the site in a north to south orientation, but was removed in the early 2000s. Soils along railroads could potentially be impacted by heavy metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and/or chlorinated herbicides. Construction debris associated with the railroad spur removal, including ballast and railroad ties, is still located on-site and may also be impacted by hazardous materials. Accordingly, Mitigation Measure HAZ-1 is recommended to reduce potential impacts to less than significant levels. Mitigation Measure HAZ-1 would require that a Phase II/Site Characterization Specialist is retained to define the extent of on-site contamination and recommend appropriate coordination with UPRR and remediation, as necessary, for implementation of the proposed project. The Phase II/Site Characterization Specialist would be required to prepare a Soil Management Plan that identifies necessary sampling efforts and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan would also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading within railroad right-of-way. The Soil Management Plan would be prepared in consultation with applicable regulatory agencies (e.g., Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board) and is anticipated to include contaminated soil removal to ensure compliance with existing U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSL), California Department of Toxic Substances Control (DTSC) Screening Levels (SL), and California background levels.. As noted above in Response 4-2, it is anticipated that approximately 2,500 tons (approximately 1,978 cubic yards) of contaminated soil would be exported to the Kettleman Hills Facility in Kettleman City, California in support of remediation activities. Thus, with implementation of Mitigation Measure HAZ-1, impacts would be reduced to less than significant levels.

Draft IS/MND page 4.9-4 is revised in the Final IS/MND, as indicated below.

Mitigation Measures:

HAZ-1 The project applicant shall retain a Phase II/Site Characterization Specialist to prepare a Soil Management Plan prior to the issuance of any grading permit for the proposed project. The Phase II/Site Characterization Specialist shall define the extent of on-site contamination associated with the Recognized Environmental Condition (REC) and Other Environmental Features (OEFs) identified in the *Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California* prepared by Roux Associates, Inc. (dated July 2, 2021). These REC and OEFs pertain to railroad activities and historical uses. The Specialist shall recommend remediation, as necessary, per the standards of, the Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and other agencies as applicable. The Soil Management Plan shall identify necessary sampling efforts, and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan shall also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. The Soil Management Plan would be prepared in consultation with applicable regulatory agencies (e.g., Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board) and is anticipated to include contaminated soil removal to ensure compliance with existing U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSL), California Department of Toxic Substances Control (DTSC) Screening Levels (SL), and California background levels. The handling and/or disposal of contaminated soils shall comply with all federal, state, and local laws and regulations.

SECTION 4.14 POPULATION AND HOUSING

Draft IS/MND pages 4.14-1 and 4.14-2 are revised in the Final IS/MND, as indicated below.

Potential population growth impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. The Southern California Association of Governments (SCAG) growth forecasts estimate the City's population to reach ~~69,100~~ 67,387 persons by ~~2040~~ 2045, representing a total increase of ~~5,700~~ 3,482 between ~~2016~~ 2020 and ~~2040~~ 2045.[3] SCAG's regional growth forecasts are based upon long-range development assumptions (i.e., General Plans) of the relevant jurisdiction. The project's anticipated population increase (481 persons) would represent approximately ~~8.4~~ 13.8 percent of the City's anticipated population growth by ~~2040~~ 2045, or ~~0.6~~ 0.7 percent of the City's projected population by ~~2040~~ 2045.

Although the proposed project would result in direct population growth, project would not induce substantial population growth exceeding existing local conditions (~~0.7~~ 0.8 percent) or regional projections (~~0.5~~ 0.6 percent). The project does not eliminate a barrier to growth, but rather complies with the City's planned growth within the project area since it is consistent with the General Plan land use designation and Municipal Code zoning for the majority of the project site. As such, impacts in this regard would be less than significant.

SECTION 4.17 TRANSPORTATION

Draft IS/MND page 4.17-1 is revised in the Final IS/MND, as indicated below.

Less Than Significant Impact. The proposed project would not result in significant impacts related to conflicts with a program, ordinance, or policy addressing the circulation system including the Los Angeles County Bicycle Master Plan, General Plan, Municipal Code regulations and standards, and Los Angeles County Congestion Management Plan. The project would be consistent with City standards including Municipal Code Title 15, Buildings and Construction, which adopts the California Building Code standards and regulations related to access and circulation, and would be subject to review by the City's Public Works Department during final design to ensure adherence to local requirements for internal site circulation, bridge design, secondary access, and primary access from Beverly Boulevard. As noted in Section 2.0, *Project Description*, the proposed roadway design changes along Beverly Boulevard that would improve the overall vehicular circulation in the project area. These design changes would include a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket. In addition, outbound traffic would exit the project site via a stop-controlled right- and left-turn movement onto Beverly Boulevard. To determine if these recommended changes improve traffic and the overall vehicular circulation system during project operations, a post-project opening traffic study would be prepared as pare of Project Feature PF-1.

Draft IS/MND page 4.17-2 is revised in the Final IS/MND, as indicated below.

Mitigation Measures: No mitigation is required.

Project Features:

PF-1: The proposed traffic and circulation improvements for the project shall be predicated on a post opening traffic study provided by the applicant's traffic engineer or a traffic engineer selected by the City of Pico Rivera to analyze left turn movements in and out of the development and the general operation of the driveway. The study is to include a queuing analysis and gap study. If the study finds that left turn gaps are not adequate, left turn restrictions shall be implemented. A post opening traffic will also be required after construction of the I-605/Beverly Boulevard Interchange improvement project if the development opening day occurs prior to interchange improvement implementation.

SECTION 4.19 UTILITIES AND SERVICE SYSTEMS

Draft IS/MND page 4.19-2 is revised in the Final IS/MND, as indicated below.

The Los Angeles County Sanitation District (LACSD) oversees treatment facilities that serve the City of Pico Rivera. Wastewater generated by the proposed project would be treated at either the Los Coyotes Water Reclamation Plant (WRP) or the Joint Water Pollution Control Plant (JWPCP). WRP is located in the City of Cerritos, and provides primary, secondary, and tertiary treatment at a capacity of 37.5 million gallons of wastewater per day (mgd). JWPCP is located in the City of Carson, and provides primary, secondary, and tertiary treatment at a capacity of 400 mgd.

As mentioned above, the project would entail the construction and development of a new warehouse and print shop facility on vacant land requiring new pipelines and utilities to accommodate the proposed new development. Given the current ~~remaining~~ capacity ~~of 37.4 mgd~~ available at the WRP and the JWPCP, and ~~an~~ the estimated increase of average water waste flow from the project site of approximately ~~9,0973~~ 9,948 gallons per day (gpd), sufficient capacity exists to serve the project.

Attachment A.

Drainage Technical Memorandum

Michael Baker
INTERNATIONAL

We Make a Difference

TECHNICAL MEMORANDUM

To: Insite Property Group

From: David Hoopfer, PE

CC: Alan Ashimine, Michael Baker International

Date: December 22, 2021

Subject: Beverly Boulevard Warehouse Project Drainage Memo

Introduction

Michael Baker prepared this technical memorandum to provide an overview of the existing site drainage conditions and anticipated drainage requirements for the proposed Beverly Boulevard Warehouse Project (Project) located in the City of Pico Rivera, California. **Exhibit 1** shows the location of the Project and the existing drainage condition.

Existing Drainage Condition

The portion of the Project located south of the Union Pacific Railroad (UPRR) has two drainage patterns. The southern portion sheet flows to the west to a natural channel that runs between the Project site and the Union Pacific Railroad. The natural channel flows south towards a headwall adjacent to Amigo Park that outlets into the San Gabriel River. The northern portion sheet flows to a concrete channel that is owned and maintained by Caltrans. This concrete channel outlets into a 60" RCP pipe that is also owned and maintained by Caltrans and outlets into the San Gabriel River.

The portion of the Project located north of the Union Pacific Railroad currently surface flows west to the San Gabriel River along the north side of the Union Pacific Railroad and along an existing paved access road. Beverly Boulevard surface flows to the west until it reaches a catch basin at the southwest corner of Beverly Boulevard and San Gabriel River Parkway that is owned and maintained by the City of Pico Rivera.

Proposed Drainage Condition

The Project will maintain the existing drainage patterns and conditions. Underground detention systems will be installed to mitigate for increased runoff due to increased impervious area. The underground detention systems will reduce flows to match the existing drainage condition as required by the City of Pico Rivera and County of Los Angeles. Therefore, this Project will not increase runoff discharging into Los Angeles County Flood Control District (LACFCD) drainage facilities resulting in a less than significant impact.

LEGEND

- PROJECT SITE
- DRAINAGE DIRECTION
- EXISTING STORM DRAIN

NOT TO SCALE

EXISTING DRAINAGE CONDITION EXHIBIT 1

Attachment B.

Air Quality/Greenhouse Gas/Energy Modeling Worksheets

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - Soil sampling for potential contamination (refer to Mitigation Measure HAZ-2).

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Grading hauling trip length based on weighted average.

Grading -

Architectural Coating - SCAQMD RUle 1113; 100,000 sf will be painted on the building. All other surfaces will be prefinished panels or masonry

Vehicle Trips - per traffic study

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Water Mitigation - CALGreen Code

Waste Mitigation - AB 341

Fleet Mix - per traffic study

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	180,202.00	100,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintParkingValue	50	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	3,978.00
tblGrading	MaterialImported	0.00	66,978.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	34.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.4767	5.7343	3.4418	0.0127	1.2967	0.1947	1.4913	0.5214	0.1796	0.7010	0.0000	1,170.3884	1,170.3884	0.2363	0.0763	1,199.0220
2023	1.2265	3.9852	5.2562	0.0126	0.4894	0.1524	0.6418	0.1320	0.1425	0.2745	0.0000	1,149.7499	1,149.7499	0.1712	0.0448	1,167.3799
Maximum	**1.2265**	**5.7343**	**5.2562**	**0.0127**	**1.2967**	**0.1947**	**1.4913**	**0.5214**	**0.1796**	**0.7010**	**0.0000**	**1,170.3884**	**1,170.3884**	**0.2363**	**0.0763**	**1,199.0220**

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					
2022	0.4767	5.7343	3.4418	0.0127	0.5955	0.1947	0.7901	0.2246	0.1796	0.4042	0.0000	1,170.3876	1,170.3876	0.2363	0.0763	1,199.0212
2023	1.2265	3.9852	5.2562	0.0126	0.4894	0.1524	0.6418	0.1320	0.1425	0.2745	0.0000	1,149.7492	1,149.7492	0.1712	0.0448	1,167.3792
Maximum	**1.2265**	**5.7343**	**5.2562**	**0.0127**	**0.5955**	**0.1947**	**0.7901**	**0.2246**	**0.1796**	**0.4042**	**0.0000**	**1,170.3876**	**1,170.3876**	**0.2363**	**0.0763**	**1,199.0212**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.26**	**0.00**	**32.87**	**45.43**	**0.00**	**30.43**	**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	**6-1-2022**	**8-31-2022**	2.6170	2.6170
2	**9-1-2022**	**11-30-2022**	2.8765	2.8765
3	**12-1-2022**	**2-28-2023**	1.5837	1.5837
4	**3-1-2023**	**5-31-2023**	1.3731	1.3731
5	**6-1-2023**	**8-31-2023**	1.4914	1.4914
6	**9-1-2023**	**9-30-2023**	0.4463	0.4463
		Highest	2.8765	2.8765

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.4156	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Energy	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	276.0147	276.0147	0.0222	2.9600e-003	277.4516
Mobile	0.2271	2.4020	3.1821	0.0172	1.1999	0.0181	1.2181	0.3249	0.0172	0.3421	0.0000	1,649.0677	1,649.0677	0.0644	0.1654	1,699.9662
Waste						0.0000	0.0000		0.0000	0.0000	68.8606	0.0000	68.8606	4.0696	0.0000	170.5993
Water						0.0000	0.0000		0.0000	0.0000	26.3161	196.3968	222.7129	2.7195	0.0658	310.3177
Total	**1.6443**	**2.4174**	**3.2050**	**0.0173**	**1.1999**	**0.0193**	**1.2193**	**0.3249**	**0.0184**	**0.3433**	**95.1767**	**2,121.4988**	**2,216.6755**	**6.8757**	**0.2342**	**2,458.3558**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.4156	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Energy	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	276.0147	276.0147	0.0222	2.9600e-003	277.4516
Mobile	0.2271	2.4020	3.1821	0.0172	1.1999	0.0181	1.2181	0.3249	0.0172	0.3421	0.0000	1,649.0677	1,649.0677	0.0644	0.1654	1,699.9662
Waste						0.0000	0.0000		0.0000	0.0000	34.4303	0.0000	34.4303	2.0348	0.0000	85.2996
Water						0.0000	0.0000		0.0000	0.0000	21.0529	158.0872	179.1400	2.1757	0.0527	249.2289
Total	**1.6443**	**2.4174**	**3.2050**	**0.0173**	**1.1999**	**0.0193**	**1.2193**	**0.3249**	**0.0184**	**0.3433**	**55.4832**	**2,083.1891**	**2,138.6723**	**4.2971**	**0.2210**	**2,311.9673**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**41.71**	**1.81**	**3.52**	**37.50**	**5.62**	**5.95**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2022	6/9/2022	5	7	
2	Grading	Grading	6/10/2022	12/12/2022	5	132	
3	Building Construction	Building Construction	12/13/2022	10/13/2023	5	219	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	7/1/2023	7/31/2023	5	21	
5	Architectural Coating	Architectural Coating	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 594

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 100,000; Striped Parking Area: 23,054 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	402	0.38
Grading	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	0	8.00	46	0.45
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	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
Site Preparation	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	28.00	0.00	8,870.00	14.70	6.90	34.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	349.00	136.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8000e-004	7.9300e-003	7.1400e-003	3.0000e-005		2.5000e-004	2.5000e-004		2.3000e-004	2.3000e-004	0.0000	2.9007	2.9007	9.4000e-004	0.0000	2.9241
Total	**7.8000e-004**	**7.9300e-003**	**7.1400e-003**	**3.0000e-005**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**2.9007**	**2.9007**	**9.4000e-004**	**0.0000**	**2.9241**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0961
Total	**4.0000e-005**	**3.0000e-005**	**3.9000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0961**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8000e-004	7.9300e-003	7.1400e-003	3.0000e-005		2.5000e-004	2.5000e-004		2.3000e-004	2.3000e-004	0.0000	2.9007	2.9007	9.4000e-004	0.0000	2.9241
Total	**7.8000e-004**	**7.9300e-003**	**7.1400e-003**	**3.0000e-005**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**2.9007**	**2.9007**	**9.4000e-004**	**0.0000**	**2.9241**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0961
Total	**4.0000e-005**	**3.0000e-005**	**3.9000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0961**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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					1.1139	0.0000	1.1139	0.4716	0.0000	0.4716	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4052	4.1535	2.7526	7.0000e-003		0.1733	0.1733		0.1595	0.1595	0.0000	615.0532	615.0532	0.1989	0.0000	620.0262
Total	**0.4052**	**4.1535**	**2.7526**	**7.0000e-003**	**1.1139**	**0.1733**	**1.2872**	**0.4716**	**0.1595**	**0.6310**	**0.0000**	**615.0532**	**615.0532**	**0.1989**	**0.0000**	**620.0262**

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	0.0316	1.2734	0.2536	4.6000e-003	0.1297	9.3700e-003	0.1390	0.0356	8.9600e-003	0.0446	0.0000	457.4024	457.4024	0.0245	0.0726	479.6441
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3300e-003	5.2800e-003	0.0686	1.8000e-004	0.0203	1.3000e-004	0.0204	5.3800e-003	1.2000e-004	5.5000e-003	0.0000	16.7627	16.7627	4.8000e-004	4.6000e-004	16.9103
Total	**0.0379**	**1.2787**	**0.3222**	**4.7800e-003**	**0.1499**	**9.5000e-003**	**0.1594**	**0.0410**	**9.0800e-003**	**0.0501**	**0.0000**	**474.1651**	**474.1651**	**0.0250**	**0.0730**	**496.5544**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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					
Fugitive Dust					0.4127	0.0000	0.4127	0.1747	0.0000	0.1747	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4052	4.1535	2.7526	7.0000e-003		0.1733	0.1733		0.1595	0.1595	0.0000	615.0524	615.0524	0.1989	0.0000	620.0254
Total	**0.4052**	**4.1535**	**2.7526**	**7.0000e-003**	**0.4127**	**0.1733**	**0.5860**	**0.1747**	**0.1595**	**0.3342**	**0.0000**	**615.0524**	**615.0524**	**0.1989**	**0.0000**	**620.0254**

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	0.0316	1.2734	0.2536	4.6000e-003	0.1297	9.3700e-003	0.1390	0.0356	8.9600e-003	0.0446	0.0000	457.4024	457.4024	0.0245	0.0726	479.6441
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3300e-003	5.2800e-003	0.0686	1.8000e-004	0.0203	1.3000e-004	0.0204	5.3800e-003	1.2000e-004	5.5000e-003	0.0000	16.7627	16.7627	4.8000e-004	4.6000e-004	16.9103
Total	**0.0379**	**1.2787**	**0.3222**	**4.7800e-003**	**0.1499**	**9.5000e-003**	**0.1594**	**0.0410**	**9.0800e-003**	**0.0501**	**0.0000**	**474.1651**	**474.1651**	**0.0250**	**0.0730**	**496.5544**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0226	0.2383	0.2525	4.3000e-004		0.0110	0.0110		0.0103	0.0103	0.0000	37.8353	37.8353	0.0102	0.0000	38.0906
Total	**0.0226**	**0.2383**	**0.2525**	**4.3000e-004**		**0.0110**	**0.0110**		**0.0103**	**0.0103**	**0.0000**	**37.8353**	**37.8353**	**0.0102**	**0.0000**	**38.0906**

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	1.8600e-003	0.0490	0.0162	1.9000e-004	6.0000e-003	4.4000e-004	6.4400e-003	1.7300e-003	4.3000e-004	2.1600e-003	0.0000	18.1792	18.1792	6.1000e-004	2.6200e-003	18.9758
Worker	8.3700e-003	6.9700e-003	0.0907	2.4000e-004	0.0268	1.8000e-004	0.0270	7.1100e-003	1.6000e-004	7.2700e-003	0.0000	22.1597	22.1597	6.3000e-004	6.0000e-004	22.3548
Total	**0.0102**	**0.0559**	**0.1069**	**4.3000e-004**	**0.0328**	**6.2000e-004**	**0.0334**	**8.8400e-003**	**5.9000e-004**	**9.4300e-003**	**0.0000**	**40.3389**	**40.3389**	**1.2400e-003**	**3.2200e-003**	**41.3307**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0226	0.2383	0.2525	4.3000e-004		0.0110	0.0110		0.0103	0.0103	0.0000	37.8353	37.8353	0.0102	0.0000	38.0906
Total	**0.0226**	**0.2383**	**0.2525**	**4.3000e-004**		**0.0110**	**0.0110**		**0.0103**	**0.0103**	**0.0000**	**37.8353**	**37.8353**	**0.0102**	**0.0000**	**38.0906**

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	1.8600e-003	0.0490	0.0162	1.9000e-004	6.0000e-003	4.4000e-004	6.4400e-003	1.7300e-003	4.3000e-004	2.1600e-003	0.0000	18.1792	18.1792	6.1000e-004	2.6200e-003	18.9758
Worker	8.3700e-003	6.9700e-003	0.0907	2.4000e-004	0.0268	1.8000e-004	0.0270	7.1100e-003	1.6000e-004	7.2700e-003	0.0000	22.1597	22.1597	6.3000e-004	6.0000e-004	22.3548
Total	**0.0102**	**0.0559**	**0.1069**	**4.3000e-004**	**0.0328**	**6.2000e-004**	**0.0334**	**8.8400e-003**	**5.9000e-004**	**9.4300e-003**	**0.0000**	**40.3389**	**40.3389**	**1.2400e-003**	**3.2200e-003**	**41.3307**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.3090	3.2151	3.6831	6.3400e-003		0.1422	0.1422		0.1329	0.1329	0.0000	554.0853	554.0853	0.1490	0.0000	557.8100
Total	**0.3090**	**3.2151**	**3.6831**	**6.3400e-003**		**0.1422**	**0.1422**		**0.1329**	**0.1329**	**0.0000**	**554.0853**	**554.0853**	**0.1490**	**0.0000**	**557.8100**

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	0.0158	0.5618	0.2103	2.6000e-003	0.0879	2.7000e-003	0.0906	0.0254	2.5800e-003	0.0279	0.0000	253.4602	253.4602	8.4700e-003	0.0365	264.5420
Worker	0.1136	0.0902	1.2221	3.4000e-003	0.3920	2.4100e-003	0.3944	0.1041	2.2200e-003	0.1063	0.0000	315.9343	315.9343	8.3000e-003	8.1200e-003	318.5622
Total	**0.1293**	**0.6520**	**1.4324**	**6.0000e-003**	**0.4799**	**5.1100e-003**	**0.4850**	**0.1295**	**4.8000e-003**	**0.1343**	**0.0000**	**569.3945**	**569.3945**	**0.0168**	**0.0446**	**583.1042**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.3090	3.2151	3.6831	6.3400e-003		0.1422	0.1422		0.1329	0.1329	0.0000	554.0847	554.0847	0.1490	0.0000	557.8093
Total	**0.3090**	**3.2151**	**3.6831**	**6.3400e-003**		**0.1422**	**0.1422**		**0.1329**	**0.1329**	**0.0000**	**554.0847**	**554.0847**	**0.1490**	**0.0000**	**557.8093**

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	0.0158	0.5618	0.2103	2.6000e-003	0.0879	2.7000e-003	0.0906	0.0254	2.5800e-003	0.0279	0.0000	253.4602	253.4602	8.4700e-003	0.0365	264.5420
Worker	0.1136	0.0902	1.2221	3.4000e-003	0.3920	2.4100e-003	0.3944	0.1041	2.2200e-003	0.1063	0.0000	315.9343	315.9343	8.3000e-003	8.1200e-003	318.5622
Total	**0.1293**	**0.6520**	**1.4324**	**6.0000e-003**	**0.4799**	**5.1100e-003**	**0.4850**	**0.1295**	**4.8000e-003**	**0.1343**	**0.0000**	**569.3945**	**569.3945**	**0.0168**	**0.0446**	**583.1042**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	9.2400e-003	0.1017	0.0909	1.8000e-004		4.2400e-003	4.2400e-003		3.9000e-003	3.9000e-003	0.0000	15.7337	15.7337	5.0900e-003	0.0000	15.8609
Paving	4.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1017**	**0.0909**	**1.8000e-004**		**4.2400e-003**	**4.2400e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.7337**	**15.7337**	**5.0900e-003**	**0.0000**	**15.8609**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.6000e-004	3.5900e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9273	0.9273	2.0000e-005	2.0000e-005	0.9351
Total	**3.3000e-004**	**2.6000e-004**	**3.5900e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9273**	**0.9273**	**2.0000e-005**	**2.0000e-005**	**0.9351**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	9.2400e-003	0.1017	0.0909	1.8000e-004		4.2400e-003	4.2400e-003		3.9000e-003	3.9000e-003	0.0000	15.7337	15.7337	5.0900e-003	0.0000	15.8609
Paving	4.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1017**	**0.0909**	**1.8000e-004**		**4.2400e-003**	**4.2400e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.7337**	**15.7337**	**5.0900e-003**	**0.0000**	**15.8609**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.6000e-004	3.5900e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9273	0.9273	2.0000e-005	2.0000e-005	0.9351
Total	**3.3000e-004**	**2.6000e-004**	**3.5900e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9273**	**0.9273**	**2.0000e-005**	**2.0000e-005**	**0.9351**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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					
Archit. Coating	0.7690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**0.7711**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.9400e-003	0.0263	7.0000e-005	8.4400e-003	5.0000e-005	8.4900e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8005	6.8005	1.8000e-004	1.7000e-004	6.8570
Total	**2.4400e-003**	**1.9400e-003**	**0.0263**	**7.0000e-005**	**8.4400e-003**	**5.0000e-005**	**8.4900e-003**	**2.2400e-003**	**5.0000e-005**	**2.2900e-003**	**0.0000**	**6.8005**	**6.8005**	**1.8000e-004**	**1.7000e-004**	**6.8570**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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					
Archit. Coating	0.7690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**0.7711**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.9400e-003	0.0263	7.0000e-005	8.4400e-003	5.0000e-005	8.4900e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8005	6.8005	1.8000e-004	1.7000e-004	6.8570
Total	**2.4400e-003**	**1.9400e-003**	**0.0263**	**7.0000e-005**	**8.4400e-003**	**5.0000e-005**	**8.4900e-003**	**2.2400e-003**	**5.0000e-005**	**2.2900e-003**	**0.0000**	**6.8005**	**6.8005**	**1.8000e-004**	**1.7000e-004**	**6.8570**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.2271	2.4020	3.1821	0.0172	1.1999	0.0181	1.2181	0.3249	0.0172	0.3421	0.0000	1,649.0677	1,649.0677	0.0644	0.1654	1,699.9662
Unmitigated	0.2271	2.4020	3.1821	0.0172	1.1999	0.0181	1.2181	0.3249	0.0172	0.3421	0.0000	1,649.0677	1,649.0677	0.0644	0.1654	1,699.9662

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	622.75	622.75	622.75	2,668,913	2,668,913
Total	808.25	808.25	808.25	3,070,121	3,070,121

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	259.3720	259.3720	0.0219	2.6500e-003	260.7101
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	259.3720	259.3720	0.0219	2.6500e-003	260.7101
NaturalGas Mitigated	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	16.6427	16.6427	3.2000e-004	3.1000e-004	16.7416
NaturalGas Unmitigated	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	16.6427	16.6427	3.2000e-004	3.1000e-004	16.7416

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	4075	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2175	0.2175	0.0000	0.0000	0.2188
Unrefrigerated Warehouse-No Rail	307797	1.6600e-003	0.0151	0.0127	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	16.4252	16.4252	3.1000e-004	3.0000e-004	16.5228
Total		**1.6800e-003**	**0.0153**	**0.0128**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.6427**	**16.6427**	**3.1000e-004**	**3.0000e-004**	**16.7416**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	4075	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2175	0.2175	0.0000	0.0000	0.2188
Unrefrigerated Warehouse-No Rail	307797	1.6600e-003	0.0151	0.0127	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	16.4252	16.4252	3.1000e-004	3.0000e-004	16.5228
Total		**1.6800e-003**	**0.0153**	**0.0128**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.6427**	**16.6427**	**3.1000e-004**	**3.0000e-004**	**16.7416**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	59080	10.4776	8.8000e-004	1.1000e-004	10.5316
Regional Shopping Center	32675	5.7948	4.9000e-004	6.0000e-005	5.8247
Unrefrigerated Warehouse-No Rail	1.37077e+006	243.0997	0.0205	2.4900e-003	244.3538
Total		**259.3720**	**0.0219**	**2.6600e-003**	**260.7101**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	59080	10.4776	8.8000e-004	1.1000e-004	10.5316
Regional Shopping Center	32675	5.7948	4.9000e-004	6.0000e-005	5.8247
Unrefrigerated Warehouse-No Rail	1.37077e+006	243.0997	0.0205	2.4900e-003	244.3538
Total		**259.3720**	**0.0219**	**2.6600e-003**	**260.7101**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.4156	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Unmitigated	1.4156	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209

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	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Total	**1.4156**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0196**	**0.0196**	**5.0000e-005**	**0.0000**	**0.0209**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0196	0.0196	5.0000e-005	0.0000	0.0209
Total	**1.4156**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0196**	**0.0196**	**5.0000e-005**	**0.0000**	**0.0209**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	179.1400	2.1757	0.0527	249.2289
Unmitigated	222.7129	2.7195	0.0658	310.3177

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.34722	4.6248	3.9000e-004	5.0000e-005	4.6486
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.185181 / 0.113498	0.7100	6.0900e-003	1.5000e-004	0.9067
Unrefrigerated Warehouse-No Rail	82.7644 / 0	217.3782	2.7130	0.0656	304.7625
Total		**222.7129**	**2.7195**	**0.0658**	**310.3177**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.34722	4.6248	3.9000e-004	5.0000e-005	4.6486
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.148145 / 0.113498	0.6127	4.8800e-003	1.2000e-004	0.7703
Unrefrigerated Warehouse-No Rail	66.2115 / 0	173.9025	2.1704	0.0525	243.8100
Total		**179.1400**	**2.1757**	**0.0527**	**249.2289**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.4303	2.0348	0.0000	85.2996
Unmitigated	68.8606	4.0696	0.0000	170.5993

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.63	0.5339	0.0316	0.0000	1.3226
Unrefrigerated Warehouse-No Rail	336.43	68.2923	4.0360	0.0000	169.1912
Total		**68.8606**	**4.0696**	**0.0000**	**170.5993**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.085	0.0173	1.0200e-003	0.0000	0.0428
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.315	0.2669	0.0158	0.0000	0.6613
Unrefrigerated Warehouse-No Rail	168.215	34.1461	2.0180	0.0000	84.5956
Total		**34.4303**	**2.0348**	**0.0000**	**85.2997**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - Soil sampling for potential contamination (refer to Mitigation Measure HAZ-2).

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Grading hauling trip length based on weighted average.

Grading -

Architectural Coating - SCAQMD RUle 1113; 100,000 sf will be painted on the building. All other surfaces will be prefinished panels or masonry

Vehicle Trips - per traffic study

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Water Mitigation - CALGreen Code

Waste Mitigation - AB 341

Fleet Mix - per traffic study

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	180,202.00	100,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintParkingValue	50	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	3,978.00
tblGrading	MaterialImported	0.00	66,978.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	34.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	6.7170	81.2965	52.1106	0.1787	19.1887	2.7700	21.9587	7.7758	2.5536	10.3294	0.0000	18,202.4924	18,202.4924	3.7395	1.2191	18,659.2708
2023	74.6152	47.0696	59.6236	0.1397	5.5546	1.8415	7.0672	1.4929	1.7156	3.0307	0.0000	13,969.6538	13,969.6538	2.3182	0.4883	14,169.0002
Maximum	**74.6152**	**81.2965**	**59.6236**	**0.1787**	**19.1887**	**2.7700**	**21.9587**	**7.7758**	**2.5536**	**10.3294**	**0.0000**	**18,202.4924**	**18,202.4924**	**3.7395**	**1.2191**	**18,659.2708**

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					
2022	6.7170	81.2965	52.1106	0.1787	8.5645	2.7700	11.3345	3.2780	2.5536	5.8316	0.0000	18,202.4924	18,202.4924	3.7395	1.2191	18,659.2708
2023	74.6152	47.0696	59.6236	0.1397	5.5546	1.8415	7.0672	1.4929	1.7156	3.0307	0.0000	13,969.6538	13,969.6538	2.3182	0.4883	14,169.0002
Maximum	**74.6152**	**81.2965**	**59.6236**	**0.1787**	**8.5645**	**2.7700**	**11.3345**	**3.2780**	**2.5536**	**5.8316**	**0.0000**	**18,202.4924**	**18,202.4924**	**3.7395**	**1.2191**	**18,659.2708**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	42.94	0.00	36.60	48.53	0.00	33.67	0.00	0.00	0.00	0.00	0.00	0.00

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
Mobile	1.3054	12.5028	17.9514	0.0959	6.7191	0.0997	6.8188	1.8159	0.0944	1.9104		10,157.0521	10,157.0521	0.3865	0.9944	10,463.0359
Total	**9.0735**	**12.5873**	**18.1024**	**0.0964**	**6.7191**	**0.1064**	**6.8254**	**1.8159**	**0.1011**	**1.9170**		**10,257.7475**	**10,257.7475**	**0.3889**	**0.9962**	**10,564.3400**

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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
Mobile	1.3054	12.5028	17.9514	0.0959	6.7191	0.0997	6.8188	1.8159	0.0944	1.9104		10,157.0521	10,157.0521	0.3865	0.9944	10,463.0359
Total	**9.0735**	**12.5873**	**18.1024**	**0.0964**	**6.7191**	**0.1064**	**6.8254**	**1.8159**	**0.1011**	**1.9170**		**10,257.7475**	**10,257.7475**	**0.3889**	**0.9962**	**10,564.3400**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Site Preparation	Site Preparation	6/1/2022	6/9/2022	5	7	
2	Grading	Grading	6/10/2022	12/12/2022	5	132	
3	Building Construction	Building Construction	12/13/2022	10/13/2023	5	219	
4	Paving	Paving	7/1/2023	7/31/2023	5	21	
5	Architectural Coating	Architectural Coating	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 594

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 100,000; Striped Parking Area: 23,054 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	402	0.38
Grading	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	0	8.00	46	0.45
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	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
Site Preparation	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	28.00	0.00	8,870.00	14.70	6.90	34.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	349.00	136.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669		913.5608	913.5608	0.2955		920.9474
Total	**0.2241**	**2.2664**	**2.0411**	**9.4400e-003**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0669**	**0.0669**		**913.5608**	**913.5608**	**0.2955**		**920.9474**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	7.5800e-003	0.1182	3.1000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		31.2038	31.2038	8.4000e-004	7.5000e-004	31.4486
Total	**0.0104**	**7.5800e-003**	**0.1182**	**3.1000e-004**	**0.0335**	**2.1000e-004**	**0.0338**	**8.8900e-003**	**2.0000e-004**	**9.0900e-003**		**31.2038**	**31.2038**	**8.4000e-004**	**7.5000e-004**	**31.4486**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669	0.0000	913.5608	913.5608	0.2955		920.9474
Total	**0.2241**	**2.2664**	**2.0411**	**9.4400e-003**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0669**	**0.0669**	**0.0000**	**913.5608**	**913.5608**	**0.2955**		**920.9474**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	7.5800e-003	0.1182	3.1000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		31.2038	31.2038	8.4000e-004	7.5000e-004	31.4486
Total	**0.0104**	**7.5800e-003**	**0.1182**	**3.1000e-004**	**0.0335**	**2.1000e-004**	**0.0338**	**8.8900e-003**	**2.0000e-004**	**9.0900e-003**		**31.2038**	**31.2038**	**8.4000e-004**	**7.5000e-004**	**31.4486**

3.3 Grading - 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					16.8772	0.0000	16.8772	7.1450	0.0000	7.1450			0.0000			0.0000
Off-Road	6.1387	62.9316	41.7064	0.1061		2.6261	2.6261		2.4160	2.4160		10,272.4249	10,272.4249	3.3223		10,355.4826
Total	**6.1387**	**62.9316**	**41.7064**	**0.1061**	**16.8772**	**2.6261**	**19.5033**	**7.1450**	**2.4160**	**9.5609**		**10,272.4249**	**10,272.4249**	**3.3223**		**10,355.4826**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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	0.4814	18.2942	3.8253	0.0697	1.9985	0.1419	2.1404	0.5478	0.1358	0.6836		7,638.8320	7,638.8320	0.4093	1.2121	8,010.2676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0969	0.0708	1.1036	2.8600e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		291.2356	291.2356	7.8800e-003	7.0100e-003	293.5206
Total	**0.5783**	**18.3649**	**4.9289**	**0.0726**	**2.3115**	**0.1439**	**2.4554**	**0.6308**	**0.1376**	**0.7685**		**7,930.0676**	**7,930.0676**	**0.4172**	**1.2191**	**8,303.7882**

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					6.2530	0.0000	6.2530	2.6472	0.0000	2.6472			0.0000			0.0000
Off-Road	6.1387	62.9316	41.7064	0.1061		2.6261	2.6261		2.4160	2.4160	0.0000	10,272.4249	10,272.4249	3.3223		10,355.4826
Total	**6.1387**	**62.9316**	**41.7064**	**0.1061**	**6.2530**	**2.6261**	**8.8791**	**2.6472**	**2.4160**	**5.0632**	**0.0000**	**10,272.4249**	**10,272.4249**	**3.3223**		**10,355.4826**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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	0.4814	18.2942	3.8253	0.0697	1.9985	0.1419	2.1404	0.5478	0.1358	0.6836		7,638.8320	7,638.8320	0.4093	1.2121	8,010.2676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0969	0.0708	1.1036	2.8600e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		291.2356	291.2356	7.8800e-003	7.0100e-003	293.5206
Total	**0.5783**	**18.3649**	**4.9289**	**0.0726**	**2.3115**	**0.1439**	**2.4554**	**0.6308**	**0.1376**	**0.7685**		**7,930.0676**	**7,930.0676**	**0.4172**	**1.2191**	**8,303.7882**

3.4 Building Construction - 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	3.2232	34.0353	36.0713	0.0618		1.5657	1.5657		1.4645	1.4645		5,958.0415	5,958.0415	1.6083		5,998.2478
Total	**3.2232**	**34.0353**	**36.0713**	**0.0618**		**1.5657**	**1.5657**		**1.4645**	**1.4645**		**5,958.0415**	**5,958.0415**	**1.6083**		**5,998.2478**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.2676	6.6619	2.2841	0.0266	0.8711	0.0635	0.9346	0.2508	0.0607	0.3115		2,862.2777	2,862.2777	0.0957	0.4125	2,987.5819
Worker	1.2079	0.8819	13.7552	0.0357	3.9010	0.0250	3.9260	1.0346	0.0230	1.0576		3,630.0434	3,630.0434	0.0983	0.0873	3,658.5244
Total	**1.4755**	**7.5437**	**16.0393**	**0.0623**	**4.7721**	**0.0885**	**4.8606**	**1.2854**	**0.0837**	**1.3691**		**6,492.3211**	**6,492.3211**	**0.1939**	**0.4998**	**6,646.1063**

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	3.2232	34.0353	36.0713	0.0618		1.5657	1.5657		1.4645	1.4645	0.0000	5,958.0415	5,958.0415	1.6083		5,998.2478
Total	**3.2232**	**34.0353**	**36.0713**	**0.0618**		**1.5657**	**1.5657**		**1.4645**	**1.4645**	**0.0000**	**5,958.0415**	**5,958.0415**	**1.6083**		**5,998.2478**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.2676	6.6619	2.2841	0.0266	0.8711	0.0635	0.9346	0.2508	0.0607	0.3115		2,862.2777	2,862.2777	0.0957	0.4125	2,987.5819
Worker	1.2079	0.8819	13.7552	0.0357	3.9010	0.0250	3.9260	1.0346	0.0230	1.0576		3,630.0434	3,630.0434	0.0983	0.0873	3,658.5244
Total	**1.4755**	**7.5437**	**16.0393**	**0.0623**	**4.7721**	**0.0885**	**4.8606**	**1.2854**	**0.0837**	**1.3691**		**6,492.3211**	**6,492.3211**	**0.1939**	**0.4998**	**6,646.1063**

3.4 Building Construction - 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	3.0148	31.3663	35.9327	0.0618		1.3873	1.3873		1.2968	1.2968		5,958.7756	5,958.7756	1.6022		5,998.8313
Total	**3.0148**	**31.3663**	**35.9327**	**0.0618**		**1.3873**	**1.3873**		**1.2968**	**1.2968**		**5,958.7756**	**5,958.7756**	**1.6022**		**5,998.8313**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.1566	5.2201	2.0223	0.0253	0.8711	0.0262	0.8974	0.2508	0.0251	0.2759		2,723.8417	2,723.8417	0.0913	0.3916	2,842.8231
Worker	1.1176	0.7792	12.6468	0.0345	3.9010	0.0235	3.9245	1.0346	0.0217	1.0562		3,534.0186	3,534.0186	0.0880	0.0806	3,560.2218
Total	**1.2742**	**5.9993**	**14.6691**	**0.0598**	**4.7721**	**0.0498**	**4.8219**	**1.2854**	**0.0468**	**1.3322**		**6,257.8603**	**6,257.8603**	**0.1793**	**0.4722**	**6,403.0449**

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	3.0148	31.3663	35.9327	0.0618		1.3873	1.3873		1.2968	1.2968	0.0000	5,958.7756	5,958.7756	1.6022		5,998.8313
Total	**3.0148**	**31.3663**	**35.9327**	**0.0618**		**1.3873**	**1.3873**		**1.2968**	**1.2968**	**0.0000**	**5,958.7756**	**5,958.7756**	**1.6022**		**5,998.8313**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.1566	5.2201	2.0223	0.0253	0.8711	0.0262	0.8974	0.2508	0.0251	0.2759		2,723.8417	2,723.8417	0.0913	0.3916	2,842.8231
Worker	1.1176	0.7792	12.6468	0.0345	3.9010	0.0235	3.9245	1.0346	0.0217	1.0562		3,534.0186	3,534.0186	0.0880	0.0806	3,560.2218
Total	**1.2742**	**5.9993**	**14.6691**	**0.0598**	**4.7721**	**0.0498**	**4.8219**	**1.2854**	**0.0468**	**1.3322**		**6,257.8603**	**6,257.8603**	**0.1793**	**0.4722**	**6,403.0449**

3.5 Paving - 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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714		1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**		**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.0320**	**0.0223**	**0.3624**	**9.9000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**101.2613**	**101.2613**	**2.5200e-003**	**2.3100e-003**	**102.0121**

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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714	0.0000	1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**	**0.0000**	**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0223	0.3624	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.2613	101.2613	2.5200e-003	2.3100e-003	102.0121
Total	**0.0320**	**0.0223**	**0.3624**	**9.9000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**101.2613**	**101.2613**	**2.5200e-003**	**2.3100e-003**	**102.0121**

3.6 Architectural Coating - 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					
Archit. Coating	69.9104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**70.1021**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2242	0.1563	2.5366	6.9300e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		708.8290	708.8290	0.0177	0.0162	714.0846
Total	**0.2242**	**0.1563**	**2.5366**	**6.9300e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**708.8290**	**708.8290**	**0.0177**	**0.0162**	**714.0846**

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	69.9104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**70.1021**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2242	0.1563	2.5366	6.9300e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		708.8290	708.8290	0.0177	0.0162	714.0846
Total	**0.2242**	**0.1563**	**2.5366**	**6.9300e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**708.8290**	**708.8290**	**0.0177**	**0.0162**	**714.0846**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3054	12.5028	17.9514	0.0959	6.7191	0.0997	6.8188	1.8159	0.0944	1.9104		10,157.0521	10,157.0521	0.3865	0.9944	10,463.0359
Unmitigated	1.3054	12.5028	17.9514	0.0959	6.7191	0.0997	6.8188	1.8159	0.0944	1.9104		10,157.0521	10,157.0521	0.3865	0.9944	10,463.0359

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	622.75	622.75	622.75	2,668,913	2,668,913
Total	808.25	808.25	808.25	3,070,121	3,070,121

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

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	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
NaturalGas Unmitigated	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	11.1644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	843.278	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.2092	99.2092	1.9000e-003	1.8200e-003	99.7988
Total		**9.2100e-003**	**0.0838**	**0.0704**	**5.1000e-004**		**6.3600e-003**	**6.3600e-003**		**6.3600e-003**	**6.3600e-003**		**100.5227**	**100.5227**	**1.9300e-003**	**1.8400e-003**	**101.1200**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	0.0111644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	0.843278	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.2092	99.2092	1.9000e-003	1.8200e-003	99.7988
Total		**9.2100e-003**	**0.0838**	**0.0704**	**5.1000e-004**		**6.3600e-003**	**6.3600e-003**		**6.3600e-003**	**6.3600e-003**		**100.5227**	**100.5227**	**1.9300e-003**	**1.8400e-003**	**101.1200**

6.0 Area Detail

6.1 Mitigation Measures Area

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Unmitigated	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841

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	0.4723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**7.7590**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.4723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**7.7590**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Beverly Boulevard Warehouse

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	357.90	1000sqft	8.22	357,903.00	0
Other Non-Asphalt Surfaces	5.12	Acre	5.12	223,027.20	0
Parking Lot	422.00	Space	3.80	168,800.00	0
City Park	1.97	Acre	1.97	85,813.20	0
Regional Shopping Center	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - Soil sampling for potential contamination (refer to Mitigation Measure HAZ-2).

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Grading hauling trip length based on weighted average.

Grading -

Architectural Coating - SCAQMD RUle 1113; 100,000 sf will be painted on the building. All other surfaces will be prefinished panels or masonry

Vehicle Trips - per traffic study

Area Coating - SCAQMD Rule 1113

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Water Mitigation - CALGreen Code

Waste Mitigation - AB 341

Fleet Mix - per traffic study

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	180,202.00	100,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	100
tblAreaMitigation	UseLowVOCPaintParkingValue	50	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	8.0120e-003	0.19
tblFleetMix	LDA	0.54	0.69
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0830e-003	0.07

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3740e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	9.2500e-004	0.00
tblFleetMix	SBUS	6.9800e-004	0.00
tblFleetMix	UBUS	6.1100e-004	0.00
tblGrading	MaterialExported	0.00	3,978.00
tblGrading	MaterialImported	0.00	66,978.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	34.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	46.12	74.20
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	21.10	74.20
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	37.75	74.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	6.7163	82.0343	51.0637	0.1785	19.1887	2.7701	21.9588	7.7758	2.5537	10.3295	0.0000	18,188.4322	18,188.4322	3.7392	1.2198	18,645.4220
2023	74.7097	47.3987	58.6355	0.1379	5.5546	1.8416	7.0673	1.4929	1.7158	3.0308	0.0000	13,782.5923	13,782.5923	2.3191	0.4960	13,983.9539
Maximum	**74.7097**	**82.0343**	**58.6355**	**0.1785**	**19.1887**	**2.7701**	**21.9588**	**7.7758**	**2.5537**	**10.3295**	**0.0000**	**18,188.4322**	**18,188.4322**	**3.7392**	**1.2198**	**18,645.4220**

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					
2022	6.7163	82.0343	51.0637	0.1785	8.5645	2.7701	11.3346	3.2780	2.5537	5.8318	0.0000	18,188.4322	18,188.4322	3.7392	1.2198	18,645.4220
2023	74.7097	47.3987	58.6355	0.1379	5.5546	1.8416	7.0673	1.4929	1.7158	3.0308	0.0000	13,782.5923	13,782.5923	2.3191	0.4960	13,983.9539
Maximum	**74.7097**	**82.0343**	**58.6355**	**0.1785**	**8.5645**	**2.7701**	**11.3346**	**3.2780**	**2.5537**	**5.8318**	**0.0000**	**18,188.4322**	**18,188.4322**	**3.7392**	**1.2198**	**18,645.4220**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	42.94	0.00	36.60	48.53	0.00	33.66	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
Mobile	1.2577	13.1176	17.3048	0.0939	6.7191	0.1000	6.8191	1.8159	0.0947	1.9106		9,945.5648	9,945.5648	0.3909	1.0025	10,254.0660
Total	**9.0259**	**13.2021**	**17.4558**	**0.0944**	**6.7191**	**0.1066**	**6.8257**	**1.8159**	**0.1014**	**1.9173**		**10,046.2603**	**10,046.2603**	**0.3932**	**1.0043**	**10,355.3702**

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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Energy	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
Mobile	1.2577	13.1176	17.3048	0.0939	6.7191	0.1000	6.8191	1.8159	0.0947	1.9106		9,945.5648	9,945.5648	0.3909	1.0025	10,254.0660
Total	**9.0259**	**13.2021**	**17.4558**	**0.0944**	**6.7191**	**0.1066**	**6.8257**	**1.8159**	**0.1014**	**1.9173**		**10,046.2603**	**10,046.2603**	**0.3932**	**1.0043**	**10,355.3702**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Site Preparation	Site Preparation	6/1/2022	6/9/2022	5	7	
2	Grading	Grading	6/10/2022	12/12/2022	5	132	
3	Building Construction	Building Construction	12/13/2022	10/13/2023	5	219	
4	Paving	Paving	7/1/2023	7/31/2023	5	21	
5	Architectural Coating	Architectural Coating	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 594

Acres of Paving: 8.92

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,605; Non-Residential Outdoor: 100,000; Striped Parking Area: 23,054 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	402	0.38
Grading	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Skid Steer Loaders	3	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	0	8.00	46	0.45
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	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
Site Preparation	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	28.00	0.00	8,870.00	14.70	6.90	34.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	349.00	136.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	1	70.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669		913.5608	913.5608	0.2955		920.9474
Total	**0.2241**	**2.2664**	**2.0411**	**9.4400e-003**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0669**	**0.0669**		**913.5608**	**913.5608**	**0.2955**		**920.9474**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0111	8.3800e-003	0.1086	2.9000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.5540	29.5540	8.5000e-004	8.0000e-004	29.8144
Total	**0.0111**	**8.3800e-003**	**0.1086**	**2.9000e-004**	**0.0335**	**2.1000e-004**	**0.0338**	**8.8900e-003**	**2.0000e-004**	**9.0900e-003**		**29.5540**	**29.5540**	**8.5000e-004**	**8.0000e-004**	**29.8144**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669	0.0000	913.5608	913.5608	0.2955		920.9474
Total	**0.2241**	**2.2664**	**2.0411**	**9.4400e-003**	**0.0000**	**0.0728**	**0.0728**	**0.0000**	**0.0669**	**0.0669**	**0.0000**	**913.5608**	**913.5608**	**0.2955**		**920.9474**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0111	8.3800e-003	0.1086	2.9000e-004	0.0335	2.1000e-004	0.0338	8.8900e-003	2.0000e-004	9.0900e-003		29.5540	29.5540	8.5000e-004	8.0000e-004	29.8144
Total	**0.0111**	**8.3800e-003**	**0.1086**	**2.9000e-004**	**0.0335**	**2.1000e-004**	**0.0338**	**8.8900e-003**	**2.0000e-004**	**9.0900e-003**		**29.5540**	**29.5540**	**8.5000e-004**	**8.0000e-004**	**29.8144**

3.3 Grading - 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					16.8772	0.0000	16.8772	7.1450	0.0000	7.1450			0.0000			0.0000
Off-Road	6.1387	62.9316	41.7064	0.1061		2.6261	2.6261		2.4160	2.4160		10,272.4249	10,272.4249	3.3223		10,355.4826
Total	**6.1387**	**62.9316**	**41.7064**	**0.1061**	**16.8772**	**2.6261**	**19.5033**	**7.1450**	**2.4160**	**9.5609**		**10,272.4249**	**10,272.4249**	**3.3223**		**10,355.4826**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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	0.4739	19.0246	3.8699	0.0697	1.9985	0.1421	2.1406	0.5478	0.1359	0.6838		7,640.1701	7,640.1701	0.4089	1.2124	8,011.6716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1037	0.0782	1.0132	2.7100e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		275.8373	275.8373	7.9800e-003	7.4900e-003	278.2678
Total	**0.5776**	**19.1027**	**4.8831**	**0.0724**	**2.3115**	**0.1441**	**2.4556**	**0.6308**	**0.1378**	**0.7686**		**7,916.0074**	**7,916.0074**	**0.4169**	**1.2198**	**8,289.9394**

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					6.2530	0.0000	6.2530	2.6472	0.0000	2.6472			0.0000			0.0000
Off-Road	6.1387	62.9316	41.7064	0.1061		2.6261	2.6261		2.4160	2.4160	0.0000	10,272.4249	10,272.4249	3.3223		10,355.4826
Total	**6.1387**	**62.9316**	**41.7064**	**0.1061**	**6.2530**	**2.6261**	**8.8791**	**2.6472**	**2.4160**	**5.0632**	**0.0000**	**10,272.4249**	**10,272.4249**	**3.3223**		**10,355.4826**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 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	0.4739	19.0246	3.8699	0.0697	1.9985	0.1421	2.1406	0.5478	0.1359	0.6838		7,640.1701	7,640.1701	0.4089	1.2124	8,011.6716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1037	0.0782	1.0132	2.7100e-003	0.3130	2.0100e-003	0.3150	0.0830	1.8500e-003	0.0849		275.8373	275.8373	7.9800e-003	7.4900e-003	278.2678
Total	**0.5776**	**19.1027**	**4.8831**	**0.0724**	**2.3115**	**0.1441**	**2.4556**	**0.6308**	**0.1378**	**0.7686**		**7,916.0074**	**7,916.0074**	**0.4169**	**1.2198**	**8,289.9394**

3.4 Building Construction - 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	3.2232	34.0353	36.0713	0.0618		1.5657	1.5657		1.4645	1.4645		5,958.0415	5,958.0415	1.6083		5,998.2478
Total	**3.2232**	**34.0353**	**36.0713**	**0.0618**		**1.5657**	**1.5657**		**1.4645**	**1.4645**		**5,958.0415**	**5,958.0415**	**1.6083**		**5,998.2478**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.2644	6.9365	2.3631	0.0267	0.8711	0.0637	0.9348	0.2508	0.0609	0.3118		2,863.3531	2,863.3531	0.0954	0.4130	2,988.8080
Worker	1.2931	0.9744	12.6293	0.0338	3.9010	0.0250	3.9260	1.0346	0.0230	1.0576		3,438.1147	3,438.1147	0.0994	0.0933	3,468.4089
Total	**1.5575**	**7.9109**	**14.9924**	**0.0605**	**4.7721**	**0.0887**	**4.8608**	**1.2854**	**0.0840**	**1.3693**		**6,301.4678**	**6,301.4678**	**0.1948**	**0.5063**	**6,457.2169**

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	3.2232	34.0353	36.0713	0.0618		1.5657	1.5657		1.4645	1.4645	0.0000	5,958.0415	5,958.0415	1.6083		5,998.2478
Total	**3.2232**	**34.0353**	**36.0713**	**0.0618**		**1.5657**	**1.5657**		**1.4645**	**1.4645**	**0.0000**	**5,958.0415**	**5,958.0415**	**1.6083**		**5,998.2478**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.2644	6.9365	2.3631	0.0267	0.8711	0.0637	0.9348	0.2508	0.0609	0.3118		2,863.3531	2,863.3531	0.0954	0.4130	2,988.8080
Worker	1.2931	0.9744	12.6293	0.0338	3.9010	0.0250	3.9260	1.0346	0.0230	1.0576		3,438.1147	3,438.1147	0.0994	0.0933	3,468.4089
Total	**1.5575**	**7.9109**	**14.9924**	**0.0605**	**4.7721**	**0.0887**	**4.8608**	**1.2854**	**0.0840**	**1.3693**		**6,301.4678**	**6,301.4678**	**0.1948**	**0.5063**	**6,457.2169**

3.4 Building Construction - 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	3.0148	31.3663	35.9327	0.0618		1.3873	1.3873		1.2968	1.2968		5,958.7756	5,958.7756	1.6022		5,998.8313
Total	**3.0148**	**31.3663**	**35.9327**	**0.0618**		**1.3873**	**1.3873**		**1.2968**	**1.2968**		**5,958.7756**	**5,958.7756**	**1.6022**		**5,998.8313**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.1512	5.4654	2.0859	0.0254	0.8711	0.0264	0.8975	0.2508	0.0253	0.2761		2,728.4361	2,728.4361	0.0909	0.3927	2,847.7190
Worker	1.2008	0.8607	11.6245	0.0327	3.9010	0.0235	3.9245	1.0346	0.0217	1.0562		3,347.7012	3,347.7012	0.0892	0.0860	3,375.5704
Total	**1.3520**	**6.3261**	**13.7104**	**0.0581**	**4.7721**	**0.0500**	**4.8221**	**1.2854**	**0.0469**	**1.3323**		**6,076.1374**	**6,076.1374**	**0.1801**	**0.4787**	**6,223.2894**

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	3.0148	31.3663	35.9327	0.0618		1.3873	1.3873		1.2968	1.2968	0.0000	5,958.7756	5,958.7756	1.6022		5,998.8313
Total	**3.0148**	**31.3663**	**35.9327**	**0.0618**		**1.3873**	**1.3873**		**1.2968**	**1.2968**	**0.0000**	**5,958.7756**	**5,958.7756**	**1.6022**		**5,998.8313**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 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	0.0000
Vendor	0.1512	5.4654	2.0859	0.0254	0.8711	0.0264	0.8975	0.2508	0.0253	0.2761		2,728.4361	2,728.4361	0.0909	0.3927	2,847.7190
Worker	1.2008	0.8607	11.6245	0.0327	3.9010	0.0235	3.9245	1.0346	0.0217	1.0562		3,347.7012	3,347.7012	0.0892	0.0860	3,375.5704
Total	**1.3520**	**6.3261**	**13.7104**	**0.0581**	**4.7721**	**0.0500**	**4.8221**	**1.2854**	**0.0469**	**1.3323**		**6,076.1374**	**6,076.1374**	**0.1801**	**0.4787**	**6,223.2894**

3.5 Paving - 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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714		1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**		**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.0344**	**0.0247**	**0.3331**	**9.4000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**95.9227**	**95.9227**	**2.5600e-003**	**2.4700e-003**	**96.7212**

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	0.8805	9.6816	8.6593	0.0171		0.4037	0.4037		0.3714	0.3714	0.0000	1,651.7567	1,651.7567	0.5342		1,665.1120
Paving	0.4741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3546**	**9.6816**	**8.6593**	**0.0171**		**0.4037**	**0.4037**		**0.3714**	**0.3714**	**0.0000**	**1,651.7567**	**1,651.7567**	**0.5342**		**1,665.1120**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0247	0.3331	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		95.9227	95.9227	2.5600e-003	2.4700e-003	96.7212
Total	**0.0344**	**0.0247**	**0.3331**	**9.4000e-004**	**0.1118**	**6.7000e-004**	**0.1125**	**0.0296**	**6.2000e-004**	**0.0303**		**95.9227**	**95.9227**	**2.5600e-003**	**2.4700e-003**	**96.7212**

3.6 Architectural Coating - 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					
Archit. Coating	69.9104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**70.1021**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2408	0.1726	2.3316	6.5600e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		671.4587	671.4587	0.0179	0.0173	677.0485
Total	**0.2408**	**0.1726**	**2.3316**	**6.5600e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**671.4587**	**671.4587**	**0.0179**	**0.0173**	**677.0485**

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	69.9104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**70.1021**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2408	0.1726	2.3316	6.5600e-003	0.7824	4.7200e-003	0.7872	0.2075	4.3500e-003	0.2119		671.4587	671.4587	0.0179	0.0173	677.0485
Total	**0.2408**	**0.1726**	**2.3316**	**6.5600e-003**	**0.7824**	**4.7200e-003**	**0.7872**	**0.2075**	**4.3500e-003**	**0.2119**		**671.4587**	**671.4587**	**0.0179**	**0.0173**	**677.0485**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.2577	13.1176	17.3048	0.0939	6.7191	0.1000	6.8191	1.8159	0.0947	1.9106		9,945.5648	9,945.5648	0.3909	1.0025	10,254.0660
Unmitigated	1.2577	13.1176	17.3048	0.0939	6.7191	0.1000	6.8191	1.8159	0.0947	1.9106		9,945.5648	9,945.5648	0.3909	1.0025	10,254.0660

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	185.50	185.50	185.50	401,208	401,208
Unrefrigerated Warehouse-No Rail	622.75	622.75	622.75	2,668,913	2,668,913
Total	808.25	808.25	808.25	3,070,121	3,070,121

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Other Non-Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Parking Lot	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Regional Shopping Center	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Unrefrigerated Warehouse-No Rail	0.690000	0.000000	0.000000	0.000000	0.000000	0.068000	0.055000	0.187000	0.000000	0.000000	0.000000	0.000000	0.000000

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	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200
NaturalGas Unmitigated	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003		100.5227	100.5227	1.9300e-003	1.8400e-003	101.1200

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	11.1644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	843.278	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.2092	99.2092	1.9000e-003	1.8200e-003	99.7988
Total		**9.2100e-003**	**0.0838**	**0.0704**	**5.1000e-004**		**6.3600e-003**	**6.3600e-003**		**6.3600e-003**	**6.3600e-003**		**100.5227**	**100.5227**	**1.9300e-003**	**1.8400e-003**	**101.1200**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Other Non-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
Parking Lot	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	0.0111644	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3135	1.3135	3.0000e-005	2.0000e-005	1.3213
Unrefrigerated Warehouse-No Rail	0.843278	9.0900e-003	0.0827	0.0695	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.2092	99.2092	1.9000e-003	1.8200e-003	99.7988
Total		**9.2100e-003**	**0.0838**	**0.0704**	**5.1000e-004**		**6.3600e-003**	**6.3600e-003**		**6.3600e-003**	**6.3600e-003**		**100.5227**	**100.5227**	**1.9300e-003**	**1.8400e-003**	**101.1200**

6.0 Area Detail

6.1 Mitigation Measures Area

Beverly Boulevard Warehouse - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Unmitigated	7.7590	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841

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	0.4723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**7.7590**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.4723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2792					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4600e-003	7.3000e-004	0.0806	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		0.1728	0.1728	4.5000e-004		0.1841
Total	**7.7590**	**7.3000e-004**	**0.0806**	**1.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**		**0.1728**	**0.1728**	**4.5000e-004**		**0.1841**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Attachment C.

Operation by Law Documentation

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 19, 2020

Charles Brown
InSite Property Group
811 N. Catalina Avenue, Suite 1306
Redondo Beach, CA 90277
Email: chip@insitepg.com

Dear Mr. Brown:

Notification of Lake or Streambed Alteration, Notification No. 1600-2020-0153-R5, Beverly Boulevard Warehouse Project

As the California Department of Fish and Wildlife (CDFW) explained in a previous letter to you dated November 9, 2020, CDFW had until November 15, 2020 to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. CDFW did not meet that date. As a result, by law, you may now complete the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602, subdivision (a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by CDFW in writing prior to November 15, 2020. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify CDFW before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

Your notification includes, but is not limited to, the following information: 0.18 acres of compensatory mitigation. Ephemeral riparian enhancement and ephemeral waters enhancement mitigation credits will be purchased at the Soquel Mitigation Bank.

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, Fish and Game Code sections 2080 *et seq*. (species listed as threatened or endangered, or a candidate for listing under the California Endangered Species Act); section 1908 (rare native plants); sections 3511, 4700, 5050, and 5515 (fully protected species); section 3503 (bird nests and eggs); section 3503.5 (birds of prey); section 5650 (water pollution); section 5652 (refuse

disposal into water); section 5901 (fish passage); section 5937 (sufficient water for fish); and section 5948 (obstruction of stream).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site.

If you have questions regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist) by email at Ruby.Kwan-Davis@wildlife.ca.gov.

Sincerely,

DocuSigned by:
5991E19EF8094C3...
Victoria Tang
Senior Environmental Scientist (Supervisory)

EC: California Department of Fish and Wildlife

Victoria Tang, Senior Environmental Scientist (Supervisory)
Victoria.Tang@wildlife.ca.gov

Ruby Kwan-Davis, Senior Environmental Scientist (Specialist)
Ruby.Kwan-Davis@wildlife.ca.gov

Susan Howell, Staff Services Analyst
Susan.Howell@wildlife.ca.gov

Michael Baker International

Josephine Lim, Environmental Associate
Josephine.Lim@mbakerintl.com

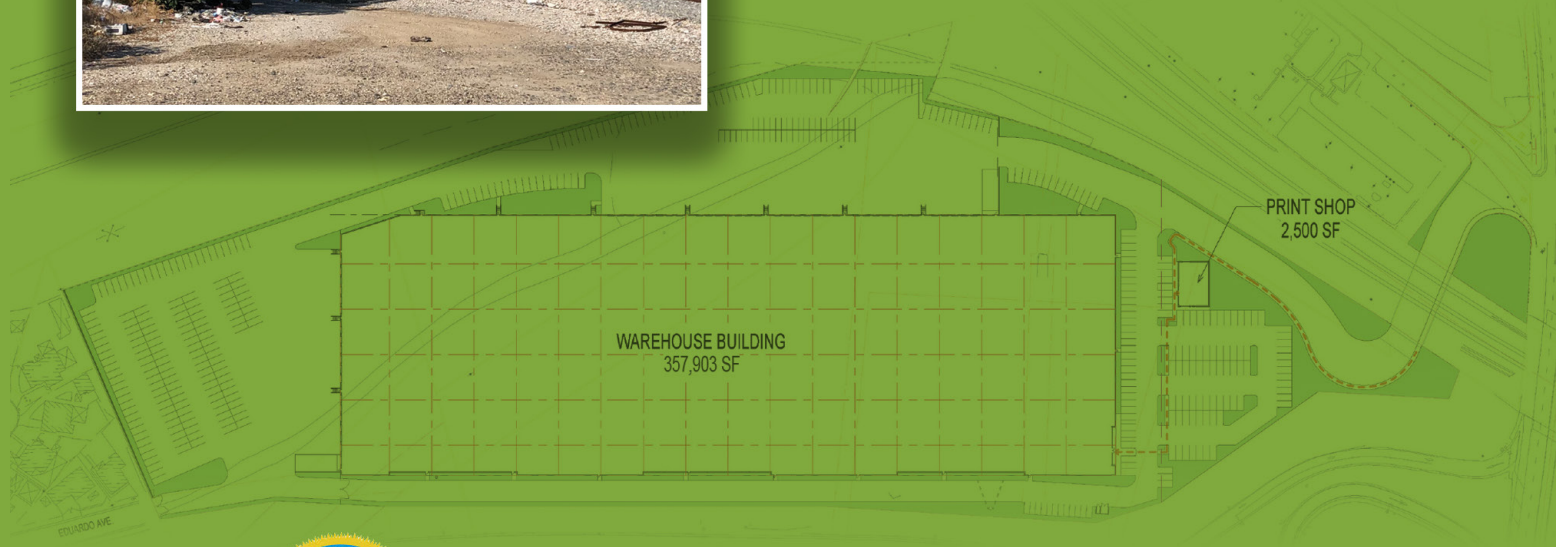
Attachment D.

Public Review Draft IS/MND

PUBLIC REVIEW | DECEMBER 2021

Beverly Boulevard Warehouse Project

Initial Study/Mitigated Negative Declaration



Prepared For:
City of Pico Rivera

Prepared By:
Michael Baker International

Michael Baker
INTERNATIONAL

PUBLIC REVIEW DRAFT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Beverly Boulevard Warehouse Project

Lead Agency:

CITY OF PICO RIVERA
6615 Passons Boulevard
Pico Rivera, California 90660
Contact: Mr. Hector Hernandez
562.801.4340

Prepared by:

MICHAEL BAKER INTERNATIONAL
5 Hutton Centre Drive, Suite 500
Santa Ana, California 92707
Contact: Mr. Alan Ashimine
949.855.5710

December 2021

JN 179201

This document is designed for double-sided printing to conserve natural resources.

TABLE OF CONTENTS

APPENDICES

LIST OF EXHIBITS

LIST OF TABLES

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1.0 INTRODUCTION

The Beverly Boulevard Warehouse Project (herein referenced as the "project") is located at the southwest quadrant of Beverly Boulevard and Interstate 605 (I-605) on a 19.06-acre property in the City of Pico Rivera (City), California. The project generally proposes the construction of an industrial warehouse distribution and office facility totaling 357,903 square feet and a 2,500 square-foot print shop facility; both facilities include surface parking, landscaping, and other ancillary improvements; refer to Section 2.0, *Project Description*. Following a preliminary review of the proposed project, the City has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study Mitigated Negative Declaration addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Section 21000-21189) and pursuant to California Code of Regulations Section 15063, the City of Pico Rivera, acting in the capacity of Lead Agency under CEQA, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Public Resources Code Section 21080(c)).

The environmental documentation, which is ultimately selected by the City in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the City. Following review of any comments received, the City will consider these comments as a part of the project's environmental review and include them with the Initial Study documentation for consideration by the City

1.2 PURPOSE

Section 15063(d) of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

Section 15071 of the CEQA Guidelines identifies the required contents for a negative declaration/mitigated negative declaration, which include the following:

a) A brief description of the project, including a commonly used name for the project, if any;
b) The location of the project, preferably shown on a map, and the name of the project proponent;
c) A proposed finding that the project will not have a significant effect on the environment;
d) An attached copy of the Initial Study documenting reasons to support the finding; and
e) Mitigation measures, if any, included in the project to avoid potentially significant effects.

1.3 CONSULTATION

As soon as a Lead Agency (in this case, the City of Pico Rivera) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines. To date, the City and the project applicant have consulted with numerous public agencies regarding the proposed project, including the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board, Caltrans, and Southern California Association of Governments.

1.4 INCORPORATION BY REFERENCE

The following documents were utilized during preparation of this Initial Study, and are incorporated into this document by reference. The documents are available for review at the City of Pico Rivera Community and Economic Development Department, located at 6615 Passons Boulevard, Rico Rivera, California 90660, and on the City's website, as indicated below for each document.

- *City of Pico Rivera General Plan* (Updated 2014), website: http://www.pico-rivera.org/depts/ced/planning/plan.asp. The purpose of a General Plan is to provide a general, comprehensive, and long-range guide for community decision-making. The *City of Pico Rivera General Plan* (General Plan) consists of the following elements, adopted on various dates: Land Use, Housing, Circulation, Community Facilities, Economic Prosperity, Environmental Resources, Safety, Healthy Community, and Noise. Each individual element begins with a discussion of relevant issues, and identifies goals, policies, and implementing actions addressing those issues.

- *Pico Rivera General Plan Update Final Program Environmental Impact Report* (October 2014), website: http://www.pico-rivera.org/depts/ced/planning/plan.asp. The *Pico Rivera General Plan Update Draft Program EIR* (General Plan PEIR) analyzes the environmental impacts associated with adoption and implementation of the updated Pico Rivera General Plan and rezoning related to the Housing Element in 2014. Subsequently, the *Pico Rivera General Plan Update Final Program Environmental Impact Report* (General Plan FEIR) identified the mitigation measures (that would be implemented to reduce the impacts associated with the updated Pico Rivera General Plan), provided revisions to the General Plan PEIR, and responded to comments received from impacted agencies and individuals regarding the drafted General Plan PEIR.

- *Pico Rivera Municipal Code (Codified through Ordinance 755, 1989*, website: http://qcode.us/codes/picorivera/. The *Pico Rivera Municipal Code* (Municipal Code) consists of regulatory, penal, and administrative ordinances of the City of Pico Rivera. The City uses the Municipal Code to implement control of land uses in accordance with the goals, provisions and objectives of the City's General Plan. Title 18, *Zoning*, of the Municipal Code identifies land uses permitted and prohibited according to the zoning designation of particular parcels. Title 18 regulations are intended to influence, encourage, promote, protect,

maintain, and perpetuate the best interests of the City's environmental quality and the public health, peace, safety, order, and general welfare.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Regionally, the project site is located within the central portion of the City of Pico Rivera (City), within the County of Los Angeles (County); refer to Exhibit 2-1, *Regional Map*. Locally, the non-contiguous 19.06-acre project area is situated between the San Gabriel River to the west and Interstate 605 (I-605) to the east, south of Beverly Boulevard; refer to Exhibit 2-2, *Site Vicinity*.

2.2 ENVIRONMENTAL SETTING

The proposed project site is currently divided into two segments by an existing Union Pacific Railroad (UPRR) alignment. The smaller segment of the project site is located northwest of UPRR and immediately south of Beverly Boulevard, and the second larger segment is located southeast of UPRR and immediately west of I-605. Both segments make up the "project site." The project site is primarily composed of undeveloped land that is bound by the San Gabriel River to the west, I-605/Beverly Boulevard interchange on the north, I-605 on the east, and an existing single-family residential development to the south. Topographically, this area is generally flat with elevation ranging from 192 to 220 feet above mean sea level. An existing concrete-lined drainage feature that flows east to west is located within the northern portion of the site. The site is unpaved and is periodically tilled/grubbed; vegetation on-site is generally limited to low-lying grasses, several mature palm trees, and bushes/shrubs that occur in several portions of the perimeter of the site. An existing gated access is provided at Eduardo Avenue along the southerly boundary of the project site, within unincorporated Los Angeles County. There is no direct access to the project site from within the City of Pico Rivera. Based on the City of Pico Rivera General Plan, this site is one of the largest remaining vacant sites in the City.

Vehicular access for the project is proposed to occur from Beverly Boulevard. This would require the construction of a roadway extending from Beverly Boulevard, in a southerly direction, connecting to the northerly extent of the project site. This portion of the project would traverse through property owned by SCE and UPRR. The portion of SCE property that would be affected by the proposed project is located immediately southwest of Beverly Boulevard, where an existing driveway entrance to the SCE parcel exists. The proposed roadway would extend from this existing driveway, across an undeveloped/unpaved but disturbed portion of land immediately south of Beverly Boulevard and west of the UPRR alignment. As the proposed roadway alignment extends further south, the alignment crosses UPRR land. UPRR's facility includes three tracks, with a right-of-way width of roughly 100 feet within the vicinity of the project site.

SURROUNDING USES

Surrounding land uses in proximity to the project site are primarily comprised of industrial, residential, open space, and railroad uses. The surrounding land uses are as follows; refer to Table 2-1, *Surrounding Uses*:

- *North:* The site is bound by Beverly Boulevard and the I-605/Beverly Boulevard interchange to the north. North of Beverly Boulevard and the I-605/Beverly Boulevard interchange are industrial uses including a large warehouse building within the City of Pico Rivera.

- *East:* East of the project site is the I-605 freeway and beyond the I-605 are residential uses located within the City of Whittier.

- *South:* Residential uses are located south of the project site within Unincorporated Los Angeles County.

Project Site

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BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Regional Map

Exhibit 2-1

Source: Google Earth Pro. July 2020

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BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Site Vicinity

Exhibit 2-2

- *West:* Within the City of Pico Rivera, the site is bound by the San Gabriel River to the west and the UPRR transects the project site in an east to west direction. Along the northwesterly portion of the site, a SCE 66kV substation and recreational vehicle (RV) storage facility exist.

2.3 EXISTING GENERAL PLAN AND ZONING

The City of Pico Rivera General Plan Land Use Map (dated October 2014) designates the project site as "I; General Industrial" and "PF; Public Facilities." General Industrial designations are intended for a range of industrial businesses including manufacturing and assembly, large-scale warehousing and distribution uses, contractors' storage yards, and wholesale activities. Retail or service uses designed to meet the needs of businesses may be permitted subject to applicable zoning regulations. General Industrial areas are intended to make a positive contribution to the local economy and municipal revenues, and furnish local employment opportunities for area residents. The Public Facilities designation is intended to recognize existing publicly owned facilities, and to provide areas for the conduct of public and institutional activities, including public and private utilities. Within the project site, the Public Facilities designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east.; refer to Exhibit 2-3, *Land Use Designations*.

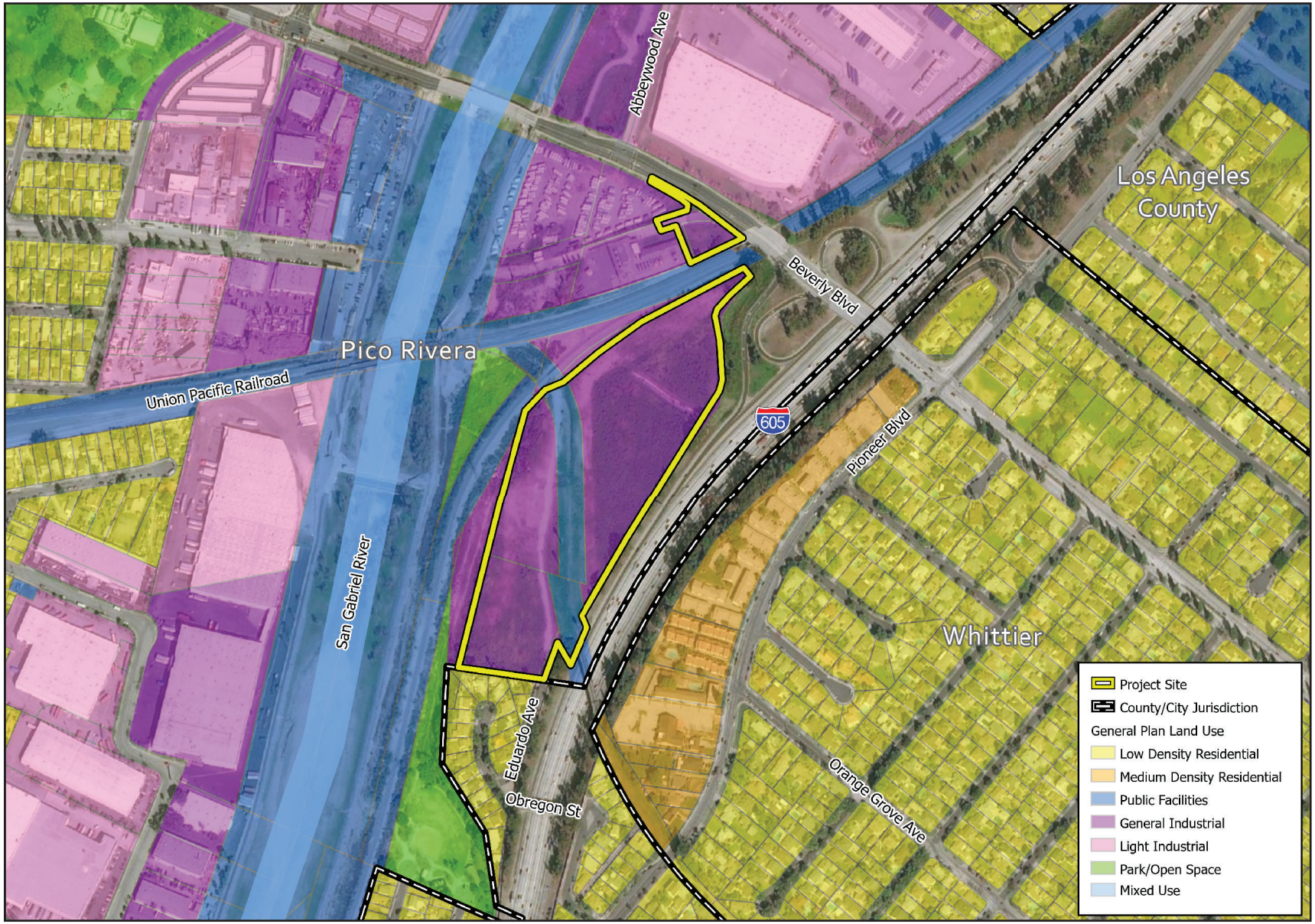
Additionally, the Land Use Element of the General Plan designates the project site as an "Opportunity Area" for development in the City. "Opportunity Areas" are intended to accommodate much of the City's anticipated redevelopment and potential new growth and allows for flexibility in determining specific intentions for use, design and character.

The City's Zoning Map zones the project site as "IPD; Industrial Planned Development" and "P-F; Public Facilities." Based on the Municipal Code, the intent and purpose of the IPD zone is to establish certain areas within the City that promote desirable industrial and sales related uses conducive to the physical characteristics of the land and surrounding development by integrating environmental land planning and development flexibility and encourage creative and innovative architectural design. The purpose of this zone is to encourage high quality industrial development in areas where existing unimproved land, underutilized, and/or deteriorating industrial activity should be revitalized. The Municipal Code identifies that the intent of the P-F zone is to recognize existing publicly owned facilities and to clearly distinguish certain areas within the city that will best facilitate the development and conduct of government and public related institutional activities. Within the project site, the P-F designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east.

Surrounding uses including land use designations and zoning are shown in Table 2-1, below.

Table 2-1
Surrounding Uses

Direction from Site	Jurisdiction	Land Use Designation	Zoning
North	City of Pico Rivera	Light Industrial (LI)	Limited Industrial (I-L)
East	Unincorporated Los Angeles County and City of Whittier	High Density Residential (R-4)	Medium Multiple Residential (R-3)
South	Unincorporated Los Angeles County	Low Density Residential (LDR)	Single-Family Residential (S-F)
West	City of Pico Rivera	General Industrial (I), Public Facilities (PF), Park/Open Space (P-OS)	Industrial Planned Development (IPD), Public Facilities (P-F), Open Space (O-S)



Source: Google Earth Pro. July 2020

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BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Land Use Designations

Exhibit 2-3

2.4 PROJECT CHARACTERISTICS

The proposed project would include construction of a warehousing/distribution building and a print shop facility on the 19.06-acre site. The new warehousing/distribution building would encompass approximately 357,903 gross square feet of building area, which would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass approximately 2,500 gross square feet of building area and include 29 surface parking spaces. The project would also include 22 bicycle spaces and approximately 85,710 square feet of landscaping on-site; refer to Exhibit 2-4, *Conceptual Site Plan*.

This project proposes to enhance the local economy and municipal revenue, and furnish local employment opportunities for residents, consistent with the City's General Plan goals for this "Opportunity Area." As previously stated, the site is bound by the San Gabriel River to the west, Beverly Boulevard and the I-605/Beverly Boulevard interchange to the north, I-605 to the east, existing single-family residential uses to the south, and the UPRR tracks bifurcate the site near the proposed Beverly Boulevard access point. Implementation of a vehicular/bicycle/pedestrian bridge is discussed further below. Construction and operation of the bridge over the UPRR tracks would provide critical access to the project site and would thus serve as a critical element to the realization of the City's priorities and objectives as they pertain to the project.

PROPOSED WAREHOUSING/DISTRIBUTION BUILDING

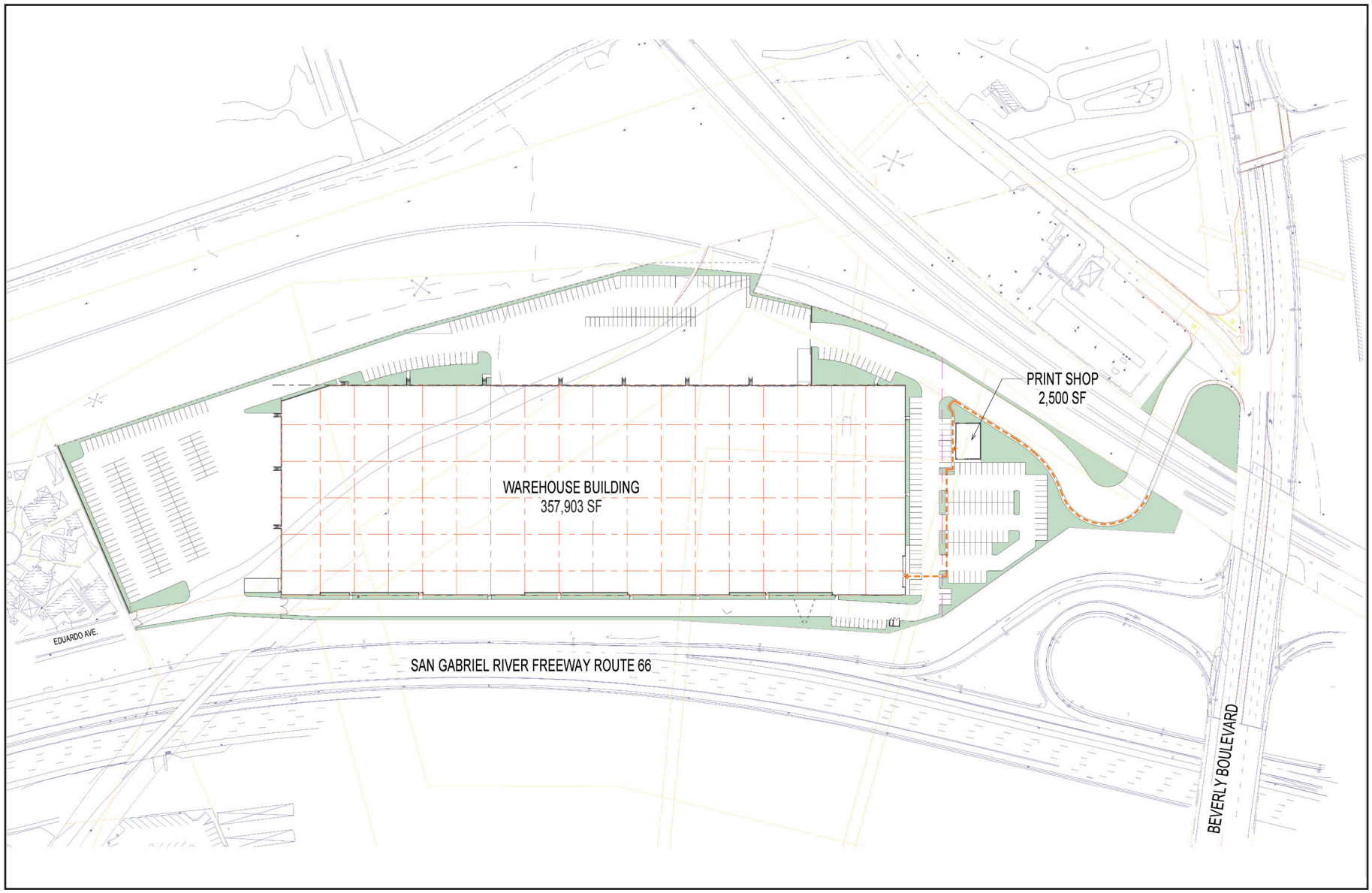
As noted above, the proposed project would construct approximately 357,903 gross square feet of new warehousing/distribution uses with supporting office facilities. This facility would occupy the majority of the project site. The two-level warehouse building would have a maximum height of 73 feet; refer to Exhibits 2-5a, *Warehouse Elevations* and 2-5b, *Print Shop Elevations*. The warehousing building area would include 352,903 square feet of warehousing/distribution uses (which includes 5,000 gross square feet of office use) and 5,000 square feet of mezzanine (total of 357,903 square feet of building area). This concrete tilt-up building would include a variety of contemporary architectural variations and features, including varying painted surfaces, a clear anodized aluminum glazing system, metal accent fins, metal cladding, and perforated metal accent screens. This warehouse facility would also include a total of 52 loading docks and 2 grade doors on the western and southern sides of the building. Billboard signage is proposed along the eastern facing side of the building, facing I-605. Trailer parking would be provided west of the warehousing building, along the westerly boundary of the project site. Security fencing is proposed along the western boarder of the site, east of the UPRR tracks. The warehousing/distribution building would operate 24 hours a day, 7 days a week.

PROPOSED PRINT SHOP FACILITY

In addition to the new warehousing/distribution facility, the project would construct a 2,500 square-foot print shop within the northern portion of the site. This facility would accommodate printing, packing, shipping, and mailbox/post office box services. This single-story building would include a painted stucco finish, with a maximum height of 25 feet. The storefront would feature a clear anodized aluminum glazing system, with a variation of painted surfaces and metal/graphic accents. The facility would have a total of 29 parking spaces to support this use. Anticipated business hours for the print shop facility would be Monday through Friday, 9:00 a.m. to 5:00 p.m.

GENERAL PLAN AMENDMENT AND ZONE RECLASSIFICATION

As noted above, the General Plan Land Use Map designates the project site as "I; General Industrial" and "PF; Public Facilities." The majority of the project site is designated General Industrial, while the Public Facilities designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east. The proposed warehousing/print shop uses would be consistent with the General Industrial land use designation for the project site. However, the proposed project would require a General Plan Amendment to redesignate the Public Facilities corridor to be consistent with the remainder of the site (General Industrial). The existing rail alignment traversing the site has been abandoned for many years, and the former railroad ties/tracks have been removed. Additionally, the project would require a General Plan Amendment for a lot line



Source: InSite

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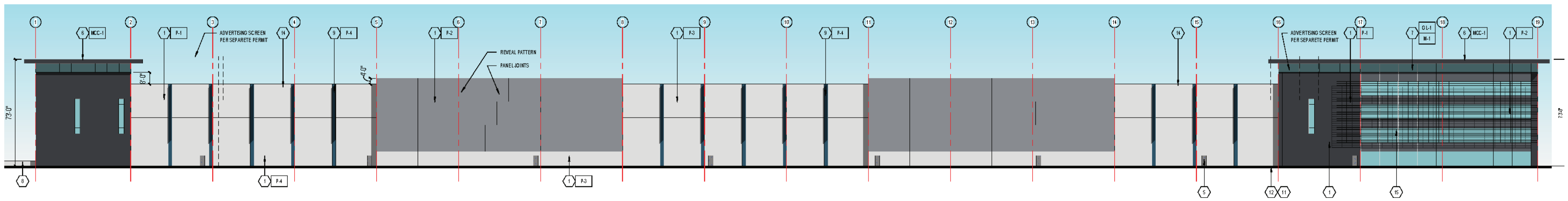
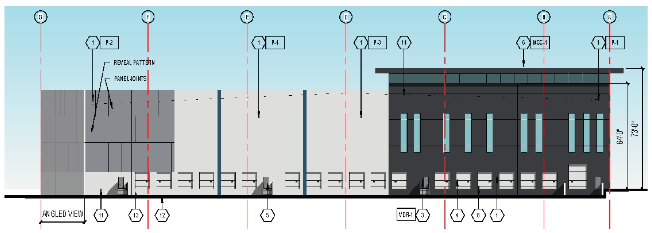
BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Conceptual Site Plan

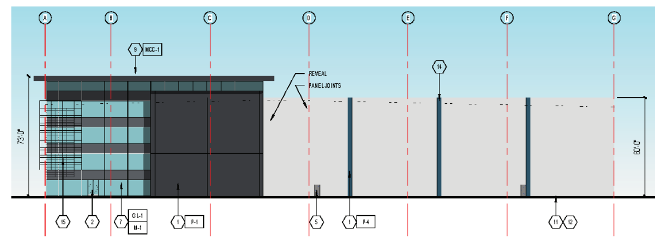
Exhibit 2-4



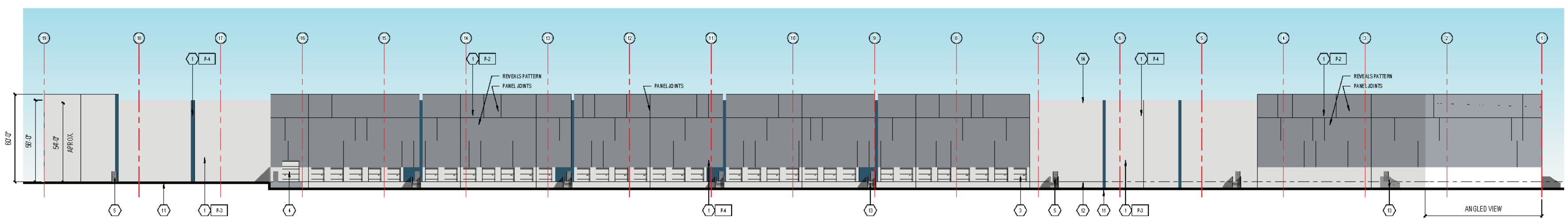
1 WAREHOUSE EAST ELEVATION
1" = 30'-0"



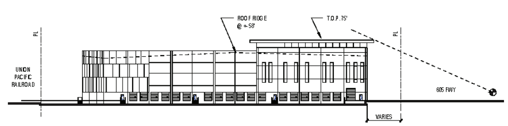
2 WAREHOUSE SOUTH ELEVATION
1" = 30'-0"



4 WAREHOUSE NORTH ELEVATION
1" = 30'-0"



3 WAREHOUSE WEST ELEVATION
1" = 30'-0"

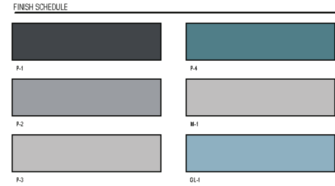


6 LINE OF SIGHT - SOUTH
1" = 60'-0"

ELEVATION KEYNOTES (000)

1. PAINTED CONCRETE TILT-UP WALL
2. PRIMARY BUILDING ENTRANCE.
3. 9' X 10' DOCK HIGH METAL TRUCK DOOR.
4. 12' X 14' GRADE LEVEL METAL DOOR.
5. PAINTED 3' X 7' METAL ACCESS MAN DOOR.
6. CORNICE.
7. STOREFRONT: GLAZING SET IN CLEAR ANODIZED ALUMINUM 2" X 4 1/4" MIN. OFF-SET GLAZING SYSTEM.
8. CONCRETE TILT-UP SCREEN WALL.
9. ARCHITECTURAL METAL ACCENT FIN.
10. ADVERTISING SCREEN.
11. APROXIMATE GRADE LEVEL.
12. SLAB F.F.E.
13. CONCRETE EXTERIOR STAIRS.
14. APPROXIMATE LINE OF ROOF DECK.
15. ACCENT PERFORATED METAL SCREEN.

FINISH SCHEDULE



FINISH SCHEDULE

CODE	MATERIAL	DESCRIPTION
P-1	ACCENT COLOR	COLOR: SW 7615 - SEA SERPENT
P-2	ACCENT COLOR	COLOR: SW 6256 - SERIOUS GRAY
P-3	FIELD COLOR	COLOR: SW 6254 - LAZY GRAY
P-4	ACCENT COLOR	COLOR: SW 6943 - INTENSE TEAL
GL-1	GLAZING	BLUE GLAZING
M-1	MULLIONS	CLEAR ANOIDIZED ALUM.
MCC-1	METAL CLADDING	ALUCOBOND FOCUS BLACK II - PVDF2; 25-35 GLOSS
VDR-1	VERTICAL LIFT DOOR	

Source: InSite

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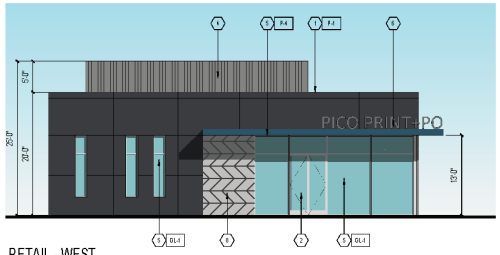
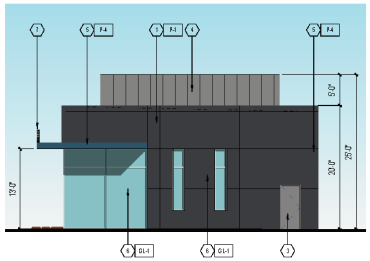
BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Warehouse Elevations

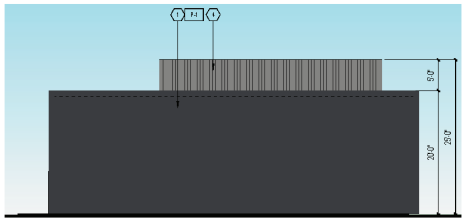
Exhibit 2-5a



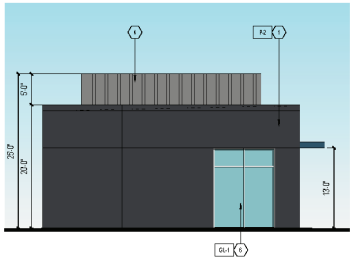
2 RETAIL - WEST



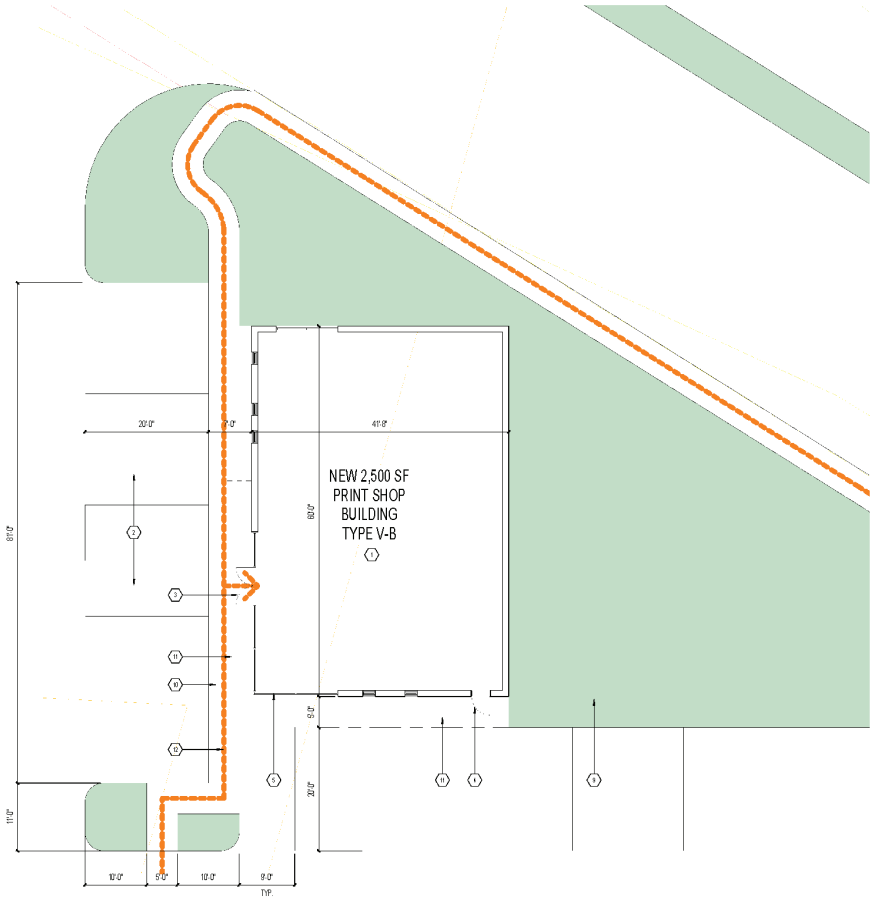
3 RETAIL - SOUTH



4 RETAIL - EAST



5 RETAIL - NORTH



1 RETAIL SITE PLAN

Source: InSite

NOT TO SCALE

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BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Print Shop Elevations

Exhibit 2-5b

adjustment of the project site boundaries to the SCE property. The proposed lot line adjustment would allow the construction of an access roadway to the project site from Beverly Boulevard by connecting to the proposed vehicular/bicycle/pedestrian bridge.

As noted above, the project site is zoned "IPD; Industrial Planned Development" and "P-F; Public Facilities." The majority of the project site is zoned IPD, while the P-F designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east. Under Municipal Code Chapter 18.40, Land Use Regulations, the proposed warehousing and print shop uses are an acceptable use for the IPD zone, upon issuance of a Conditional Use Permit (CUP). However, the proposed project would require a zone reclassification to reclassify the P-F corridor to be consistent with the remainder of the site (IPD).

CIRCULATION IMPROVEMENTS

The project proposes to utilize and improve the existing SCE driveway along Beverly Boulevard for primary access, located west of the I-605/Beverly Boulevard interchange (approximately 220 feet west of the UPRR bridge and approximately 400-feet east of Abbeywood Avenue [centerline to centerline]). The project proposes to construct a vehicular/bicycle/pedestrian bridge that would span over the UPRR to provide connectivity between Beverly Boulevard and the project site. The project access would be designed to accommodate full size 18-wheel tractor trailers associated with operation of the warehousing/distribution facility.

Site access is currently provided at Eduardo Avenue through an existing residential neighborhood located outside the City boundaries. Under the proposed project, this existing access point would be limited to secondary emergency access only.

Inbound vehicular traffic would enter the site from Beverly Boulevard via a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket. The left-turn pocket along westbound Beverly Boulevard would be restriped to accommodate 150 feet of queuing. Outbound traffic would exit the project site via a stop-controlled right- and left-turn movement onto Beverly Boulevard. Traffic exiting the SCE property (occupied by the existing substation and RV storage areas) would have a stop-controlled forward movement south of the proposed western abutment of the UPRR bridge and a second stop-controlled right- and left-turn movement onto Beverly Boulevard. Two traffic islands would be installed to separate the inbound and outbound traffic. Refer to Exhibit 2-6, *Proposed Ingress and Egress Improvements*. Along Beverly Boulevard, west and east of the SCE driveway, the project would include demolition and replacement of the existing sidewalk, curb and gutter, and installation of retaining walls (0 to 7 feet tall) and cable railing to allow for implementation of the eastbound right-turn lane. Small retaining walls would also be installed along the improved SCE driveway and west of the western bridge abutment. All street and driveway fixtures, fencing, utilities, and easements would be relocated, existing bollards and fences would be removed, as necessary, in connection with the SCE driveway improvements.

A new vehicular/bicycle/pedestrian bridge is proposed to span over the UPRR in a west to east direction. The proposed bridge would be approximately 118 feet long, 50 feet 6 inches wide, and would maintain a minimum height of 23 feet 4 inches above the UPRR tracks. The bridge would be constructed utilizing precast concrete girders. From the eastern bridge abutment, the driveway continues south via a ramp. North of the new warehouse building, the ramp levels off and on-site traffic circulation flows around the proposed warehouse building.

Sidewalk improvements would be provided for pedestrian connectivity. The proposed sidewalk would connect to existing sidewalk along the southerly side of Beverly Boulevard, continue over the proposed bridge and around the western and southern sides of the print shop and end at the warehouse building.

Three gates are proposed onsite to restrict vehicular access to the SCE property and truck loading yard. One gate is proposed at the SCE driveway, which will remain open during business hours and two gates are proposed at the truck loading yard (one gate at the northwestern entrance and one gate at the southeastern entrance).

Source: InSite

NOT TO SCALE

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BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Proposed Ingress and Egress Improvements

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Exhibit 2-6

It should be noted that as a condition of approval the project proposes to accommodate a future 10-foot wide, 500-foot long trail segment that would traverse the project site in an east-west orientation, generally along the easterly and southerly boundaries of the site; refer to Exhibit 2-4. This right-of-way would be reserved for implementation of future trail improvements intended to connect the existing Whittier Greenway Trail (a 4.5-mile commuter and recreational path and bikeway located in Whittier, east of the project site) to the San Gabriel River Trail (west of the project site). Additional improvements outside of project limits would be required to complete this connection, including overcrossings of I-605 and the UPRR alignment. The implementation of this trail connection is not a part of this proposed project, and would be a future, separate action subject to standalone environmental review under CEQA at a later time.

PARKING

To accommodate the parking needs associated with the warehouse/distribution and office uses, 393 parking stalls are proposed (351 standard, 9 Americans with Disabilities Act [ADA] compliant parking stalls, and 33 clean air vehicle parking stalls). The new print shop facility would include 29 parking spaces (24 standard, 2 ADA compliant, and 3 clean air vehicle parking stalls). Bicycle racks are also proposed on-site, which would accommodate 22 bicycles. The proposed parking would meet or exceed the City's parking requirements as noted in Municipal Code Chapter 18.44, Off-Street Parking and Loading.

LIGHTING

The project would include nighttime security and safety lighting in the form of lighting along the project access driveway from Beverly Boulevard, wall mounted security lighting, and parking lot lighting. All proposed lighting fixtures would be dark-sky compliant, directional, and shielded to minimize light spillover on adjacent uses. Typical parking lot lighting fixtures would include shielded, twin- or quad-top light poles orienting light downwards, with a 24-inch diameter concrete pole base.

LANDSCAPING AND FENCING

Ornamental landscaping and irrigation are proposed within parking lot medians, along the perimeter of the project site, and within planters located along the exterior of the buildings, consistent with City standards. Plantings would include shrubs, ground cover, and trees such as Desert Museum Palo Verde (*Parkinsonia x 'Desert Museum'*), Afghan Pine (*Pinus eldarica*), Chinese Pistache (*Pistacia chinensis*), African Sumac (*Rhus lancea*), and Brisbane box (*Tristania conferta*).

The project would include an eight-foot high chain link security fence along the easterly boundary of the project site (adjacent to railroad right-of-way), and a 10-foot screen wall along the northwesterly side of the warehousing building. A minimum six-foot high block wall would be constructed along the southerly boundary of the project site, adjacent to residential uses to the south within unincorporated Los Angeles County.

CONSTRUCTION

Project construction is anticipated to occur in one phase for a duration of 16 months, starting in June 2022 and ending in October 2023. Construction staging would occur within project boundaries. Construction activities would include grading, paving, building construction, and painting. The first four months would include installation of the vehicular/bicycle/pedestrian bridge. Construction access would be provided along Eduardo Avenue for four months until the vehicular/bicycle/pedestrian bridge is constructed providing access from Beverly Boulevard. Once the bridge is constructed, Eduardo Avenue would no longer be used for construction access. On-site grading activities would occur for a duration of three months and would include 60,000 cubic yards of cut and 10,000 cubic yards of fill. Building construction and ancillary improvements would continue during the remaining 10 months.

2.5 PERMITS AND APPROVALS

The proposed project would require permits and approvals from the City of Pico Rivera and other agencies prior to construction. These permits and approvals are described below, and may change as the project entitlement process proceeds.

City of Pico Rivera

- California Environmental Quality Act Clearance
- General Plan Amendment
- Zone Reclassification
- Conditional Use Permit
- Precise Plan of Design
- Lot Line Adustment
- Tentative Parcel Map
- Site Plan Review
- Grading Permit
- Building Permit
    - Construction Traffic Management Plan (will also be submitted to County of Los Angeles for Eduardo Avenue construction access)

County of Los Angeles

- Construction Access Agreement: In consultation with the County of Los Angeles as a Responsible Agency, the project applicant shall obtain an agreement with the County allowing the use of Eduardo Avenue for construction access, if required by the County of Los Angeles.

U.S. Army Corps of Engineers

- Clean Water Act Section 404 Nationwide Permit

California Department of Fish and Wildlife

- Section 1602 Streambed Alteration Agreement

Los Angeles Regional Water Quality Control Board

- Clean Water Act Section 401 Water Quality Certification
- NPDES Construction General Permit
- Water Quality Management Plan

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3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** Beverly Boulevard Warehouse Project
2.	**Lead Agency Name and Address:** City of Pico Rivera 6615 Passons Boulevard Pico Rivera, CA 90660
3.	**Contact Person and Phone Number:** Mr. Hector Hernandez Project Planner 562.801.4340
4.	**Project Location:** Regionally, the project site is centrally located within the City of Pico Rivera (City), County of Los Angeles (County). Locally, the 19.06-acre project site is situated between the San Gabriel River to the west and Interstate 605 (I-605) to the east, south of Beverly Boulevard. The project site is undeveloped.
5.	**Project Sponsor's Name and Address:** InSite Property Group 811 N. Catalina Avenue, Suite 1306 Redondo Beach, CA 90277
6.	**General Plan Designation:** The General Plan Land Use Map dated October 2014 designates the project site as "I; General Industrial."
7.	**Zoning:** The City's Zoning Map zones the project site as "IPD; Industrial Planned Development."
8.	**Description of the Project:** The proposed project would generally include construction of a warehousing/distribution building and a print shop facility on the 19.06-acre project site. The new warehousing development would encompass approximately 357,903 square feet of building area, which would include warehouse, distribution, and office facilities and 393 surface parking spaces. The print shop facility would encompass approximately 2,500 square feet of building area and include 29 surface parking spaces. The project would also include 22 bicycle spaces and approximately 85,710 square feet of landscaping on-site. This project proposes to enhance the local economy and municipal revenue, and furnish local employment opportunities for residents, consistent with the City's General Plan goals for this "Opportunity Area." Additional details regarding the project are provided in Section 2.4, *Project Characteristics*.
9.	**Surrounding Land Uses and Setting:** Surrounding land uses in proximity to the project site are primarily comprised of industrial, residential, open space, and transit-related uses. The surrounding land uses are as follows; refer to Table 2-1, *Surrounding Uses*: • *North:* The site is bound by Beverly Boulevard and the I-605/Beverly Boulevard interchange to the north. North of Beverly Boulevard and the I-605/Beverly Boulevard interchange are industrial uses including a large warehouse building in the City of Pico Rivera. • *East:* East of the project site is the I-605 freeway and beyond the I-605 are residential uses located within the City of Whittier.

- *South:* Residential uses are located south of the project site within unincorporated Los Angeles County.

- *West:* In the City of Pico Rivera, the site is bound by UPRR to the west and the San Gabriel River to the west. Along the northerly portion of the site, a SCE 66kV substation and recreational vehicle (RV) storage facility exist.

10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).

Refer to Section 2.5, *Permits and Approvals*, for a description of the permits and approvals anticipated to be required for the project. Additional approvals may be required as the project entitlement process moves forward.

11. California Native American tribal consultation pursuant to Public Resources Code section 21080.3.1.

As required under Assembly Bill 52 (AB52) and Senate Bill 18 (SB18), the City of Pico Rivera distributed letters to tribes, based on a tribal consultation list provided by the Native American Heritage Commission (NAHC) dated July 1, 2020. The letters provided a description of the project, and notified each tribe of the opportunity to consult with the City regarding the proposed project. No tribal responses were received by the City.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant Impact With Mitigation Incorporated," as indicated by the checklist on the following pages.

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines* and used by the City of Pico Rivera in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant impacts indicates the need to more fully analyze the development's impacts and to identify mitigation, which has been completed as part of this evaluation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the project. To each question, there are four possible responses:

- *No Impact*. The development will not have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- *Less Than Significant Impact With Mitigation Incorporated*. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- *Potentially Significant Impact*. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Mitigated Negative Declaration. Explanations are provided for each item.

4.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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, which would adversely affect day or nighttime views in the area?			✓	

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant With Mitigation Incorporated. The project site is located within a developed area of the City of Pico Rivera, and is surrounded by development including the I-605 freeway, Beverly Boulevard, and industrial/residential uses. The General Plan does not designate scenic vistas within the City. However, views of the San Gabriel River to the west, and distant views of the San Gabriel Mountains to the north and the Santa Monica Mountains to the west may be afforded by residences and pedestrians, bicyclists, motorists, and passengers traveling along the San Gabriel River Bicycle Path (located immediately adjacent to the San Gabriel River), I-605, and Beverly Boulevard within the project area.

Long-Term Impacts

The single-family residences located immediately south of the project site are primarily single-story residences with fencing that blocks direct views of the project site. Intermittent views of the proposed project are available from certain viewpoints and perspectives. However, Municipal Code Chapter 18.40, Land Use Regulations, requires industrial zoned development located adjacent to residentially zone properties comply with the following:

- Establish a six-foot high block wall along the side and rear property lines that abut residential property and if physically possible include a landscaped setback consisting of irrigation, trees and ground cover subject to approval by the zoning administrator.
- On-site lighting not to spill onto residential property.
- All unpaved areas to be paved or adequately landscaped.
- Outside storage to be adequately screened subject to zoning administrator approval and limited to an area no closer than 20 feet to any residentially zoned property.
- Commercial vehicles not to be parked or stored within 20 feet of residential zoned property.

Thus, with adherence to Municipal Code Chapter 18.40, a less than significant impact would occur in this regard.

Motorists traveling along I-605 are afforded distant views of the San Gabriel Mountains to the north. The project would be constructed west of the I-605 and would not impact these views. Similarly, the project would be constructed south of Beverly Boulevard and would not obstruct motorists' views of the San Gabriel River to the west, distant views of the San Gabriel Mountains to the north, and Santa Monica Mountains to the west. A less than significant impact would occur in this regard.

Pedestrians, bicyclists, and passengers traveling along the San Gabriel River Bicycle Path are afforded views of the San Gabriel River and distant views of the Santa Monica Mountains to the west, and distant views of the San Gabriel Mountains to the north. However, since the project site would be located approximately 650 feet east of the San Gabriel River Bicycle Path, existing views of the San Gabriel River and Santa Monica Mountain ridgeline to the west, and Santa Monica Mountains to the north would still be afforded. Views of the new warehouse and print shop facilities in the foreground of the distant mountain ridgelines would be consistent with the existing surrounding urban development and would not substantially alter existing views. As such, a less than significant impact would occur in this regard.

Short-Term Impacts

During the construction phase of the project, which is anticipated to occur for a duration of 16 months, clearing, grading, and building activities would be visible to viewers from existing trails, surrounding land uses, and roadways. Construction sites are generally regarded as aesthetically unpleasant. As discussed in Section 2.4, Project Characteristics, construction staging would occur within project site boundaries. However, for pedestrians and bicyclists traveling along the San Gabriel River Bicycle Path, construction activities associated with the project could result in temporary impacts to the existing foreground views of the distant Santa Monica Mountains to the west and San Gabriel Mountains to the north. Although views towards the scenic resources and project site may temporarily be altered by ground disturbance, construction equipment, and supplies/stockpiles, these potential impacts would be short-term in nature and would cease upon completion of the construction phase. Mitigation Measure AES-1 would require construction staging areas include opaque screening materials to shield public views toward the site throughout the construction process. With implementation of this mitigation measure, short-term construction impacts would be less than significant.

Mitigation Measures:

AES-1 Construction equipment staging areas shall utilize appropriate screening (i.e., temporary fencing with opaque material) to shield public views of construction equipment and material. Prior to issuance of a grading permit, the City of Pico Rivera shall verify that staging locations are identified on final grading/development plans and that appropriate perimeter screening is included as a construction specification.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated State scenic highways within proximity to the project sites.[1] Additionally, the General Plan does not designate scenic resources within the project vicinity. No impact would result in this regard.

Mitigation Measures: No mitigation is required.

[1] California Department of Transportation, *Scenic Highways*, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed July 22, 2020.

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 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?***

Less Than Significant Impact. As discussed in Section 2.2, *Environmental Setting*, the project site is situated in an urbanized area. Surrounding land uses include a mixture of industrial, residential, open space, and transit-related uses.

The project site is zoned "IPD" and, pursuant to Chapter 18.37 of the Municipal Code zoning, the use and development of the project would be determined by and subject to a conditional use permit (CUP).

The project would construct new warehouse and print shop facilities on vacant, disturbed land. As noted in Section 2.0, *Project Description*, the warehouse building would have a maximum height of 73 feet and would consist of a concrete tilt-up building with a variety of contemporary architectural variations and features, including varying painted surfaces, a clear anodized aluminum glazing system, metal accent fins, metal cladding, and perforated metal accent screens. The print shop building would include a painted stucco finish, with a maximum height of 25 feet. The storefront would feature a clear anodized aluminum glazing system, with a variation of painted surfaces and metal/graphic accents. Ornamental landscaping and irrigation are proposed within parking lot medians, along the perimeter of the project site, and within planters located along the exterior of the buildings, consistent with City standards. Plantings would include shrubs, ground cover, and trees such as Desert Museum Palo Verde (*Parkinsonia x 'Desert Museum'*), Afghan Pine (*Pinus eldarica*), Chinese Pistache (*Pistacia chinensis*), African Sumac (*Rhus lancea*), and Brisbane box (*Tristania conferta*). The project would include an eight-foot-high chain link security fence along the easterly boundary of the project site (adjacent to railroad right-of-way), and a 10-foot screen wall along the northwesterly side of the warehousing building. A minimum six-foot high block wall would be constructed along the southerly boundary of the project site, adjacent to residential uses to the south within unincorporated Los Angeles County. These architectural, site design, lighting, and landscaping elements would be consistent with City standards for the project site, and would be verified through the City's Site Plan Review process.

City regulations governing scenic quality for industrial development include signage, site planning, and design. However, with approval of the CUP, the proposed project would be consistent with allowed signage, site planning, and design standards. Further, Municipal Code Chapter 18.42, Article II, Public Image Enhancement Program, requires new or remodeled development in industrial zones within the City with a building valuation of $150,000 or more pay a fee (one percent of the building valuation) into the "public image enhancement fund." The fund is maintained by the City and is used for the sole purpose of implementation of the public image enhancement program. The project would be required to comply with this Code Section. Lastly, the proposed project would be consistent with the existing surrounding industrial development, particularly to the north and west of the San Gabriel River of the project site.

As such, with approval of the CUP and payment of the required public image enhancement program fees, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

d) ***Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Less Than Significant Impact. There are two primary sources of light: light emanating from building interiors that pass-through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Depending upon the location of the light source and its proximity to adjacent light sensitive uses, light introduction can be a nuisance, affecting adjacent areas and diminishing the view of the clear night sky.

Short-Term Impacts

Pursuant to Municipal Code Chapter 18.42, all construction activities may only occur between the hours of 7:00 AM and 7:00 PM, except for purposes of emergencies. Thus, as required by the Municipal Code, no nighttime construction activities would occur and light and glare would not occur during the evening hours. Therefore, impacts in this regard would be less than significant.

Long-Term Impacts

The proposed project is located within an urbanized area of the City. Currently, light and glare are being emitted from the surrounding uses including street lighting and vehicle headlights along Beverly Boulevard to the north, I-605 to the east, and residential uses to the south. Additionally, security lighting associated with the SCE and RV storage properties occurs west of the project site.

The proposed project would increase lighting at the project site as compared to existing conditions. The project would include nighttime security and safety lighting in the form of lighting along the project access driveway from Beverly Boulevard, wall mounted security lighting, and parking lot lighting. All proposed lighting fixtures would be dark-sky compliant, directional, and shielded to minimize light spillover on adjacent uses. Typical parking lot lighting fixtures would include shielded, twin- or quad-top light poles orienting light downwards, with a 24-inch diameter concrete pole base.

As stated in Response 4.1(a), above, Municipal Code Chapter 18.40, the City requires on-site lighting does not spill onto residential property. Municipal Code Chapter 18.42, Property Development Regulations, requires all exterior lighting be designed to minimize glare, light trespass, and energy conservation. Full cut-off fixtures, mounting heights, and shielding should be utilized to effectively control glare and light trespass.

Vehicle headlights entering and exiting the project's driveway at Beverly Boulevard could also result in increased lighting in the project vicinity. However, residential uses are approximately 0.5 miles west of the proposed project access point. As such, there are no light sensitive uses near the proposed project access point along Beverly Boulevard. The parking lot proposed near the residential uses located south of the project site would include a minimum six-foot wall and landscaped setback consisting of irrigation, trees, and ground cover as required by the Municipal Code, which would protect residences from light intrusion. These design features would minimize the potential for vehicle headlight impacts to result in spillover to off-site properties. As a result, vehicle headlights are not anticipated to result in a substantial increase in light/glare conditions in the area.

Thus, with adherence to Chapters 18.40 and 18.42 of the City's Municipal Code, operational lighting impacts would be less than significant.

Mitigation Measure: No mitigation is required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the 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?				✓

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

No Impact. The project site is not identified as Prime, Unique, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring program; therefore, no impact would occur in this regard.

Mitigation Measures: No mitigation is required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is zoned as "IPD" by the *City of Pico Rivera Zoning Map*. The City does not provide zoning for agricultural use. Thus, no zoning for agricultural use currently applies to the project site or the surrounding areas. Additionally, the project site is not a part of a Williamson Act contract. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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))?***

No Impact. Refer to Response 4.2 (b). No zoning for forest land or timberland exists within the project site, and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

No Impact. Refer to Responses 4.2 (b) and 4.2 (c). No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?***

No Impact. As stated above in Responses 4.2(a) through 4.2(d), the project site occurs within an urbanized area and is void of agricultural or forest resources. Thus, there is no potential for the conversion of these resources and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	
d. Expose sensitive receptors to substantial pollutant concentrations?			✓	
e. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			✓	

REGULATORY SETTING

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is one of 35 air quality management districts that have prepared Air Quality Management Plans (AQMP) to accomplish a five-percent annual reduction in emissions. On March 3, 2017, the SCAQMD Governing Board approved the 2016 AQMP, which is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories. The 2016 AQMP relies on a multi-level partnership of governmental agencies at the Federal, State, regional, and local level. These agencies (U.S. Environmental Protection Agency [EPA], California Air Resources Board [CARB], local governments, Southern California Association of Governments [SCAG], and the SCAQMD) are the primary agencies that implement the AQMP programs.

Southern California Association of Governments

SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016-2040 RTP/SCS) was adopted on April 7, 2016. The 2016–2040 RTP/SCS reaffirms the land use policies that were incorporated into the 2012–2035 RTP/SCS. These foundational policies, which guided the development of the 2016–2040 RTP/SCS's strategies for land use, include the following:

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;[1]
- Develop "Complete Communities";
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;

[1] Complete language: "Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment." A more detailed description of these strategies and policies can be found on pages 90–92 of the SCAG 2008 Regional Transportation Plan, adopted in May 2008.

- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016–2040 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the 2016–2040 RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how southern California can grow more sustainably. The 2016–2040 RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

On September 3, 2020, the Regional Council of SCAG formally adopted the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020–2045 RTP/SCS). While SCAG has recently adopted the 2020-2045 RTP/SCS, SCAQMD has not released an updated AQMP. SCAQMD is currently working on the next iteration of the AQMP, the *2022 Air Quality Management Plan* (2022 AQMP). The 2022 AQMP will incorporate the recently adopted 2020-2045 RTP/SCS. However, until the adoption of the 2022 AQMP, project AQMP consistency will be analyzed on the 2016 AQMP and the RTP/SCS that was adopted at the time, the 2016-2040 RTP/SCS.

Air Quality Significance Thresholds

SCAQMD provides guidance to lead agencies on how to evaluate project air quality impacts related to the following criteria: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

The SCAQMD's *CEQA Air Quality Handbook* also provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result.[2] If a project generates emissions in excess of the established mass daily emissions thresholds, as outlined in Table 4.3-1, *South Coast Air Quality Management District Mass Daily Emissions Thresholds*, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts. In addition, SCAQMD establishes odor thresholds, which indicate that projects creating an odor nuisance pursuant to SCAQMD Rule 402 would cause a significant impact.

Table 4.3-1
South Coast Air Quality Management District Mass Daily Emissions Thresholds

Phase	Pollutant (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55
Notes: ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter up to 10 microns; $PM_{2.5}$ = particulate matter up to 2.5 microns; lbs = pounds						
Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook,* November 1993.						

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated July 2008) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one-, two-, and five-

[2] Ultimately, the lead agency determines the thresholds of significance for impacts.

acre projects emitting CO, NO_X, PM_{10}, or $PM_{2.5}$. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways.

Cumulative Emissions Thresholds

The SCAQMD's *2016 Air Quality Management Plan* (2016 AQMP) was prepared to accommodate growth, meet State and Federal air quality standards, and minimize the fiscal impact that pollution control measures have on the local economy. According to the SCAQMD *CEQA Air Quality Handbook*, project-related emissions that fall below the established construction and operational thresholds should be considered less than significant unless there is pertinent information to the contrary. If a project exceeds these emission thresholds, the SCAQMD *CEQA Air Quality Handbook* states that the significance of a project's contribution to cumulative impacts should be determined based on whether the rate of growth in average daily trips exceeds the rate of growth in population.

City of Pico Rivera

General Plan

The Environmental Resources Element of the General Plan has identified the following applicable goals and policies aimed at improving the air quality within the City:

- **Goal 8.2**: Continued improvement in local and regional air quality with reduced greenhouse gas emissions to maintain the community's health.

    - **Policy 8.2-1 Regional Efforts**. Coordinate local air quality improvements and greenhouse gas emissions reduction efforts with surrounding communities, and regional agencies such as the South Coast Air Quality Management District, the Gateway Cities Council of Governments.

    - **Policy 8.2-3 Construction Emissions**. Require new development projects to incorporate feasible measures that reduce emissions from construction, grading, excavation, and demolition activities to avoid, minimize, and/or offset their impacts consistent with the South Coast Air Quality Management District.

    - **Policy 8.2-4 Operational Emissions**. Require new development projects to incorporate feasible measures that reduce operational emissions through project and site design and use of best management practices to avoid, minimize, and/or offset their impacts consistent with South Coast Air Quality Management District requirements.

    - **Policy 8.2-5 Toxic Air Pollutants**. Locate uses, facilities and operations that may produce toxic or hazardous air pollutants (e.g. industrial uses, highways) an adequate distance from sensitive receptors, consistent with California air Resources Board recommendations.

      Implementation Program for Policy 8.2-5:
        - Require projects for new industrial development or expansion of existing industrial uses that produce air pollutants or toxic air contaminants to conduct a health risk assessment and establish appropriate mitigation prior to approval.

    - **Policy 8.2-6 Odors**. Require that adequate buffer distances be provided between odor sources such as industrial users and sensitive receptors.

    - **Policy 8.2-7 Consolidate Industrial Uses**. Consolidate truck-intensive industrial uses within the southern portion of the city to separate truck routes from neighborhoods and minimize potential impacts of diesel emissions on existing residential uses.

- **Policy 8.2-9 Park and Ride Lots**. To encourage carpooling, work with the city of Whittier to develop additional park and ride facilities along the I-605 freeway, and with the cities of Downey and Commerce to develop additional park and ride facilities along the I-5 freeway.

- **Policy 8.2-10 Employers**. Encourage employers to allow flexible work hours and telecommuting where feasible, and to provide incentives for employee use of public transit, biking, walking, and carpooling for home to work commutes.

- **Policy 8.2-14 Transit Vehicles**. Encourage and work with local and regional transit providers to use transit vehicles and facilities that are powered by alternative fuels and are low emissions.

- **Policy 8.2-18 Electric Vehicles**. Encourage provision of or readiness for charging stations and related infrastructure for electric vehicles within new development and redevelopment proposals and within City operations.

Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The proposed project is located within the South Coast Air Basin (Basin), which is governed by the SCAQMD. On March 3, 2017, the SCAQMD Governing Board adopted the 2016 AQMP. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, updated emission inventory methodologies for various source categories. Additionally, the 2016 AQMP utilized information and data from SCAG and its *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016-2040 RTP/SCS). While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), SCAQMD has not released an updated AQMP. As such, this consistency analysis is based off the 2016 AQMP and the associated 2016-2040 RTP/SCS. According to the SCAQMD's CEQA Air Quality Handbook, projects must be analyzed for consistency with two main criteria, as discussed below.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertains to pollutant concentrations, rather than to total regional emissions, an analysis of the project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(c), localized concentrations of carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would be less than significant during project construction and operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations.[3]

b) Would the project cause or contribute to new air quality violations?

[3] Because reactive organic gases (ROGs) are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

As discussed below in Response 4.3(b) and Response 4.3(c), the proposed project would result in emissions that would be below the SCAQMD thresholds. Therefore, the proposed project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

As shown in Response 4.3(c), the proposed project would result in less than significant impacts with regard to localized concentrations during project construction and operations. As such, the proposed project would not delay the timely attainment of air quality standards or 2016 AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the *2016 AQMP*. Determining whether or not a project exceeds the assumptions reflected in the *2016 AQMP* involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?*

A project is consistent with the AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the *2016 AQMP*, three sources of data form the basis for the projections of air pollutant emissions: the City's General Plan, SCAG's *Growth Management* Chapter of the *Regional Comprehensive Plan and Guide* (RCPG), and SCAG's 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS also provides socioeconomic forecast projections of regional population growth.

The project proposes the construction of a warehousing/distribution building and a print shop facility on a 19.06-acre site. As discussed in Section 4.14, *Population and Housing*, it is not anticipated that implementation of the proposed project would induce substantial population growth within the City either directly or indirectly. The land use for the project site is designated by the General Plan as General Industrial. The General Industrial land use designations are intended for a range of industrial businesses, including manufacturing and assembly, large-scale warehousing and distribution uses, contractors' storage yards, and wholesale activities. General Industrial areas are intended to make a positive contribution to the local economy and municipal revenues and furnish local employment opportunities for area residents. The majority of the proposed project site would include warehouse and distribution uses with supporting offices and truck loading docks. A small portion of the site would include print shop uses. Due to the proposed lot line adjustment near the SCE facility and UPRR right-of-way, the project would include a General Plan Amendment.

According to the City of Pico Rivera Zoning Map, the project site is zoned Industrial Planned Development (IPD) and Public Facilities (P-F). As described in the Municipal Code, Chapter 18.37.020, the purpose of the IPD zone is to encourage high quality industrial development in areas where existing unimproved land, underutilized and/or deteriorating industrial activity have the potential to be revitalized. The proposed project would require a zone reclassification to reclassify the P-F corridor that applies to former railroad right-of-way to be consistent with the remainder of the site (IPD). With approval of the proposed project, including approval of the proposed General Plan Amendment and zoning reclassification, the proposed project would be consistent with the City's General Plan and zoning code. Therefore, the proposed project is considered

consistent with the General Plan, and is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RCPG. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City. As the SCAQMD has incorporated these same projections into the 2016 AQMP, it can be concluded that the proposed project would be consistent with the 2016 AQMP with the approval of the General Plan Amendment and zone reclassification.

b) *Would the project implement all feasible air quality mitigation measures?*

The proposed project would result in less than significant air quality impacts and would comply with all applicable SCAQMD rules and regulations, including Rule 403 that requires excessive fugitive dust emissions controlled by regular watering or other dust prevention measures and Rule 1113 that regulates the ROG content of paint. As such, the proposed project meets this AQMP consistency criterion.

c) *Would the project be consistent with the land use planning strategies set forth in the AQMP?*

Land use planning strategies set forth in the 2016 AQMP are primarily based on the 2016-2040 RTP/SCS. In accordance with the goals of the General Plan, the proposed warehousing and print shop uses would create new economic development and potential new growth within the City. The project would fall under the General Industrial land uses designation, which is intended to make a positive contribution to the local economy and municipal revenues and furnish local employment opportunities for area residents.

Additionally, the project would be consistent with the General Plan Environmental Resources Element Goal 8.2. The project would incorporate applicable SCAQMD Rules and Regulations to help lower construction and operational emissions, including odor impacts, consistent with General Plan Policies 8.2-3, 8.2-4, and 8.2-6. Consistent with General Plan Policy 8.2-5, a Health Risk Assessment (HRA) has been conducted for the project; refer to Response 4.3(c). Additionally, the project is located in the southern portion of the City, near I-605, consistent with General Plan Policy 8.2-7. Therefore, the project would be consistent with the actions and strategies of the 2016-2040 RTP/SCS, as the project would promote new economic development within a large infill area and be consistent with the City's General Plan goals and policies. In addition, as discussed above, the project would be consistent with the General Plan land use designation and zoning upon approval of a General Plan Amendment and Zoning Reclassification. As the SCAQMD has incorporated these same projections into the 2016 AQMP, it can be concluded that the proposed project would be consistent with the 2016 AQMP. As such, the proposed project meets this AQMP consistency criterion.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. As discussed above, the proposed project's long-term influence would also be consistent with the goals and policies of the AQMP and is, therefore, considered consistent with the SCAQMD's *2016 AQMP*.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. The project has the potential to generate short-term emissions during construction and long-term emissions during operations. Construction activities may generate temporary pollutant emissions through the use of heavy-duty construction equipment (e.g., graders, pavers, etc.), as well as construction worker,

vendor, and haul trips. Project operations may generate area, energy, mobile, or stationary source emissions. The following analysis discusses the project-generated construction, operational, and cumulative emissions.

CRITERIA POLLUTANTS

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of CO.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O_3 layer) extends upward from about ten to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen dioxide (NO_X), and sunlight to form; therefore, VOCs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the Earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary

disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards. On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised and established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Sulfur Dioxide (SO_2). SO_2 is a colorless, irritating gas with a rotten egg smell that is primarily formed by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with sulfur oxides (SO_X). Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are criteria pollutants since they are precursors to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROG). Similar to VOC, ROG are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight. ROGs are criteria pollutants since they are precursors to O_3, which is a criteria pollutant.

Short-Term Construction Emissions

The project involves construction activities associated with grading, on-site earthwork, building construction, paving, and architectural coating. The project would be constructed over approximately 17 months. The proposed earthwork would involve approximately 60,000 cubic yards of cut and 10,000 cubic yards of fill, resulting in approximately 65,000 cubic yards of import and 2,000 cubic yards of export. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site.[4] The analysis of daily construction emissions has been prepared utilizing CalEEMod. An individual CalEEMod run was compiled for the project's construction emissions; refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for the CalEEMod outputs and results. Table 4.3-2, *Construction Emissions*, presents the anticipated daily short-term construction emissions.

[4] While Chapter 18.42 of the City's Municipal Code allows for construction activities to occur between seven a.m. and seven p.m., it is anticipated that construction equipment would not be used during every hour of the day. Rather, consistent with industry standards and typical construction practices, it is assumed that each piece of equipment listed would operate up to 8 total hours per day. For example, during grading operations, it can be reasonably inferred that water trucks would not operate continuously over a 12-hour period but would instead be used as necessary to minimize fugitive dust. In fact, most pieces of equipment likely would operate for fewer hours per day than indicated in the modeling.

Table 4.3-2
Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Emissions[2,3]						
Year 1	7.05	95.01	51.06	0.23	12.78	6.29
Year 2	70.34	47.40	58.64	0.14	6.73	3.03
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes: ROG = reactive organic gases; NO_X = nitrous oxides; CO = carbon monoxide; SO_2 = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

1. Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case.
2. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.
3. The project's 17-month construction schedule would occur over two calendar years.

Refer to Appendix A, *Air Quality/Greenhouse Gas /Energy Data*, for assumptions used in this analysis.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (including demolition as well as construction activities). Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, site preparation, and construction is expected to be short-term and would cease upon project completion. Most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the Earth's crust, such as dust, are also present, with the amount varying in different locations.

The project would be subject to all required SCAQMD dust control techniques (i.e., daily watering), limitations on construction hours, and adhere to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM_{10} and $PM_{2.5}$ concentrations. As noted in Table 4.3-2, total PM_{10} and $PM_{2.5}$ emissions would not exceed SCAQMD thresholds during construction. Thus, construction air quality impacts would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, employee commutes to the project site, emissions produced on-site as equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 4.3-2, construction equipment and worker vehicle exhaust emissions would not exceed the established SCAQMD threshold for all criteria pollutants. Therefore, impacts in this regard would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. In accordance with the methodology prescribed by the SCAQMD, the ROG emissions associated with paving and architectural coating have been quantified with the CalEEMod model. The project would include a large number of prefinished panels or masonry, which would reduce the project's architectural coating area and associated ROG emissions. ROG emissions associated with the proposed project would be less than significant; refer to Table 4.3-2.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are human health hazards when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

Long-Term Operational Emissions

Long-term air quality impacts would consist of mobile source emissions generated from project-related traffic, and emissions from stationary area and energy sources. Emissions associated with each of these sources were calculated and are discussed below.

Mobile Source

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod. According to the Transportation Impact Analysis (TIA) prepared for the project (refer to Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report*), the proposed project would generate approximately 808 total daily trips between the warehouse and print

shop uses. Due to the nature of the proposed on-site uses (warehouse and print shop facility), the TIA provided separate fleet mixes and trip generation rates for both proposed land uses; refer to Appendix F. As such, CalEEMod run was adjusted to accurately model the different fleet mixes and total daily trips between each proposed land uses within the project. Table 4.3-3, *Long-Term Air Emissions*, presents the anticipated mobile source emissions due to the project.

Table 4.3-3
Long-Term Air Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Summer Emissions						
Area	7.76	<0.01	0.08	<0.01	<0.01	<0.01
Energy	0.01	0.08	0.07	<0.01	0.01	0.01
Mobile	1.31	12.50	17.95	0.10	6.82	1.91
Total Summer Emissions[2]	***9.07***	***12.59***	***18.10***	***0.10***	***6.83***	***1.92***
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Is Threshold Exceeded? (Significant Impact?)	***No***	***No***	***No***	***No***	***No***	***No***
Project Winter Emissions						
Area	7.76	<0.01	0.08	<0.01	<0.01	<0.01
Energy	0.01	0.08	0.07	<0.01	0.01	0.01
Mobile	1.26	13.12	17.30	0.09	6.82	1.91
Total Winter Emissions[2]	***9.02***	***13.20***	***17.45***	***0.09***	***6.83***	***1.92***
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Is Threshold Exceeded? (Significant Impact?)	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.
2. The numbers may be slightly off due to rounding.

Refer to Appendix A, *Air Quality/Greenhouse Gas /Energy Data*, for assumptions used in this analysis.

Area Source Emissions

Area source emissions are generated from consumer products, architectural coating, and landscaping. The project would be required to comply with SCAQMD Rule 1113. SCAQMD Rule 1113 restricts the VOC content of architectural coatings; reducing ROG emissions. Additionally, the project would include a large number of prefinished panels or masonry, which would reduce the project's architectural coating area and associated ROG emissions. As seen in Table 4.3-3, the project's ROG emissions would not exceed SCAQMD thresholds.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity and natural gas usage associated with the proposed project; refer to Table 4.3-3. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

Total Operational Emissions

As shown in Table 4.3-3, the total operational emissions for both summer and winter would not exceed established SCAQMD thresholds. Therefore, impacts in this regard would be less than significant.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O_3 precursors, VOCs and NO_x, affect air quality on a regional scale. Health effects related to O_3 are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants during construction would have negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the SCAQMD,[5] the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD),[6] SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD further states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

Cumulative Short-Term Construction Impacts

With respect to the proposed project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to Federal Clean Air Act mandates. As such, the proposed project would be subject to SCAQMD Rule 403 requirements and implement all feasible SCAQMD rules to reduce construction air emissions to the extent feasible. Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. In addition, the proposed project would comply with adopted 2016 AQMP emissions control measures. Implementation of SCAQMD Rule 403 and the 2016 AQMP emissions control measures would help the project reduce its emissions from construction activities, consistent with the General Plan Policy 8.2-3. Pursuant to SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the Basin.

As discussed above, the project's short-term construction emissions would be below the SCAQMD thresholds and would result in less than significant air quality impacts. Thus, it can be reasonably inferred that the project's construction

[5] South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

[6] San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin. A less than significant impact would occur in this regard.

Cumulative Long-Term Operational Impacts

As discussed, the proposed project would not result in long-term operational air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Furthermore, project adherence to SCAQMD rules and regulations would help reduce operational air emissions, consistent with General Plan Policy 8.2-4. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, no cumulative operational impacts associated with implementation of the proposed project would result.

Mitigation Measures: No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The closest sensitive receptors to the project site are residential uses adjacent to the south.[7] In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction and operations impacts (area sources only). The CO hotspot analysis following the LST analysis addresses localized mobile source impacts.

Localized Significance Thresholds (LST)

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, $PM_{2.5}$, or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD notes that any project over five acres may need to perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project is located within Sensitive Receptor Area (SRA) 5, Southeast Los Angeles County.

Construction

Although the site is approximately 19 acres, the total acres disturbed per day is based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. Based off the CalEEMod results, the project would disturb approximately 297 acres over 66 days (4.5 acres per day). Therefore, the LST thresholds interpolated from the two acres and five acres thresholds were utilized for the construction LST analysis. As noted above, the closest sensitive receptor to the project site is a residential property adjacent to the south of the project's construction limits. This sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD LST Methodology, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. As the nearest sensitive use

[7] While the proposed project is adjacent to the nearest residential property line, the nearest structure is approximately 12 feet to the south.

is located adjacent to the project site, the lowest LST values of 25 meters were utilized. Table 4.3-4, *Localized Significance of Construction Emissions*, shows the construction-related emissions with incorporation of SCAQMD Rule 402 and 403. It is noted that the localized emissions presented in Table 4.3-4 are less than those in Table 4.3-1 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As seen in Table 4.3-4, on-site emissions with SCAQMD rules applied would not exceed the LSTs for SRA 5.

Table 4.3-4
Localized Significance of Construction Emissions

Source	Pollutant (pounds/day)[4]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 1				
On-Site Construction Emissions with SCAQMD Rules Applied[2]	62.92	41.71	8.90	5.07
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Year 2				
On-Site Construction Emissions with SCAQMD Rules Applied[3]	31.37	35.93	1.39	1.30
Localized Significance Threshold[1]	*162*	*1,376*	*12*	*6*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately 4.5 acres; therefore, thresholds interpolated from 2-acre and 5-acre thresholds were used), the distance to sensitive receptors, and the source receptor area (SRA 5).
2. For construction year 1, the grading phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
3. For construction year 2, the building construction phase is presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.
4. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.

Refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*, for detailed model input/output data.

Operations

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). Since the proposed project consists of a warehouse facility, the operational phase LST protocol was applied. If emissions exceed the applicable operational LSTs for the project site, then additional dispersion modeling would need to be conducted to determine if there is an actual exceedance of the ambient air quality standards. Although the project site is approximately 19.06 acres, the five-acre operational LST was utilized to provide a conservative estimate of operational LST impacts. As the nearest sensitive use is located adjacent to the project site, the lowest LST values of 25 meters were utilized.

According to the CalEEMod defaults and output, the project's trip lengths could be as short as 6.90 miles. It was conservatively assumed that 10 percent of this trip length would occur on site, or about 0.69 miles. The project site is approximately 0.36 miles across, which means the 10 percent assumption, or 0.69 miles, would be conservative. As 10 percent of the project's mobile trips would occur on site, the operational LST assessment analyzed 10 percent of the total operational mobile emissions. Table 4.3-5, *Localized Significance of Operational Emissions*, shows the calculated emissions for the project's operational activities compared to the applicable LSTs. As shown in Table 4.3-5, the project's operational area source emissions plus 10 percent of the project's total mobile emissions would not exceed the LSTs for SRA 5. Therefore, localized significance impacts from operations would be less than significant.

Table 4.3-5
Localized Significance of Operational Emissions

Source	Pollutant (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Total Area Source Emissions	<0.01	0.08	<0.01	<0.01
Total On-site Mobile Emissions[2]	1.31	1.73	0.68	0.19
Total On-site Operational Emissions	1.31	1.81	0.68	0.19
Localized Significance Threshold[2]	*172*	*1,480*	*4*	*2*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Note:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the total acreage, the distance to sensitive receptors, and the source receptor area (SRA 5).
2. It was conservatively assumed that approximately 10 percent of the project's mobile trips would occur on site, the operational LST assessment analyzed 10 percent of the total winter operational mobile emissions from Table 4.3-2.

Toxic Air Contaminants

Consistent with the General Plan Policy 8.2-5 and Implementation Program for Policy 8.2-5, an HRA was conducted to evaluate the project's operational diesel particulate matter (DPM) emissions from heavy-duty truck trips and the potential health risk at nearby sensitive receptors. Furthermore, it should be noted that the project truck-intensive industrial uses were cited in the southern portion of the City, nearby I-605, consistent with General Plan Policy 8.2-7.

It should be noted that the quantified modeling and analysis of the project's health risk impacts were based upon a previous iteration of the proposed project. This previous version of the project included 45 loading docks for the warehouse, and the updated project plans included 52 loading docks, representing an approximately 16 percent increase. The locations of the loading docks have not been changed. To account for the increased trucks idling time at the additional loading docks, the modeled concentrations and health risk levels were increased by 16 percent and presented below. This is a conservative analysis because the modeled concentrations and health risk levels not only account for trucks idling emissions, but also emissions from trucks movement and maneuvering. The daily truck trips (192 trips per day) did not change due to the updated project plans, and therefore emissions from truck movement and maneuvering did not increase.

Health Risk Assessment Thresholds

In order to determine whether or not a proposed project would cause a significant health risk effect on the environment, the impact of the project must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the CEQA Guidelines, the SCAQMD recommends that the following thresholds be used by lead agencies in determining whether the health impact of the proposed project is significant. The thresholds for air toxic emissions are as follows:

- *Cancer Risk*: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.

- *Non-Cancer Risk*: Emit toxic contaminants that exceed the maximum hazard quotient of 1.0 in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per one million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below, which health effects are not likely to occur. A hazard index of less than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

Sensitive Receptors

According to the SCAQMD, in order "to identify the maximum impacted receptors (i.e., peak cancer risk and peak hazard indices) a grid spacing of 100 meters or less must be used".[8] As such, receptors were modeled with a 100-meter (82 feet) by 100-meter (82 feet) grid spacing over the entire 6.0 kilometer (km) by 6.0 km modeling site domain[8]; refer to Appendix G, *Health Risk Data*. In addition, smaller sensitive receptor grids of 10 meters (33 feet) by 10 meters (33 feet) or less were modeled over nearby sensitive receptor locations of concern:

- Residential neighborhood along Obregon and Eduardo Avenue adjacent to the south of the project site (SR-1);
- Residential uses located between I-605 to the east, Pioneer Boulevard to the west, Obregon Street to the South, and Beverly Boulevard to the North, approximately 70 meters (230 feet) to the southeast of the project site (SR-2);
- Residential uses located between Strong Avenue to the north, Sherril Street to the south, and east of Pioneer Boulevard, approximately 183 meters (600 feet) to the northeast of the project site (SR-3);
- Residential uses located south of Amigo park, along Jaurez and Esperanza Avenue, bordering I-605, approximately 244 meters (800 feet) to the south of the project site (SR-4);
- Residential uses located east of Pioneer Boulevard, south of Obregon Street, north of Orange Drive, and west of Lockheed Avenue, approximately 263 meters (860 feet) to the southeast of the project site (SR-5);
- Franklin Elementary School, located at 5777 Lockheed Avenue, Whittier, CA 90606, approximately 494 meters (1620 feet) to the southeast of the project site (SR-6);
- San Gabriel River Mid Trail located approximately 80 meters (260 feet) to west of the project site (Trail 1 and Trail 2); and
- Multifamily Residential uses, located at 10165 Beverly Blvd, Whittier, CA 90601, approximately 227 meters (746 feet) to the northeast of the project site (SR-7).

In total, 7,211 individual sensitive receptor locations were modeled over the 6.0 km by 6.0 km site domain in order to capture the maximum individual cancer risk (MICR) due to the operation of the project; refer to Appendix G for the modeling results at these sensitive receptor locations. It should be noted that the project is consistent The United States Geological Survey (USGS) 1/3 arc-second (about 10 meters) National Elevation Dataset (NED) terrain data was processed with AERMAP[9] and imported into AERMOD for the project area. The modeling and analysis were prepared in accordance with the SCAQMD Guidelines.

Health Risk Assessment Methodology

The air dispersion modeling for the HRA was performed using the Environmental Protection Agency (EPA) AERMOD dispersion model version 19191. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed,

[8] Site domain is the area defined in AERMOD, where all the modeled sources and receptors are within it.
[9] U.S. Environmental Protection Agency, *User's Guide for the AERMOD Terrain Preprocessor (AERMAP)*, https://www3.epa.gov/ttn/scram/models/aermod/aermap/aermap_userguide_v18081.pdf, accessed October 1,2020.

temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Pico Rivera Monitoring Station was selected as being the most representative meteorology based on proximity.[10]

According to the TIA, the project would have 808 total daily trips, with 616 passenger car trips and 192 truck trips.[11] On-site emission sources in the model include: seven one-line volume source (comprised of 45 volume sources) to model the 192 trucks idling at the 52 loading docks to the northwest and south of the warehouse, and two one-line volume source modeled surrounding the warehouse (comprised of 74 volume sources) to model truck movement and maneuvering. The off-site emission sources in the model include 12 separate one-line volume sources along: Beverly Boulevard, I-605, Pioneer Boulevard, and Rosemead Boulevard. These off-site emissions sources are comprised of a total of 1,680 volume sources and represent the off-site truck movement on adjacent roadways. An emission rate for PM_{10} (DPM) was calculated using EMFAC2017[12] model run for Los Angeles County. Emissions from heavy trucks were assigned a release height of 4.27 meters (14 feet) in compliance with the California Vehicle Code (CVC) Section 35250. Refer to Appendix G, for all emission calculations, EMFAC2017 model runs, and AERMOD results.

The model was run to obtain the peak one-hour and period (annual) average concentration in micrograms per cubic meter [µg/m^3] at nearby sensitive receptors. According to the SCAQMD's Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588), air dispersion modeling is required to estimate (a) annual average concentrations to calculate the MICR, the maximum chronic hazard index (HI), the zones of impact, and excess cancer burden; and (b) peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects.

The Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT) was employed to calculate the health risks of the project on the sensitive receptors near the project site. HARP2 was created for the purpose of assisting and supporting the local California Air Pollution Control and Air Quality Management Districts with implementing the requirements of AB 2588. Although designed to meet the programmatic requirements of the Air Toxics "Hot Spots" Program, HARP2 modules have also been used for preparing risk assessments for other air related programs (e.g., air toxic control measure development, facility permitting applications, roads, ambient monitoring evaluations, CEQA reviews). A health risk computation was performed to determine the potential risk using the maximum annual average and the risk of developing an excess cancer was calculated on a 30-year exposure scenario for nearby sensitive receptors. The chronic and carcinogenic health risk calculations are based on the office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (Guidance Manual). Only the risk associated with operations of the proposed project was assessed, as construction emissions do not exceed the SCAQMD thresholds.

Note that the concentration estimate developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur as a result of the project any one point in time. Actual one-hour and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

Carcinogenic Risk

Based on the AERMOD outputs, the highest expected annual average DPM emission concentrations resulting from operation of the project (192 daily truck trips) at a discrete receptor grid point would be 0.0020 µg/m^3. This level of concentration would be experienced to the south of the project site; refer to Appendix G. It is acknowledged that the calculations conservatively assume no cleaner technology with lower emissions would occur in future years. Cancer risk calculations are based on 30-year MICR exposure periods. As shown in Table 4.3-6, *Project Maximum Individual Cancer Risk*, the highest calculated carcinogenic risk from project implementation is 1.66 per million for 30-year

[10] South Coast Air Quality Management District, *SCAQMD Meteorological Data for AERMOD*, http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod, accessed October 1, 2020.
[11] These 192 truck trips are split between 42 2-axle truck trips, 34 3-axle truck trips, and 116 4+-axle truck trips.
[12] California Air Resources Board, *EMFAC 2017 Web Database,* https://www.arb.ca.gov/emfac/2017/, accessed October 1, 2020.

exposure. As shown, impacts related to cancer risk and DPM concentrations from heavy trucks would be less than significant at the MICR.

Table 4.3-6
Project Maximum Individual Cancer Risk

Exposure Scenario	Maximum Individual Cancer Risk (Risk per Million)[1]	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
30-Year Exposure at a Sensitive Receptor[2]	0.53	10	No
30-Year Exposure within Modeling Domain[3]	1.66	10	No

Notes:
1. Refer to Appendix G, *Health Risk Data*.
2. The maximum cancer risk at a sensitive receptor would be experienced at UTM NAD83 Zone 11S coordinate location 401385.35, 3762424.23 to the south of the project site.
3. The maximum cancer risk within the modeling domain would be experienced at UTM NAD83 Zone 11S coordinate location 401465.73, 3763079.27, directly on the project site.

Refer to Appendix G, *Health Risk Data*, for detailed model input/output data.

Non-Carcinogenic Hazards

The significance thresholds for TAC exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the REL. The highest maximum chronic and acute hazard index associated with the emissions from the project at sensitive receptors would be 0.0003 and 0.0027 respectively; refer to Appendix G. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

As described, non-carcinogenic hazards resulting from the proposed project are calculated to be within acceptable limits. Additionally, impacts related to cancer risk and PM_{10} concentrations from warehouse operations would be less than significant at the MICR. Therefore, impacts related to health risk from warehouse operations would be less than significant.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The Basin is designated as an attainment/maintenance area for the Federal CO standards and an attainment area for State standards. There has been a decline in CO emissions even though vehicle miles traveled on U.S. urban and rural roads have increased. Nationwide estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.[13] CO emissions have continued to decline since this time. The Basin was re-designated as attainment in 2007 and is

[13] United States Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed by September 8, 2020.

no longer addressed in the SCAQMD's AQMP. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A detailed CO analysis was conducted in the *Federal Attainment Plan for Carbon Monoxide* (CO Plan) for the SCAQMD's *2003 Air Quality Management Plan*.[14] The locations selected for microscale modeling in the CO Plan are worst-case intersections in the Basin and would likely experience the highest CO concentrations. Thus, CO analysis within the CO Plan is utilized in a comparison to the proposed project, since it represents a worst-case scenario with heavy traffic volumes within the Basin.

Of these locations, the Wilshire Boulevard/Veteran Avenue intersection in Los Angeles experienced the highest CO concentration (4.6 parts per million [ppm]), which is well below the 35-ppm 1-hour CO Federal standard. The Wilshire Boulevard/Veteran Avenue intersection is one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection, it can be reasonably inferred that CO hotspots would not be experienced at any intersections near the project site due to net increase in volume of traffic of 808 daily trips that would occur as a result of project implementation. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. include construction of a warehousing/ distribution building and a print shop facility on the 19.06-acre site and does not include any uses identified by the SCAQMD as being associated with odors. Furthermore, the proposed project would be required to comply with the California Code of Regulations, Title 13, Sections 2485(C)(1) which limits the idling time of trucks to no more than five minutes and would further minimize emissions and possible odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce detectable odors from heavy-duty equipment exhaust. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

[14] The CO Plan was not updated as part of the 2016 AQMP.

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4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game 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, regulations or by the California Department of Fish and Game 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?				✓

This section is based on the *Biological Resources Assessment of the Beverly Boulevard Warehouse Project* (Biological Report) prepared by Michael Baker International (dated June 12, 2020) and the *Delineation of Jurisdictional Waters for the Beverly Boulevard Warehouse Project* (Jurisdictional Delineation) prepared by Michael Baker International (dated July 13, 2020); refer to Appendix B, *Biological Resources Analysis*.

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 Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated. The project site is located within an urbanized area and is disturbed and dominated by non-native vegetation. Additionally, active tilling for weed abatement occurs on-site. Based on the records search conducted as part of the Biological Report, 30 special-status plant species, 27 special-status wildlife species, and three special-status vegetation communities have been recorded within the Biological Study Area (BSA). However, no special-status plant species, wildlife, or vegetation communities were observed during the field survey. Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that no special-status plant species or vegetation communities are expected to occur on-site. The project site has a low potential to support the following special-status wildlife: Cooper's hawk (*Accipiter cooperii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), burrowing owl (*Athene cunicularia*), yellow-breasted chat (*Icteria virens*), coast horned lizard (*Phrynosoma blainvillii*), coastal California gnatcatcher (*Polioptila californica californica*), and least Bell's vireo (*Vireo bellii pusillus*). All remaining special-status wildlife

species are not expected to occur within the project site. Thus, project implementation is not anticipated to result in a substantial impact, either directly or through habitat modifications, on any sensitive species. Thus, a less than significant impact would occur in this regard.

The project site and surrounding areas provide suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents as well as migrating songbirds that could occur in the project area. Thus, the project could result in potential impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits activities that result in the direct take (defined as killing or possession) of a migratory bird. The proposed project has the potential to impact nesting birds if construction activities occur during the nesting season. Mitigation Measure BIO-1 has been provided to reduce impacts in this regard to a less than significant level.

Mitigation Measures:

BIO-1 If ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season (nesting season generally extends from January 1 - August 31), a pre-construction clearance survey for nesting birds shall be conducted within three days prior to any vegetation removal or ground disturbing activities.

The biologist conducting the clearance survey shall document the negative results if no active bird nests are observed on the project site during the clearance survey with a brief letter report indicating that no impacts to active bird nests would occur before construction can proceed. If an active nest is found, the bird species should be identified and a "no-disturbance" buffer should be established around the active nest. The size of the "no-disturbance" buffer should be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. A qualified biologist shall be present to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new nests in the restricted area. Results of the pre-construction survey and any subsequent monitoring shall be provided to the City of Pico Rivera, California Department of Fish and Wildlife (CDFW), and other appropriate agencies as required by Federal, state, and local requirements.

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

Less Than Significant Impact . The majority of the project site has been disturbed and no longer consists of undeveloped, native plant communities. The project footprint is generally a combination of bare, vegetated weedy ground, and developed land. Based on the Biological Report and Jurisdictional Delineation prepared for the project, riparian habitat occurs on-site in association with Drainage 1; however, prior to commencement of construction activities, a Section 1602 Streambed Alteration Agreement would be required from the CDFW, which would minimize on-site riparian vegetation (refer to Response 4.4(c), below, for additional information regarding regulatory permits required for the project). Additionally, as stated above, the Biological Report indicates that the project site does not provide suitable habitat that would support any of the sensitive plant species known to occur in the general vicinity of the project site. No other sensitive natural communities are present within the project site or overlying survey area. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Then Significant Impact. Based on the Jurisdictional Delineation, the project site did not display evidence of potential wetland characteristics; however, two drainage features (Drainage 1 and 2) are located within the northeastern and northern portion of the project site that qualify as jurisdictional waters and fall under the regulatory authority of the U.S. Army Corps of Engineers (Corps), CDFW, and Regional Water Quality Control Board (RWQCB).

Drainage 1 is an ephemeral concrete trapezoidal channel located in the northeastern portion of the project site. Flows within Drainage 1 originate as surface runoff from the adjacent land, surrounding developments, and nearby roadways including I-605 and residential neighborhoods to the east. Drainage 1 enters the eastern boundary of the project site as a concrete trapezoidal channel and proceeds northwest before entering two three-foot underground concrete pipes in the central portion of the project site. No surface water was present within Drainage 1 during the May 13, 2020 site visit conducted as part of the Jurisdictional Delineation. Evidence of an ordinary high water mark (OHWM) within Drainage 1 was observed including a clear line impressed on the channel wall and the presence of litter and debris. Vegetation associated with Drainage 1 consisted of sparse mule fat (*Baccharis salicifolia*, FAC), black mustard (*Brassica nigra*, not indicated [NI]), and castor bean *(Ricinus communis* [FACU]). Within the project site, Drainage 1 measures approximately 337 linear feet in length. Drainage 1 measures approximately six feet in width for the Corps/RWQCB and 15 feet in width for CDFW.

Drainage 2 is an ephemeral concrete trapezoidal channel located in the northern portion of the project site. Flows within Drainage 2 originate as surface runoff from the adjacent land, surrounding developments, and nearby roadways including Beverly Boulevard and the on-ramp to I-605 southbound. Drainage 2 enters the northern boundary of the project site and generally flows west towards the adjacent railway. Drainage 2 exits the project site as a concrete trapezoidal channel and continues to convey flows west until its terminus with a small concrete detention pond outside of the project boundaries. No surface water was present within Drainage 2 during the May 13, 2020 site visit. Evidence of an OHWM within Drainage 2 was observed including a clear line impressed on the channel bank and the presence of litter and debris. Vegetation associated with Drainage 2 consisted of castor bean (FACU), tree tobacco (*Nicotiana Glauca* [FAC]), blue gum (*Eucalyptus globulus* [NI]), pine tree (*pinus sp.* [NI]), and elderberry (*Sambucus nigra* [FACU]). Onsite, Drainage 2 measures approximately 45 linear feet in length. Drainage 2 measures approximately two feet in width for the Corps/RWQCB and five feet in width for CDFW.

Table 4.4-1, *Jurisdictional Limits within the Project Site*, provides a summary of the jurisdictional limits (acreages) for each on-site drainage feature.

Table 4.4-1
Jurisdictional Limits Within the Project Site

Feature	Linear Feet (Width Minimum/Maximum)	Jurisdictional Limits (acres)	
		Corps/RWQCB Non-Wetland Waters of the U.S.	CDFW Jurisdictional Streambed
Drainage 1	337 (6/15)	0.048	0.18
Drainage 2	45 (2/5)	0.002	0.006
Total	*382*	*0.05*	*0.19*
Source: Michael Baker International, *Delineation of Jurisdictional Waters for the Pico Rivera Office Building Project*, June 13, 2020.			

As shown in Table 4.4-1, the project would permanently impact approximately 0.05-acre (382 linear feet) of Corps/RWQCB jurisdiction (non-wetland waters of the U.S.) and approximately 0.19-acre (382 linear feet) of CDFW Streambed, which would be removed as part of the project. Based on the analysis conducted for the project site and proposed improvements, the project applicant shall be required to obtain a Preliminary Jurisdictional Determination (PJD) from the Corps and obtain a Clean Water Act Section 404 Permit (Nationwide Permit No. 39), a Section 1602

Streambed Alteration Agreement from the CDFW, and a Clean Water Act Section 401 Water Quality Certification from the Corps or a Waste Discharge Requirements (WDR) from the RWQCB. Upon obtaining the required permits, as required under existing Federal and State law, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact With Mitigation Incorporated. The project site is not located within any wildlife corridors or habitat conservation plans. The site is surrounded by developed and urban land on all sides, including the UPRR to the east and I-605 to the west. Although the San Gabriel River is located further to the west across the railroad, wildlife movement into or out of the site is likely minimal given the presence of the freeway and railroad bounding the site on its eastern and western ends, respectively. Additionally, the project site is fenced off along the western and southern boundaries and is regularly tilled for weed abatement. Therefore, the project site does not act as a corridor or linkage for wildlife species. Project implementation would not interfere 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. In addition, Mitigation Measure BIO-1 would ensure that impacts to migratory birds during the nesting season would be reduced to a less than significant level. Thus, with implementation of BIO-1, impacts in this regard would be reduced to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. Vegetation removal associated with the proposed project would remove of existing ornamental trees and both non-native and native vegetation. Chapters 12.40, 12.48, and 8.44 of the City's Municipal Code contain regulations on tree and shrub planting, removal, and maintenance, including the protection of all trees located along the street, parkway, or other public places during construction activities. Thus, with adherence to Chapters 12.40, 12.48, and 8.44 of the Municipal Code, impacts would be reduced to less than significant levels.

Mitigation Measures: No mitigation is required.

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?

No Impact. According to the U.S. Fish and Wildlife Service's *HCP/NCCP Planning Areas in Southern California Map*[1] and *California Regional Conservation Plans Map*[2] the project site is not located within a Natural Community Conservation Plan (NCCP) or Habitat Conservation Plan (HCP). As such, there would be no impact in this regard.

Mitigation Measures: No mitigation is required.

[1] U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, *HCP/NCCP Planning Areas in Southern California*, October 2008.

[2] California Department of Fish and Wildlife, *California Regional Conservation Plans Map*, April 2019.

4.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		✓		
c. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

This section is based on the *Cultural and Paleontological Resources Assessment for the Pico Rivera Industrial Project, City of Pico Rivera, Los Angeles County, California* (Cultural Assessment) prepared by Cogstone (dated August 2020); refer to Appendix C, *Cultural Assessment*.

a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

Less Than Significant Impact.

As part of the Cultural Assessment, results of the field survey and records search of the California Historic Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) database were included. The CHRIS search also included a review of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of a variety of additional sources, including the California Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), California Point of Historical Interest (CPHI), and a review of USGS historic topographic maps and historic US Department of Agriculture (USDA) Aerial Photographs.

Two historic built environment resources were encountered during the field survey: a drainage ditch and a railroad segment associated with the previously documented UPRR (P-19-186112). This section of P-19-186112 is located on and near a I-605 railroad bridge overcrossing. The tracks historically crossed the project site to connect with other portions of the UPRR; however, the portion of the tracks that once traversed the project site have been removed.

Anaheim Branch Segment. The railroad segment, which is approximately 930 feet long, was originally constructed in 1917 by the San Pedro, Los Angeles and Salt Lake Railroad, the line passed through what is now residential, shopping, and light industrial areas. Since its discontinuation from UPRR, much of the line has been demolished and is in very poor condition. Based on the Cultural Assessment, this resource no longer retains its integrity of design, materials, feeling, workmanship, or setting. Due to the significant alterations to the Anaheim Branch and the surrounding area over past decades, this segment of the UPRR is recommended not eligible for listing in the NRHP or the CRHR. This resource has not yielded, nor is likely to yield, information important in prehistory or history and, therefore, is recommended ineligible for listing in either the NRHP or the CRHR under Criteria 4/D and is not considered a historical resource under CEQA. Impacts to this resource would not be significant.

Drainage Ditch. Based on historical aerial photographs, the drainage ditch was constructed between 1963 and 1964, adjacent to I-605. Based on the Cultural Assessment, this resource is not associated with events that have made a significant contribution to the broad patterns of history; is not associated with the lives of persons significant to history; does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a

master, or possesses high artistic values; and has not, nor is likely to yield information important in prehistory or history. As such, this feature is recommended not eligible for listing in the NRHP or the CRHR under Criteria A/1, B/2, C/3, and is not considered a historical resource under CEQA. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Less Than Significant Impact With Mitigation Incorporated.

Based on the literary records search and the intensive field survey conducted for the Cultural Assessment, no archaeological resources were identified in the area of potential effect (APE). Based on the results of the field survey and records search, 17 cultural resources occur within a one-mile radius from the designated APE. The cultural resources include one archaeological site and 16 historic built environment resources. The records search identified a total of 39 previous studies that were completed within a one-mile radius, and four previous studies that included a portion of the APE.

No cultural resources are known to occur or were observed on-site. However, given the proximity of the project site to resources identified within a one-mile radius, the Cultural Assessment concludes that the APE has a moderate sensitivity for prehistoric cultural resources. As such, Mitigation Measure CUL-1 is recommended, which would require archaeological and Native American monitoring to minimize impacts related to the potential discovery of previously unknown archaeological/tribal cultural resources. In the event that archaeological/tribal cultural resources are encountered during earth disturbing activities, all work would be required to be halted in the vicinity of the find (a minimum of a 50-foot radius) until the resources can be properly evaluated by a qualified archaeologist. If warranted, and in consultation with the Native American monitor, the archaeologist would have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. In the event Native American resources are discovered, the City shall consult with the Native American monitor and affected tribe(s). Upon implementation of recommended mitigation, impacts in this regard would be less than significant.

Mitigation Measures:

CUL-1 During construction, archaeological and Native American monitoring shall be conducted to minimize impacts related to the potential discovery of previously unknown archaeological/tribal cultural resources. If evidence of subsurface cultural resources is found during excavation and other ground-breaking activities, all work within 50 feet of the discovery shall cease and the construction contractor shall contact the City of Pico Rivera. With direction from the City and in coordination with the Los Angeles County Archaeological Society and local Native American organizations, as necessary, the archaeologist shall evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted, and in consultation with the Native American monitor, the archaeologist shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact.

Due to the recorded ethnography and the historic setting described in the Cultural Assessment, as well as the recent to current level of disturbances that occurred within the APE, it is unlikely that any disturbance of any human remains, including those interred outside of formal cemeteries, would be encountered during ground-disturbing construction activities for the project. If human remains are found, those remains would require proper treatment, in accordance

with State of California Health and Safety Code Sections 7050.5-7055. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the "most likely descendant." If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State law, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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4.6 ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in 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?			✓	

REGULATORY AND PLANNING FRAMEWORK

The following is a description of State and local regulations and planning programs related to energy consumption that are relevant to the proposed project.

State

Senate Bill 100. Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The bill requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and other State agencies to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of the policy.

California Building Energy Efficiency Standards (Title 24). The 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2020. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Under 2019 Title 24 standards, nonresidential buildings will use about 30 percent less energy, mainly due to lighting upgrades, when compared to 2016 Title 24 standards.[1] The standards offer developers better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

California Green Building Standards (CALGreen). California Green Building Standards (CALGreen) is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. The 2019 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2020. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g.

[1] California Energy Commission, *2019 Building Energy Efficiency* Standards, dated March 2018.

lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.[2]

California Public Utilities Commission Energy Efficiency Strategic Plan. The CPUC prepared an Energy Efficiency Strategic Plan (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and a reduction in greenhouse gases. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State between 2009 and 2020, and beyond 2020. The Strategic Plan contains the practical strategies and actions to attain significant statewide energy savings, as a result of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the following four strategies:

1. All new residential construction in California will be zero net energy by 2020.

2. All new commercial construction in California will be zero net energy by 2030.

3. HVAC will be transformed to ensure that its energy performance is optimal for California's climate.

4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

California Energy Commission Integrated Energy Policy Report. In 2002, the California State legislature adopted SB 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2019 IEPR on February 20, 2020.[3] The 2019 IEPR provides the results of the CEC's assessment of a variety of energy issues facing California and covers a broad range of topics, including implementation of SB 100 (statewide GHG reduction targets), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission, landscape-scale planning, electricity and natural gas demand forecast, transportation energy demand forecast, renewable gas, updates on Southern California's electricity reliability, natural gas outlook, and climate adaptation and resiliency.

Executive Order N-79-20. Executive Order N-79-20, issued September 23, 2020, directs the State to require all new cars and passenger trucks sold in the State to be zero-emission vehicles by 2035. Executive Order N-79-20 further states that all medium- and heavy-duty vehicles sold in the State will be zero-emission by 2045.

[2] U.S. Green Building Council, *Green Building Costs and Savings*, https://www.usgbc.org/articles/green-building-costs-and-savings, accessed October 7, 2020.

[3] California Energy Commission, *2019 Integrated Energy Policy Report*, February 20, 2020, https://efiling.energy.ca.gov/GetDocument.aspx?tn=232922&DocumentContentId=65363, accessed October 8, 2020.

Local

Pico Rivera General Plan. Applicable policies related to energy from the General Plan Environmental Resources Element are listed below.

- **Goal 8.1**: A sustainable community where land use and transportation improvements are consistent with regional planning efforts and adopted plans to reduce dependence on the use of fossil fuels and decrease greenhouse gas emissions.
    - **Policy 8.1-5 Energy Conservation**. Promote energy conservation through:
        - Partnerships with Southern California Edison and Southern California Gas Company programs;
        - Improving the energy efficiency and increasing conservation in existing and new city buildings;
        - Improving energy efficiency of outdoor lighting, including upgrading of city owned street lights, as well as outdoor lighting within parks and municipal parking lots to more energy efficient models;
        - Increasing water efficiency and water conservation in existing city buildings and new development projects; and
        - Providing for renewable energy generation at city facilities with the aim of achieving five percent of city facilities' energy needs with renewable energy generation by 2030.
- **Goal 8.3**: A community with improved energy conservation and efficiency.
    - **Policy 8.3-2 Heat Gain Reduction**. Ensure that site and building designs reduce exterior heat gain and heat island effects (e.g., tree planting, reflective paving materials, covered parking, cool roofs), when feasible.
    - **Policy 8.3-3 Tree Planting**. Continue to provide shade trees along street frontages, and promote planting shade trees on private property.
    - **Policy 8.3-4 Building Orientation**. Encourage building orientations and landscaping designs that promote the use of natural lighting, take advantage of passive summer cooling and winter solar access, and incorporate other techniques to reduce energy demands. Where feasible, place the long access of buildings along an east-west axis.
    - **Policy 8.3-5 Renewable Energy**. Encourage new development to install, and consider providing incentives for, onsite renewable energy systems and facilities (e.g., solar).
    - **Policy 8.3-6 Industrial Users**. Encourage new industrial users to install cogeneration facilities and renewable energy systems such as solar, when economically feasible.
    - **Policy 8.3-7 Energy Efficiency**. Encourage all new development to implement additional energy efficient measures beyond what is required by State law to exceed minimum energy efficiency requirements.

METHODOLOGY

The impact analysis focuses on the three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with the project as well as the fuel necessary for project construction. The analysis of electricity/natural gas usage is based on CalEEMod version 2020.4.0 GHG emissions modeling, which quantifies energy use for occupancy. The project's estimated electricity and natural gas consumption is based primarily on CalEEMod's default settings for the County, and consumption factors provided by Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas), who are the electricity and natural gas providers for the City and the project site. The results of the CalEEMod modeling are included in Appendix A, *Air Quality/Greenhouse Gas/Energy Data*. The amount of operational fuel use was estimated using the EMFAC2017 computer program, which provides projections for typical daily fuel (i.e. diesel and gasoline) usage in the County, and the project's annual VMT from the VMT Analysis; refer to Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report*. The estimated construction fuel consumption is based on the project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips. The results of EMFAC2017 modeling and construction fuel estimates are included in Appendix A.

CEQA Guidelines Appendix F is an advisory document that assists in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis on Impact 4.6(a) relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- Criterion 1: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.
- Criterion 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- Criterion 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Criterion 4: The degree to which the project complies with existing energy standards.
- Criterion 5: The effects of the project on energy resources.
- Criterion 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses Criterion 1. The discussion on construction-related energy use focuses on Criteria 2, 4, and 5. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses Criteria 2, 3, and 6, and the building energy demand analysis discusses Criteria 2, 3, 4, and 5.

IMPACT ANALYSIS

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The project's estimated energy consumption is summarized in Table 4.6-1, *Project and Countywide Energy Consumption*. As shown in Table 4.6-1, the project's energy usage would constitute an approximate 0.0031 percent increase over Los Angeles County's typical annual electricity consumption and an approximate 0.0002 percent increase over Los Angeles County's typical annual natural gas consumption. The project's construction and operational vehicle fuel consumption would increase Los Angeles County's consumption by 0.0221 percent and 0.0058 percent, respectively (Criterion 1).

Table 4.6-1
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	Los Angeles County Annual Energy Consumption[2]	Percentage Increase Countywide[2]
Electricity Consumption	1,460 MWh	46,556,118 MWh	0.0031%
Natural Gas Consumption	3,119 therms	1,812,591,714 therms	0.0002%
Fuel Consumption			
• Construction Fuel Consumption[3]	134,297 gallons	608,470,142 gallons	0.0221%
• Operational Automotive Fuel Consumption[3]	224,447 gallons	3,873,708,021 gallons	0.0058%

Notes:
1. As modeled in CalEEMod version 2020.4.0.
2. The project increases in electricity and natural gas consumption are compared to the total consumption in Los Angeles County in 2019. The project increases in automotive fuel consumption are compared with the projected Countywide fuel consumption in 2022.
   Los Angeles County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms. energy.ca.gov/elecbycounty.aspx, accessed October 5, 2020.
   Los Angeles County natural gas consumption data source: California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy. ca.gov/gasbycounty.aspx, accessed October 5, 2020.
3. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2017 model.

Refer to Appendix A, for assumptions used in this analysis.

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading, building construction, paving, and architectural coating. As indicated in Table 4.6-1, the overall fuel consumption during project construction would be 134,297 gallons, which would result in a nominal increase (0.0221 percent) in fuel use in the County. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (Criterion 2).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off (i.e., Title 13, California Code of Regulations Section 2485). Project construction equipment would also be required to comply with the latest U.S. EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and

reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (Criterion 4).

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than nonrecycled materials.[4] It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, or building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (Criterion 5).

Therefore, construction energy use would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

Operational Energy

Transportation Energy Demand

Pursuant to the federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Table 4.6-1 provides an estimate of the daily fuel consumed by vehicles traveling to and from the project site. As indicated in Table 4.6-1, project operations are estimated to consume approximately 224,447 gallons of fuel per year, which would increase Countywide automotive fuel consumption by 0.0058 percent. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (Criterion 2).

The key drivers of transportation-related fuel consumption for the proposed project are medium- and heavy-duty trucks traveling to and from the project site. At the time of this analysis, the future tenant of the project is unknown. Therefore, it has not been determined if the ultimate tenant will operate its own fleet and most warehouse operators have no control over the trucks entering and exiting their facilities. Consequently, it is infeasible to require trucks with particular emission profiles (e.g., zero-emission [ZE], near-zero-emission [NZE], or 2010 or beyond model year trucks) to visit the project site. Notwithstanding, the project's fleet vehicles would comply with State fuel efficiency standards.

The project would also consume fuel in the form of employees driving to and from the project site. However, employee commuting factors are outside of the scope of the design of the proposed industrial development. Notwithstanding, the project would include installation of electric vehicle (EV) charging stations and a total of 36 parking spaces designated for clean air vehicles, in compliance with CALGreen Code. This requirement would encourage and support the use of electric vehicles and thus reduce the petroleum fuel consumption (Criterion 4 and Criterion 6).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur in this regard.

[4] California Department of Resources Recycling and Recovery, *Green Building Materials*, https://www.calrecycle.ca.gov/greenbuilding/materials#Material, accessed October 5, 2020.

Building Energy Demand

The CEC developed 2018 to 2030 forecasts for energy consumption and peak demand in support of the 2017 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections.[5] CEC forecasts that the statewide annual average growth rates of energy demand between 2016 and 2030 would be 0.99 percent to 1.59 percent for electricity and 0.25 percent to 0.77 percent for natural gas.[6] As shown in Table 4.6-1, operational energy consumption of the project would represent approximately 0.0031 percent increase in electricity consumption and 0.0002 percent increase in natural gas consumption over the current Countywide usage, which would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the project would be consistent with the CEC's energy consumption forecasts. As such, the project would not require additional energy capacity or supplies (Criterion 2). Additionally, the project would consume energy during the same time periods as other industrial developments and would consume energy evenly throughout the day. As a result, the project would not result in unique or more intensive peak or base period electricity demand (Criterion 3).

The proposed project would be required to comply with 2019 Title 24, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the 2019 Title 24 standards significantly reduces energy usage (30 percent compared to the 2016 Title 24 standards). The Title 24 Building Energy Efficiency Standards are updated every 3-year and become more stringent between each update, therefore, complying with the latest 2019 Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards. Compliance with 2019 Title 24 standards would also ensure the project would be consistent with General Plan Goal 8.1 (Policy 8.1-5) and Goal 8.3 (Policies 8.3-4, 8.3-5, 8.3-6, and 8.3-7), by incorporating sustainable building design features (Criterion 4).

Furthermore, the electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS) reflected in SB 100. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources (Criterion 5).

Therefore, the project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

Mitigation Measures: No mitigation is required.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The City currently does not have a plan pertaining to renewable energy or energy efficiency. The applicable State plans and policies for renewable energy and energy efficiency include the 2019 Title 24 standards, CALGreen Code, CPUC's Energy Efficiency Strategic Plan, CEC's 2019 IEPR, and Executive Order N-79-20. The project would be required to comply with the latest Title 24 and CALGreen standards pertaining to building energy efficiency. Compliance with 2019 Title 24 standards and 2019 CALGreen Code would ensure the project incorporates energy-efficient windows, insulation, lighting, and ventilation systems, which are consistent with the Energy Efficiency Strategic Plan strategies, the IEPR building energy efficiency recommendations, and General Plan

[5] California Energy Commission, *California Energy Demand 2018-2030 Revised Forecast*, February 2018. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Table 1 and Table 3, respectively.

[6] Ibid.

Goal 8.1 (Policy 8.1-5) and Goal 8.3 (Policies 8.3-4, 8.3-5, 8.3-6, and 8.3-7), as well as water-efficient fixtures and EV charging infrastructure. Additionally, shade trees would be planted throughout the project site, including street frontages, which would ensure consistency with General Plan Goal 8.3 (Policies 8.3-2 and 8.3-3). Further, per the RPS, the project would utilize electricity provided by SCE that is composed of 36 percent renewable energy as of 2018 and would achieve at least 60 percent renewable energy by 2030. Because the project's energy consumption would be significantly less than the existing regional (County) level, the project would be consistent with energy reduction targets identified in statewide plans and programs, such as the Energy Efficiency Strategic Plan and the IEPR. Therefore, the proposed project would be consistently associated with renewable energy or energy efficiency plans and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

4.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to 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? Refer to Division of Mines and Geology Special Publication 42.			✓	
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 waste water disposal systems where sewers are not available for the disposal of waste water?				✓
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

This section is generally based on the *Geotechnical Investigation Proposed Commercial/Industrial Development* (Geotechnical Report) prepared by Southern California Geotechnical, dated June 4, 2020; refer to Appendix D, *Geotechnical Analysis*.

a) Expose people or structures to 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? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the region. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone.

Based on the Geotechnical Report prepared for the project, the project site is not located within an Alquist-Priolo Earthquake Fault Zone and the possibility of significant fault rupture on the site is low. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

2) Strong seismic ground shaking?

Less Than Significant Impact With Mitigation Incorporated. Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires. Both primary and secondary hazards pose a threat to the community as a result of the project's proximity to active regional faults.

The region surrounding the Pico Rivera area is characterized by relatively high seismic activity. The greatest damage from earthquakes results from ground shaking. Ground shaking is generally most severe near quake epicenters and generally become weaker further out from the epicenter. Based on the General Plan, faults most likely to impact the City as a result of seismic activity include the San Andreas, the Sierra Madre, and the Raymond Hill faults. The Whittier Fault is the closest major fault to the project site (along which historic [1987] displacement has occurred), which is located approximately .70 mile east of the project site. As such, the project site may be subject to strong seismic shaking during a seismic event, as is the case with the vast majority of areas of southern California.

The proposed project involves construction of a warehouse, print shop, associated parking and circulation improvements. Due to the location of the project site, which is within seismically-active region, there is potential for seismic ground shaking. However, building and structures that would be constructed for the project would be subject to Chapter 15.42 (Referenced Standards Code) of Title 15 (Buildings and Construction), of the Pico Rivera Municipal Code, in addition to the California Building Code (CBC) in order to minimize hazards during a seismic event. The CBC includes standards related to soils and foundations, structural design, building materials, and structural testing and inspections. Mitigation Measure GEO-1 would require the project applicant to prepare a design-level geotechnical report that addresses seismic design parameters consistent with the Municipal Code and CBC standards and regulations. The design measures would maximize structural stability in the event of an earthquake. Thus, upon implementation of Mitigation Measure GEO-1, impacts would be less than significant.

Mitigation Measures:

GEO-1 Prior to issuance of building permits and subject to Site Plan Review, the project applicant shall prepare a site-specific design-level geotechnical/soils report which addresses structural and geotechnical conditions at the project site that shall be subject to review and approval by the City of Pico Rivera City Engineer. The geotechnical report shall address soil stability, including liquefaction, and shall address potential impacts during earthquakes. Additionally, the City of Pico Rivera City Engineer shall ensure that all improvements conform to existing building requirements of the California Building Code (CBC) in order to minimize the potential for damage and major injury during a seismic event. The geotechnical/soils report shall include specific design measures, which are based on the determination of Site Classification and Seismic Design Categories, specific to the project site. Moreover, design and construction of the proposed project shall comply with existing City standards, including Chapter 15.42 (Referenced Standards Code) of Title 15 (Buildings and Construction), of the Pico Rivera Municipal Code.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact With Mitigation Incorporated. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. Susceptibility to liquefaction is based on geologic and geotechnical data. River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction.

Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in low and very low susceptibility.

Subsurface exploration was conducted as part of the analysis for the Geotechnical Report, which consisted of eight borings. Based on the Geotechnical Report, a potentially liquefiable soil stratum was encountered at Boring No. B-1 (located near the northwest corner of the proposed warehouse facility) that consists of a medium dense low-plasticity silt stratum. Since the project site is located within a liquefaction potential area, the project would be required to comply with Mitigation Measure GEO-1. As stated above, this measure would require the applicant to prepare a site-specific design level geotechnical report that addresses geotechnical conditions at the project site and ensures compliance with the Municipal Code and CBC. The design measures are intended to maximize structural stability in the event of liquefaction hazards. Adherence to these existing building requirements and Mitigation Measure GEO-1 would minimize risks related to liquefaction to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure GEO-1.

4) Landslides?

Less Than Significant Impact. Landslides are a geologic hazard, with some moving slowly and causing damage gradually, and others moving rapidly and causing unexpected damage. Gravity is the force driving landslide movement. Factors that commonly allow the force of gravity to overcome the resistance of earth material to landslide movement include saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, and seismic shaking.

Based on the Geotechnical Report, project site topography ranges from approximately 220 feet above mean sea level (msl) in the north corner of the project site to 192 feet msl in the southwest corner of site. The northwestern portion of the site slopes towards the concrete lined drainage swale at a gradient of approximately 6 to 10 percent. A slope is present in the central and northern portions of the site. This slope possesses an inclination with a ratio of approximately 2 horizontal to 1 vertical (2h:1v) and descends downward toward the western and northern property lines. The slope ranges in height between 3 and 16 feet, increasing in the northern portion of the site. The remaining areas of the site generally slope downward to the southeast at a gradient of approximately 6 percent. Based on the relatively flat topography, the possibility for landslides is extremely remote. Therefore, there would be a less than significant impact associated with the exposure of people or structures to potential substantial adverse effects involving landslides.

Mitigation Measures: No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The primary concern in regards to soil erosion or loss of topsoil would be during the construction phase of the project. Grading and earthwork activities associated with project construction activities would expose soils to potential short-term erosion by wind and water. All demolition and construction activities for the project would be subject to compliance with the CBC. Further, the project would be subject to compliance with the requirements set forth in the National Pollutant Discharge Elimination System (NPDES) Storm Water General Construction Permit for construction activities; refer to Response 4.10(a). The NPDES Storm Water General Construction Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP), which would identify specific erosion and sediment control Best Management Practices (BMPs) that would be implemented to protect storm water runoff during construction activities. Compliance with the CBC and NPDES requirements would minimize effects from erosion and ensure consistency with the RWQCB Water Quality Control Plan. Following compliance with Municipal Code, CBC, and NPDES requirements, project implementation would result in a less than significant impact regarding soil erosion.

Mitigation Measures: No mitigation is required.

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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact With Mitigation Incorporated. The proposed project site is located within a seismically-active area. As stated within Response 4.7(a)(3), impacts related to liquefaction would be mitigated to a less than significant level with compliance with the CBC and Mitigation Measure GEO-1 and as demonstrated in Response 4.7(a)(4), the project site would not be subject to earthquake-induced landslides.

Due to soil composition and subsurface conditions encountered at the boring locations, on-site soil could become unstable and result in settlement, subsidence, and/or lateral spreading. However, the project would be required to comply with Mitigation Measure GEO-1 and all new structures would conform to existing Municipal Code and CBC requirements in order to minimize the potential for hazards due to unstable soils. With compliance with the CBC and Mitigation Measure GEO-1, impacts in this regard would be reduced to less than significant levels.

Mitigation Measures: Refer to Mitigation Measure GEO-1.

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?

No Impact. Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). According to the Geotechnical Report, the near-surface soils on-site generally consist of sands, and silty sands, and sandy silts. Based on their composition and lack of any appreciable plasticity, these soils are considered to be non-expansive. Thus, no impacts would occur in this regard.

Mitigation Measures: Refer to Mitigation Measure GEO-1.

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

No Impact. No septic tanks or alternative wastewater disposal systems would be constructed as part of the project. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated. Based on the Cultural Assessment prepared for the project, no previous fossil localities have been recorded and no paleontological resources were observed on-site. However, the project site is mapped entirely as middle to late Pleistocene old alluvial fan deposits and localities are known to occur from the same sediment near the project site.

Based on the Cultural Assessment, middle to late Pleistocene older alluvium sediments that occur less than eight feet below the modern surface are assigned a low potential for fossils due to the lack of fossils in these deposits. More than eight feet below the modern surface, these sediments are assigned a moderate potential for fossils due to similar deposits producing fossils at that depth near the project site. As such, Mitigation Measure GEO-2 recommends paleontological monitoring for excavations that are more than eight feet below the ground surface, into native sediments. Drilling or pile driving activities, regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling would not have information regarding formation, depth, or context. The only instance in which such fossils would meet significance criteria is if the fossil is a species new to the region. If unanticipated fossil discoveries are made, all work must halt within 25 feet until a

qualified paleontologist can evaluate the find. Work may resume immediately outside of the 25-foot radius. With implementation of Mitigation Measure GEO-2, impacts would be reduced to a less than significant level.

Mitigation Measures:

GEO-2 Prior to the start of ground-disturbing activities, a professional paleontologist who meets the qualification standards of the Society of Vertebrate Paleontology (project paleontologist) shall be retained to provide paleontological monitoring assistance, and this requirement shall be indicated on project plans and specifications. Construction monitoring shall be conducted by a qualified paleontological monitor overseen by the project paleontologist. Monitoring shall entail the visual inspection of excavated areas greater than eight feet below the ground surface (bgs) during project-related ground-disturbing activities.

Daily monitoring activities shall be documented on field forms accompanied with photographs of activities as well as photographs of soils, sediments, and fossils, if any. In the event a potentially significant paleontological resource is encountered during ground-disturbing activities, the contractor shall stop construction within 25 feet of the discovery and the project paleontologist shall evaluate the significance of the resource. Additional recommendations may be made at that time. If the resource is found to be significant, the paleontologist shall systematically remove it from the site for laboratory preparation, which may entail the stabilization of the resource with glues and consolidants, as needed, and separation from sedimentary matrix, if necessary. Following laboratory preparation, the resource would be identified to the lowest taxonomic level, cataloged, and inventoried in anticipation of curation. All collected and prepared resources would be curated and stored in an accredited repository, such as the Natural History Museum of Los Angeles County or the Western Science Center of Hemet.

At the conclusion of all construction monitoring for the project, the project paleontologist shall prepare a report summarizing the monitoring efforts and results, including documentation of paleontological discoveries, if any. A final copy of the report shall be provided to the City of Pico Rivera and the accredited repository.

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4.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Global Climate Change

California is a substantial contributor of global GHGs, emitting over 420 million metric tons of carbon dioxide equivalent ($MTCO_2e$) per year.[1] Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which increases the Earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation is required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of May 2020, the highest monthly average concentration of CO_2 in the atmosphere was recorded at 417 ppm.[2]

Regulatory Framework

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO_2e)[3] concentration is required to keep global mean warming below two degrees Celsius (^oC), which in turn is assumed to be necessary to avoid dangerous climate change.

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation is necessary to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

[1] California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2017,* https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf, accessed September 30, 2020.

[2] Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, https://scripps.ucsd.edu/programs/keelingcurve/, accessed September 30, 2020.

[3] Carbon Dioxide Equivalent (CO_2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20. Executive Order N-79-20, issued September 23, 2020, directs the State to require all new cars and passenger trucks sold in the State to be zero-emission vehicles by 2035. Executive Order N-79-20 further states that all medium- and heavy-duty vehicles sold in the State will be zero-emission by 2045.

Senate Bill 32. Signed into law on September 2016, SB 32 codifies California's 2030 GHG reduction target of 40 percent below 1990 levels by 2030. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030.

California Building Energy Efficiency Standards (Title 24). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Under the 2019 Title 24 standards, nonresidential buildings would use about 30 percent less energy (mainly due to lighting upgrades) when compared to 2016 Title 24 standards.[4] The standards require installation of energy efficient windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

CARB Scoping Plan. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California implement; to reduce CO_2e emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million $MTCO_2e$ under a business as usual (BAU)[5] scenario. This is a reduction of 42 million $MTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

[4] California Energy Commission, *2019 Building Energy Efficiency Standards*, dated March 2018.

[5] "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to http://www.arb.ca.gov/cc/inventory/data/bau.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The 2014 Scoping Plan identifies the actions California had already taken to reduce GHG emissions and focused on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The 2014 Scoping Plan update also looked beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observed that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal."

In December 2017, CARB approved the *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Scoping Plan). This update focuses on implementation of a 40 percent reduction in GHGs by 2030 compared to 1990 levels. To achieve this, the updated 2017 Scoping Plan draws on a decade of successful programs that address the major sources of climate changing gases in every sector of the economy.

Southern California Association of Governments. On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS. The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specifically, these strategies are:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita VMT. Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

Pico Rivera General Plan. The Environmental Resources Element of the General Plan has identified the following applicable goals and policies aimed at GHG reduction in the City.

- **Goal 8.1**: A sustainable community where land use and transportation improvements are consistent with regional planning efforts and adopted plans to reduce dependence on the use of fossil fuels and decrease greenhouse gas emissions.
    - **Policy 8.1-2 Gateway Cities SCS**. Continue to implement sustainable strategies identified in, and maintain consistency with, the Gateway Cities Council of Governments 2012 Subregional Sustainable Communities Strategy and updated versions incorporated into SCAG's RTP/SCS.
    - **Policy 8.1-3 Environmental Integrity**. Foster sustainable living by reducing community dependency of fossil fuels and other non-renewable resources, minimizing air pollutant and GHG emissions, retaining existing open space lands, and restoring habitat areas along the Rio Hondo and San Gabriel Rivers.
    - **Policy 8.1-4 Efficient Land Use Patterns**. Promote efficient land use patterns and compact development that supports widespread walkability and bicycle use, providing for a modest and

incremental overall increase in community development intensity that complements the existing community fabric by:

  - Encouraging infill and redevelopment of vacant and underutilized sites;
  - Facilitating the development of engaging and livable streetscapes characterized by benches, vegetation-appropriate architecture, and pedestrian/bicycle linkages.
  - Providing opportunities for non-motorized transportation and linkages between new development and transit.

- **Policy 8.1-7 Solid Waste Management**. Practice and promote responsible waste management with the aim of exceeding mandated waste diversion targets when economically feasible to do so.

- **Goal 8.2:** Continued improvement in local and regional air quality with reduced greenhouse gas emissions to maintain the community's health.

  - **Policy 8.2-2 GHG Reduction Measures**. Reduce greenhouse gas emissions in the City and the region through the following measures including, but not limited to:

    - Implementing land use patterns that reduce automobile dependency by increasing housing and employment densities within mixed use settings and transit-oriented developments;
    - Reducing the number of vehicular miles traveled through implementation of Transportation Demand Management Programs;
    - Encouraging the use of alternative modes of transportation by supporting transit facility and service expansion, expanding bicycle routes and improving bicycle facilities, and improving pedestrian facilities;
    - Increasing building energy efficiency through site design, building orientation, landscaping, and incentive/rebate programs;
    - Implementing water conservation measures;
    - Requiring the use of drought-tolerant landscaping; and
    - Increasing solid waste diversion through recycling efforts.

  - **Policy 8.2-10 Employers**. Encourage employers to allow flexible work hours and telecommuting where feasible, and to provide incentives for employee use of public transit, biking, walking, and carpooling for home to work commutes.

  - **Policy 8.2-13 Contractor Preference**. Give preference to contractors that commit to apply methods to minimize greenhouse gas emissions in building construction and operations, such as the use of low or zero-emission vehicles and equipment.

  - **Policy 8.2-18 Electric Vehicles**. Encourage provision of or readiness for charging stations and related infrastructure for electric vehicles within new development and redevelopment proposals and within City operations.

Thresholds of Significance

The following thresholds of significance are based on CEQA Guidelines Appendix G. For the purposes of this analysis, implementation of the proposed project would be considered to have a significant impact on GHG emissions if it would do any of the following:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The City currently does not have thresholds of significance for GHG emissions. However, the SCAQMD has adopted a threshold to address significance of GHG emissions from industrial projects: 10,000 metric tons of CO_2e per year.[6] Thus, the 10,000 $MTCO_2e$ per year threshold has been selected as the significance threshold, as it is most applicable to the proposed project for the current analysis. The 10,000 $MTCO_2e$ per year threshold is used in addition to the qualitative thresholds of significance set forth above from Appendix G to the CEQA Guidelines.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO_2, CH_4, and N_2O, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project-related GHG emissions include emissions from construction/operational activities, while indirect sources include emissions from electricity consumption. The proposed project would include construction of a warehousing/distribution building and a print shop facility. The CalEEMod version 2020.4.0 was utilized to calculate the project's construction and operational GHG emissions. Due to the nature of the proposed on-site uses (warehouse and print shop facility), the TIA prepared for the project (refer to Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report*) provided separate fleet mixes and trip generation rates for both proposed land uses. As such, CalEEMod run was adjusted to accurately model the different fleet mixes and total daily trips between each proposed land uses within the project. The CalEEMod outputs are contained within the Appendix A, *Air Quality/Greenhouse Gas /Energy Data*.

Table 4.8-1, *Estimated Greenhouse Gas Emissions*, presents the estimated CO_2, CH_4, and N_2O emissions of the proposed project.

[6] South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, revised April 2019, http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed September 30, 2020.

Table 4.8-1
Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e
	Metric Tons/yr[1]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	Metric Tons/yr[1]	Metric Tons of CO_2e[2]	
Direct Emissions						
• Construction • (total of 2,207.84 $MTCO_2e$ amortized over 30 years)	72.13	0.01	0.28	<0.01	1.18	73.59
• Area Source	0.02	0.00	0.00	0.00	0.00	0.02
• Mobile Source	1,649.07	0.06	1.61	0.17	49.29	1,699.97
Total Direct Emissions[3]	***1,721.22***	***0.08***	***1.89***	***0.17***	***50.47***	***1,773.58***
Indirect Emissions						
• Energy	275.54	0.02	0.56	<0.01	0.88	276.98
• Solid Waste Generation	34.43	2.03	50.87	0.00	0.00	85.30
• Water Demand	179.14	2.18	54.39	0.05	15.70	249.23
Total Indirect Emissions[3]	***489.11***	***4.23***	***105.82***	***0.06***	***16.58***	***611.51***
Total Project-Related Emissions[3]	***2,385.09 $MTCO_2e$/year***					
GHG Emissions Threshold	***10,000.00 $MTCO_2e$/year***					
GHG Emissions Exceed Threshold?	***No***					

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2020.4.0 (CalEEMod) computer model.
2. CO_2 Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed September 2020.
3. Totals may be slightly off due to rounding.
4. Emission reductions applied in the CalEEMod model include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code and the 2019 CALGreen Code. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources.

Refer to Appendix A, for detailed model input/output data.

Direct Project-Related Sources of Greenhouse Gases

- *Construction Emissions.* Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[7] As shown in Table 4.8-1, the proposed project would result in 73.59 $MTCO_2e$ per year (amortized over 30 years), which represents a total of 2,207.84 $MTCO_2e$ from construction activities.

- *Area Source.*[8] Area source emissions were calculated using CalEEMod and project-specific land use data. As noted in Table 4.8-1, the proposed project would result in 0.02 $MTCO_2e$ per year of area source GHG emissions.

- *Mobile Source.*[9] The CalEEMod model relies upon trip data within the TIA and project-specific land use data to calculate mobile source emissions. Due to the nature of the proposed on-site uses (warehouse and print shop facility), the TIA provided separate fleet mixes and trip generation rates for both proposed land uses. According to the TIA, the project would generate approximately 808 total daily trips. The project fleet mixe

[7] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (SCAQMD). SCAQMD, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009.

[8] Area sources are defined by the SCAQMD as smaller sources of pollution (e.g., water heaters, gas furnaces, fireplaces, woodstoves, architectural coatings) that are typically associated with homes and non-industrial sources.

[9] Mobile sources are defined by SCAQMD as moving sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats and airplanes.

and trip generation rates were applied in CalEEMod. The project would directly result in 1,699.97 $MTCO_2e$ per year of mobile source-generated GHG emissions; refer to Table 4.8-1.

Indirect Project-Related Source of Greenhouse Gases

- *Energy Consumption*. Electricity would be provided to the project site by SCE. The project would indirectly result in 276.98 $MTCO_2e$ per year due to energy consumption; refer to Table 4.8-1.

- *Water Demand*. The project operations would result in a demand of approximately 68.82 million gallons of water per year. Emissions from indirect energy impacts due to water supply would result in 249.23 $MTCO_2e$ per year; refer to Table 4.8-1.

- *Solid Waste*. Solid waste associated with operations of the proposed project would result in 85.30 $MTCO_2e$ per year; refer to Table 4.8-1.

Total Project-Related Sources of Greenhouse Gases

As shown in Table 4.8-1, the total amount of proposed project related GHG emissions from direct and indirect sources combined would total 2,385.09 $MTCO_2e$ per year, which is below the SCAQMD GHG threshold of 10,000 $MTCO_2e$ per year. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The City has not adopted a Climate Action Plan (CAP) or any other plan for the purpose of reducing GHG emissions. Thus, the GHG plan consistency for this project is based off the project's consistency with the General Plan, 2020-2045 RTP/SCS, and CARB's 2017 Scoping Plan.

Project Consistency with the Pico Rivera General Plan

The Environmental Resources Element of the City's General Plan has identified goals and policies aimed at GHG reduction in the City. As shown in Table 4.8-2, *Project Consistency with the Pico Rivera General Plan*, the project would be consistent with the GHG reduction goals and objectives of the General Plan.

Table 4.8-2
Project Consistency with the Pico Rivera General Plan

Goals and Policies	Project Consistency Analysis
Goal 8.1: A sustainable community where land use and transportation improvements are consistent with regional planning efforts and adopted plans to reduce dependence on the use of fossil fuels and decrease greenhouse gas emissions.	
Policy 8.1-2: Gateway Cities SCS. Continue to implement sustainable strategies identified in, and maintain consistency with, the Gateway Cities Council of Governments 2012 Subregional Sustainable Communities Strategy and updated versions incorporated into SCAG's RTP/SCS.	**Consistent.** As shown in Table 4.8-3, *Project Consistency with the 2020-2045 RTP/SCS*, the project would be consistent with the 2020-2045 RTP/SCS reduction strategies.

Table 4.8-2 (continued)
Project Consistency with the Pico Rivera General Plan

Goals and Policies	Project Consistency Analysis
Policy 8.1-3: Environmental Integrity. Foster sustainable living by reducing community dependency of fossil fuels and other non-renewable resources, minimizing air pollutant and GHG emissions, retaining existing open space lands, and restoring habitat areas along the Rio Hondo and San Gabriel Rivers.	**Consistent.** The electricity provider for the project site, SCE, is subject to SB 100 and the California's RPS. SB 100 requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kWh of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent of total procurement by 2030. Per the RPS, the project would utilize electricity provided by SCE that is composed of 36 percent renewable energy as of 2018 and would achieve at least 60 percent renewable energy by 2030. Further, EV charging facilities would be installed at the project site in compliance with CALGreen Nonresidential Mandatory Measure 5.106.5.3, *Electric Vehicle (EV) Charging*. The project would also provide 33 parking spaces for alternative-fueled vehicles in compliance with CALGreen Code Nonresidential Mandatory Measure 5.106.5.2. Additionally, the project site would be located near two Montebello Bus Lines (MBL) transit stops, with one located 0.1-mile northwest of the site, and the other located 0.2-mile to the southeast. Therefore, the project would support this policy and help reduce community dependency on fossil fuels.
Policy 8.1-4: Efficient Land Use Patterns. Promote efficient land use patterns and compact development that supports widespread walkability and bicycle use, providing for a modest and incremental overall increase in community development intensity that complements the existing community fabric by: – *Encouraging infill and redevelopment of vacant and underutilized sites;* – *Facilitating the development of engaging and livable streetscapes characterized by benches, vegetation-appropriate architecture, and pedestrian/bicycle linkages.* – *Providing opportunities for non-motorized transportation and linkages between new development and transit.*	**Consistent.** Under existing conditions, the project site is currently vacant land within an urban area. Therefore, the project would support this policy by constructing an infill industrial development. The project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity between the project site and Beverly Boulevard. As noted above, two MBL transit stops are located within 0.2-mile of the project site. Additionally, the project would provide 22 bicycle parking spaces for employees and customers. By doing so, the project would encourage non-motorized transportation.

Table 4.8-2 (continued)
Project Consistency with the Pico Rivera General Plan

Goals and Policies	Project Consistency Analysis
Policy 8.1-7: Solid Waste Management. Practice and promote responsible waste management with the aim of exceeding mandated waste diversion targets when economically feasible to do so.	**Consistent.** The project would divert 50 percent of all solid waste from landfills in compliance with Assembly Bill 939 (AB 939). Additionally, the project will be required to recycle a minimum of 75 percent of waste in accordance with Assembly Bill 342 (AB 341). Further, the project would not obstruct or interfere with agency efforts to support organic waste landfill reduction goals in CARB's Short-Lived Climate Pollutants (SLCP) Reduction Strategy and Senate Bill 1383 (SB 1383). The project would comply with waste regulations, and it is not feasible to determine economical waste diversion above mandated targets at the time of this analysis since it would be speculative and could vary widely depending on the ultimate user.
Goal 8.2: Continued improvement in local and regional air quality with reduced greenhouse gas emissions to maintain the community's health.	
Policy 8.2-2: GHG Reduction Measures. Reduce greenhouse gas emissions in the City and the region through the following measures including, but not limited to: – *Implementing land use patterns that reduce automobile dependency by increasing housing and employment densities within mixed use settings and transit-oriented developments;* – *Reducing the number of vehicular miles traveled through implementation of Transportation Demand Management Programs;* – *Encouraging the use of alternative modes of transportation by supporting transit facility and service expansion, expanding bicycle routes and improving bicycle facilities, and improving pedestrian facilities;* – *Increasing building energy efficiency through site design, building orientation, landscaping, and incentive/rebate programs;* – *Implementing water conservation measures;* – *Requiring the use of drought-tolerant landscaping; and* – *Increasing solid waste diversion through recycling efforts.*	**Consistent.** The project would provide employment near residential uses. As previously discussed, the project would support alternative modes of transportation by providing bicycle facilities (i.e., 22 bicycle parking spaces). The project would support energy efficiency by complying with all applicable Title 24 and CALGreen building codes (e.g. energy efficient lighting and plumbing fixtures). Landscaping would cover approximately 85,710 square feet of the project site. In accordance with 2019 Title 24 requirements, the project would install water efficient irrigation systems and landscapes. Solid waste diversion and recycling efforts at the project site would be achieved through compliance with AB 939 (i.e., diversion of 50 percent of all solid waste) and AB 341 (I.e., recycle 75 percent of waste). In addition, the project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity between the project site and Beverly Boulevard. As noted above, two MBL transit stops are located within 0.2-mile of the project site. Additionally, the project would provide 33 clean air vehicle parking spaces, with associated electrical vehicle charging facilities.

Table 4.8-2 (continued)
Project Consistency with the Pico Rivera General Plan

Goals and Policies	Project Consistency Analysis
Policy 8.2-10: Employers. Encourage employers to allow flexible work hours and telecommuting where feasible, and to provide incentives for employee use of public transit, biking, walking, and carpooling for home to work commutes.	**Consistent.** The project would include 33 clean air vehicle parking spaces in compliance with the 2019 CALGreen Code Nonresidential Mandatory Measure 5.106.5.2. Further, EV charging facilities would be installed at the project site in compliance with CALGreen Nonresidential Mandatory Measure 5.106.5.3, *Electric Vehicle (EV) Charging*. The project would support alternative modes of transportation by providing bicycle facilities (i.e., 22 bicycle parking spaces). In addition, the project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity between the project site and Beverly Boulevard. As noted above, two MBL transit stops are located within 0.2-mile of the project site. Additionally, the project would provide 33 clean air vehicle parking spaces, with associated electrical vehicle charging facilities. At the time of this analysis, the project tenant has not been identified. Therefore, it is not feasible to determine potential employer incentives and programs.
Policy 8.2-13: Contractor Preference. Give preference to contractors that commit to apply methods to minimize greenhouse gas emissions in building construction and operations, such as the use of low or zero-emission vehicles and equipment.	**Consistent.** The Project Applicant will give preference to contractors committed to reducing GHG emissions through use of low or zero-emission vehicles and equipment. The project would be required to comply with CALGreen construction requirements, including water efficiency and conservation provisions in new buildings, increases in building system efficiencies (e.g., lighting, HVAC, and plumbing fixtures), the diversion of construction waste from landfills, and the incorporation of EV charging infrastructure. The project would be built to specification and the future tenant is unknown at the time of this analysis. Accordingly, it is unknown if the ultimate tenant will operate its own fleet, and most warehouse operators have no control over the trucks entering and exiting their facilities. Consequently, it is infeasible to require trucks with particular emission profiles (e.g., ZE, NZE, or 2010 or beyond model year trucks) to visit the project site. Furthermore, it is unknown what type of on-site cargo handling equipment would be required and whether the required equipment would be available in electric-powered models. Currently, all-electric models of most heavy equipment have not been developed. Therefore, it is infeasible to require all-electric on-site cargo handling equipment.
Policy 8.2-18: Electric Vehicles. Encourage provision of or readiness for charging stations and related infrastructure for electric vehicles within new development and redevelopment proposals and within City operations.	**Consistent.** The project would install 33 clean air vehicle parking spaces and associated EV charging stations in compliance with 2019 Title 24 and CALGreen.
Source: City of Pico Rivera, *Pico Rivera General Plan*, last updated October 2014.	

Project Consistency with the SCAG 2020-2045 RTP/SCS

Table 4.8-3, *Project Consistency with the 2020-2045 RTP/SCS*, shows the project's consistency with the strategies found within the 2020-2045 RTP/SCS. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 4.8-3
Project Consistency with the 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
• Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking)	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	**Consistent.** The project is an infill development that would be consistent with the 2020-2045 RTP/SCS focus on growing development near destinations and mobility options. The project would provide employment near residential uses. The project site is located adjacent to I-605 and Beverly Boulevard, and is located within 0.2- mile of two MBL transit stops. 33 clean air vehicle parking spaces would be provided, with associated electric vehicle charging facilities in compliance with the CALGreen Nonresidential Mandatory Measure 5.106.5.3, *Electric Vehicle (EV) Charging* and 2019 CALGreen Code Nonresidential Mandatory Measure 5.106.5.2. Additionally, the project would promote healthy lifestyles by providing 22 long-term bicycle parking spaces for employees and customers. In addition, the project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity between the project site and Beverly Boulevard. As such, the project would be consistent with this reduction strategy.

Table 4.8-3 (continued)
Project Consistency with the 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Leverage Technology Innovations		
• Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation	**HQTA, TPAs, NMA, Livable Corridors.**	**Consistent.** The project would be required to comply with all applicable 2019 Title 24 and CALGreen building codes at the time of construction. These building codes require EV charging stations, designated EV parking, designated carpool and/or alternative-fueled vehicles, as well as bike parking and storage. In addition, the project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity between the project site and Beverly Boulevard. Therefore, proposed development within the project would leverage technology innovations and help the City, County, and State meet its GHG reduction goals. The project would be consistent with this reduction strategy.
Support Implementation of Sustainability Policies		
• Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**PGA, Job Centers, HQTAs, TPA, NMAs, Livable Corridors, SOIs, Green Region, Urban Greening.**	**Not Applicable.** This reduction strategy is directed at regional and local agencies, and not at individual development projects. However, the project would support sustainability policies. As described above, the proposed project site is located within 0.2-mile of two MBL transit stops. The project would implement sustainable design features in accordance with the 2019 Title 24 and CALGreen. Sustainable design features include energy-efficient appliances, water and space heating/cooling equipment, building insulation and roofing, and lighting. Thus, the project would be consistent with this reduction strategy.

Table 4.8-3 (continued)
Project Consistency with the 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Promote a Green Region		
• Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space	**Green Region, Urban Greening, Greenbelts and Community Separators.**	**Consistent.** The proposed project would be required to comply with all applicable Title 24 and CALGreen measures, which would help reduce energy consumption and reduce GHG emissions. Thus, the project would support climate change resilience and local policies for efficient development that reduces energy consumption and GHG emissions. The project would be consistent with this reduction strategy. In addition, as noted within Section 4.6, *Energy*, the project would not result in significant impacts related to the wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation.

Source: Southern California Association of Governments, *2025-2040 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal*, September 3, 2020.

Project Consistency with the 2017 Scoping Plan

The 2017 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target. Some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions would be adopted as required to achieve Statewide GHG emissions targets at an unknown time in the future. Table 4.8-4, *Consistency with the 2017 Scoping Plan*, provides an evaluation of applicable reduction actions/strategies by emissions source category to determine whether the project would be consistent with or exceed reduction actions/strategies outlined in the 2017 Scoping Plan.

Table 4.8-4
Consistency with the 2017 Scoping Plan

Actions and Strategies	Project Consistency Analysis
Senate Bill 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	The project would utilize electricity from SCE, which is required to comply with SB 350. As such, it can be reasonably inferred that the project would be in compliance with SB 350.

Table 4.8-4 (continued)
Consistency with the 2017 Scoping Plan

Actions and Strategies	Project Consistency Analysis
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	Motor vehicles driven by the proposed project's employees and customers would be required to use LCFS compliant fuels in accordance with Federal and State fuel standards that apply during project operations, thus the project would be in compliance with this strategy.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	
Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	The project would include light and heavy-duty truck trips that would be required to comply with the applicable Mobile Source Strategy that applies during project operations, including all CARB and SCAQMD regulations. Additionally, the project would be required to comply with CALGreen and would include EV parking and charging stations. Furthermore, the State is expected to see a decrease in transportation sector GHG emissions due to Executive Order N-79-20. Executive Order N-79-20 directs the State to require all new vehicles sold in the State to be zero-emission by 2035 (cars and passenger trucks) and by 2045 (medium- and heavy-duty vehicles). As such, the project would not conflict with the goals of the Mobile Source Strategy.
SB 375 Sustainable Communities Strategies	
Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	As shown in Table 4.8-3, the project would be consistent with the 2020-2045 RTP/SCS.
Source: California Air Resources Board, *2017 Scoping Plan*, November 2017.	

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the General Plan, 2020-2045 RTP/SCS, and 2017 Scoping Plan. Thus, the project's incremental increase in GHG emissions as described above would not result in a significant impact on the environment. Therefore, project impacts with regard to climate change would be less than significant.

Mitigation Measures: No mitigation is required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 one-quarter mile of an existing or proposed school?			✓	
d. Be located on a site which is included on a list of hazardous materials 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 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 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?				✓

This section is based on the *Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California* (Phase I ESA) prepared by Roux Associates, Inc. (dated July 2, 2021); refer to Appendix H, *Phase I ESA*.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The project proposes the construction of warehouse and print shop facilities. Although the end user of the warehouse buildings is not known at this time, long-term operation of the project may involve the routine transport, use, or disposal of hazardous materials. The types and quantities of hazardous substances utilized by the various types of potential future users at the project site would vary and, as a result, the nature of potential hazards would vary. Generally, the exposure of persons to hazardous materials could occur in the following manner: 1) improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; 2) an accident during transport; 3) environmentally unsound disposal methods; or 4) fire, explosion, or other emergencies. Therefore, the project could result in impacts related to the routine transport, use, and/or disposal of hazardous materials.

The proposed project would be subject to compliance with existing regulations, standards, and guidelines established by the U.S. EPA, State, County, and the City related to the storage, use, and disposal of hazardous materials. The project is subject to compliance with existing hazardous materials regulations, which are codified in California Code of Regulations Titles 8, 22, 26, and 49, as well as the enabling legislations set forth in Health and Safety Code Chapter 6.95. Both the Federal and State governments require any business, where a maximum quantity of a regulated

substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a Risk Management Plan. The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agencies (CUPAs), in this case, the Los Angeles County Fire Department. The Los Angeles County Fire Department Health Hazardous Materials Division administers and enforces the California Accidental Release Prevention (CalARP) program. The CalARP program encompasses both the federal "Risk Management Program," established in the Code of Federal Regulations, Title 40, Part 68, and the State of California program, in accordance with the California Health and Safety Code, Chapter 6.95, Article 2 and California Code of Regulations, Title 19, Division 2, Chapter 4.5. The Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses would be required to submit their plans to the Certified Unified Program Agency (CUPA) (City of Pico Rivera, Department of Environmental Health [DEH]), which would make the plans available to emergency response personnel. The Risk Management Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

While the risk of exposure to hazardous materials cannot be eliminated, best management practices can be implemented to reduce risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations, which would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the proposed project would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Impacts

One of the means through which human exposure to hazardous substance could occur is through accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, hazardous substances can migrate into the soil or enter a local stream or channel causing contamination of soil and water. Human exposure of contaminated soil, soil gas, or water can have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

Construction Equipment

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures including proper handling of hazardous materials, refueling vehicles off-site, maintaining proper storage containers, and installing best management practices (BMPs) that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law including the Hazardous Waste Control Act, California Division of Occupational Safety and Health (Cal/OSHA) requirements, Resources Conservation and Recovery Act (RCRA), and the Emergency Planning and

Community Right-to-Know Act (EPCRA). Compliance with existing laws and regulations would ensure impacts in this regard would be less than significant.

Grading Activities

Construction activities could also result in accidental conditions involving existing on-site contamination. The following analysis considers past uses of the project site including historical agricultural and railroad activities, which may have impacted soil, soil gas, and/or groundwater underlying the project site.

Railroad Activities

Based on the Phase I ESA prepared for the site, a Union Pacific Railroad (UPRR) right-of-way is located adjacent to the site, and has been in existence since at least 1923. A rail spur extending from the UPRR right-of-way previously traversed the site in a north to south orientation, but was removed in the early 2000s. Soils along railroads could potentially be impacted by heavy metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and/or chlorinated herbicides. Construction debris associated with the railroad spur removal, including ballast and railroad ties, is still located on-site and may also be impacted by hazardous materials. Accordingly, Mitigation Measure HAZ-1 is recommended to reduce potential impacts to less than significant levels. Mitigation Measure HAZ-1 would require that a Phase II/Site Characterization Specialist is retained to define the extent of on-site contamination and recommend appropriate coordination with UPRR and remediation, as necessary, for implementation of the proposed project. The Phase II/Site Characterization Specialist would be required to prepare a Soil Management Plan that identifies necessary sampling efforts and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan would also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading within railroad right-of-way. Thus, with implementation of Mitigation Measure HAZ-1, impacts would be reduced to less than significant levels.

San Gabriel Valley Superfund Site

Based on the Phase I ESA, the project is located in Area 1 of the San Gabriel Valley Superfund Site (SGV Area 1). According to the Phase I ESA, SGV Area 1 is a groundwater plume that runs along the axis of the Rio Hondo Wash and the Salt Pit Wash in the San Gabriel groundwater basin in El Monte. The plume also parallels the San Gabriel River to the east. It is approximately 4 miles long and 1.5 miles wide. The groundwater of SGV Area 1 is contaminated with trichloroethene (TCE), tetrachloroethene (PCE), and carbon tetrachloride. However, the project site is not located within the documented groundwater contamination plume.

Historical Uses

Based on the Phase I ESA, past uses include agricultural operations that may have involved the use of pesticides and herbicides to control and optimize vegetation typical of agricultural facilities. Based on the historical aerial photographs, the site was used for agricultural purposes until the late 1940s or early 1950s.

The Phase I ESA also noted O'Donnel Oil Refinery operated approximately 0.25-mile north of project site (APN 8129-001-007) from at least 1923 to approximately 1948. The oil refinery was known to have had aboveground storage tanks containing refined petroleum products. Groundwater is approximately 10 to 46 feet below ground surface (bgs). Although a spill of petroleum products was not indicated, the Phase I ESA considers this historic use an OEF.

A leak occurred at the Yellow Freight Systems, Inc. (YFS) facility in 1987 due to a broken pipe connection. YFS is immediately north of site (APN 8129-001-007), located at 9933 East Beverly Boulevard. Six USTs were removed from the property and case closure was confirmed in a letter from the Leaking UST (LUST) cleanup program by the Los Angeles Regional Water Quality Control Board (LARWQCB) dated August 12, 2013. As such, the former presence of these tanks is considered an OEF

Due to the potential for hazards associated with these historic uses, Mitigation Measure HAZ-1 would require that the project applicant retain a Phase II/Site Characterization Specialist to define the extent of on-site contamination and conduct shallow soil, as necessary, and prior to construction. Thus, with implementation of Mitigation Measure HAZ-1, potential impacts associated with the current agricultural operations on-site are less than significant.

Aerially Deposited Lead

Aerially deposited lead (ADL) refers to lead deposited on older roadway shoulders from past leaded fuel vehicle emissions. According to the Caltrans ADL webpage, lead was banned as a fuel additive in California beginning in 1992. Thus, ADL may be present in soils adjacent to highways/roadways in use prior to that time. However, based on Appendix I of the Phase I ESA, ADL associated with I-605 is not considered a Recognized Environmental Condition (REC). As such, impacts would be less than significant in this regard.

Debris Piles

Based on the Phase I ESA, miscellaneous refuse as observed throughout the site including construction debris, old spray paint cans, and paint thinner cans. Based on the small quantities observed, the Phase I ESA determined these debris piles as an OEF. Thus, Mitigation Measure HAZ-1 would be implemented, and would require that a Phase II/Site Characterization Specialist investigate the contents of the debris piles for the presence of hazardous materials. If determined present, the Specialist would identify the extent of on-site contamination and steps for management, handling, and disposal of affected soils. With implementation of Mitigation Measure HAZ-1, impacts would be less than significant in this regard.

Long-Term Operational Impacts

Refer to Response 4.9(a), above, for a description of long-term operational impacts related to proposed development at the site. Upon adherence to existing regulations related to hazardous materials, reasonably foreseeable upset and accident impacts during project operations would be less than significant.

Mitigation Measures:

HAZ-1 The project applicant shall retain a Phase II/Site Characterization Specialist to prepare a Soil Management Plan prior to the issuance of any grading permit for the proposed project. The Phase II/Site Characterization Specialist shall define the extent of on-site contamination associated with the Recognized Environmental Condition (REC) and Other Environmental Features (OEFs) identified in the *Phase I Environmental Site Assessment, Beverly Boulevard, Pico Rivera, California* prepared by Roux Associates, Inc. (dated July 2, 2021). These REC and OEFs pertain to railroad activities and historical uses. The Specialist shall recommend remediation, as necessary, per the standards of, the Los Angeles County Health Hazardous Materials Division, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and other agencies as applicable. The Soil Management Plan shall identify necessary sampling efforts, and soil management practices necessary during site disturbance (including safety precautions to ensure worker safety). The Plan shall also consider necessary sampling efforts, management of soils, and proper disposal of waste materials during grading and excavation. The handling and/or disposal of contaminated soils shall comply with all federal, state, and local laws and regulations.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant. The project site is located within one-quarter mile of Solid Faith Christian School, which is located approximately 0.2 mile south of the site at 5724 Esperanza Avenue, in unincorporated Los Angeles County. However, as stated above, upon adherence to existing laws and regulations related to construction activities and

operational safety, impacts pertaining to the potential for accidental conditions during project operations would be less than significant. Thus, potential impacts to an existing or proposed school would be less than significant.

Mitigation Measures: No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials 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?

No Impact. California Government Code Section 65962.5 requires the DTSC and the State Water Resources Control Board (SWRCB) to compile and update a regulatory site's listing of reported hazardous materials sites (per the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the California Health and Safety Code. Section 65962.5 also requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. These lists are made available to the public on EPA's *Cortese List Data Resources* website. Based on the *Cortese List Data Resources* website, the project site is not included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.[1] Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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 for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan and there are no public or private airports or airstrips within two miles of the project site. Thus, no impact would result in this regard.

Mitigation Measures: No mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact With Mitigation Incorporated. The proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Based on the *City of Pico Rivera Disaster Route Map*, included in the City's Multi-Jurisdictional Hazard Mitigation Plan Update, Beverly Boulevard is designated as a disaster route.[2] Project construction activities could result in short-term temporary impacts to street traffic along Beverly Boulevard. While temporary lane closures would be required, Mitigation Measure TR-1 would ensure travel along Beverly Boulevard and surrounding roadways would remain open and would not interfere with emergency access in the site vicinity. Compliance with Mitigation Measure TR-1 would allow for uninterrupted emergency access to evacuation routes and impacts in this regard would be reduced to less than significant levels.

Mitigation Measures: Refer to Mitigation Measure TR-1.

[1] California Environmental Protection Agency, Cortese List Data Resources, https://calepa.ca.gov/SiteCleanup/CorteseList/, accessed on September 4, 2020.

[2] City of Pico Rivera Multi-Jurisdictional Hazard Mitigation Plan Update, *City of Pico Rivera Disaster Route Map,* dated June 28, 2008

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. As discussed in Section 4.20, *Wildfire*, there is no potential to expose people or structures to wildland fires within the project area. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

4.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 stream or river or through the addition of impervious surfaces, in a manner which would:			✓	
1) Result in substantial erosion or siltation on- or off-site?			✓	
2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			✓	
3) 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?			✓	
4) 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?			✓	

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the U.S. EPA has established regulations under the NPDES program to control direct storm water discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the RWQCBs to preserve, protect, enhance, and restore water quality. The City of Pico Rivera is within the jurisdiction of the Los Angeles RWQCB.

According to the *Water Quality Control Plan for the Los Angeles Region* (Region 4), the project site is located within the Lower San Gabriel Hydrologic Area portion (Reach 2) of the San Gabriel River Watershed. The San Gabriel River generally flows south until its confluence with the Pacific Ocean between the cities of Long Beach and Seal Beach. The *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and*

Ventura Counties (Basin Plan) identifies beneficial uses for the San Gabriel River Watershed, including Marine Habitat (MAR) and Threatened, or Endangered Species (RARE).[1]

Short-Term Construction

Short-term impacts may result from the disturbance of on-site soils during construction activities. Runoff from the project site during construction would have the potential to violate water quality standards and water quality discharge requirements. Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ (Construction General Permit). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation.

To obtain coverage under the Construction General Permit, the project must register with the Stormwater Multiple Application and Report Tracking System, as well as develop and implement a SWPPP. The SWPPP is required to contain a site map(s) that depicts the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP must list BMPs the discharger would implement to mitigate potential pollutants in stormwater runoff and the locations of those BMPs at the construction site. BMPs for construction activities may include measures to control pollutants at particular sources, such as fueling areas, trash storage areas, outdoor materials storage areas, and outdoor work areas. BMPs are also used during treatment of the pollutants at these particular source areas. The following BMPs may be implemented prior to construction to capture sediment, stabilize slopes, and prevent runoff and sediment from leaving the construction site and entering the City's storm drain system and entering receiving waters:

- Silt curtains,
- Erosion control fiber mats,
- Silt fences,
- Sandbag barriers, and
- Sediment traps.

In addition to the BMPs, the SWPPP must contain: a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The project's construction activity would be subject to the Construction General Permit, as it involves clearing, grading, and disturbances to the ground such as stockpiling or excavation, and a construction site with soil disturbance greater than one acre. The SWPPP is required to outline the erosion, sediment, and non-storm water BMPs, in order to minimize the discharge of pollutants at the construction site. These BMPs would include measures to contain runoff from vehicle washing at the construction site, prevent sediment from disturbed areas from entering the storm drain system using structural controls (i.e., sandbags at inlets), and cover and contain stockpiled materials to prevent sediment and pollutant transport. Implementation of the BMPs would ensure runoff and discharges during the project's construction phase would not violate any water quality standards. Compliance with NPDES requirements and the Construction General Permit would reduce short-term construction-related impacts to water quality to a less than significant level.

[1] California Waterboards, Los Angeles – R4. Revised March 2020. *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/. Accessed on September 10, 2020.

Long-Term Operations

Long-term operation of the warehouse and print shop facilities would similarly have the potential for impacting drainage systems due to pollutants in stormwater runoff (heavy metals, nutrients, and refuse) that could have the potential to affect tributary drainage features. The City of Pico Rivera is an active participant in preparing and adhering to the Lower San Gabriel River Watershed Management Program, which requires pollutants in runoff generated on impervious surfaces be treated to the maximum extent prior to being released from development sites. Low-impact development (LID) strategies (post-construction BMPs) shall be utilized to infiltrate, store, and reuse stormwater runoff whenever possible.

In accordance with the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit requirements and NPDES Permit No. CAS004001, Order No. R4-2012-0175, a project-specific Water Quality Management Plan (WQMP) would be prepared for the project. The WQMP would identify structural and non-structural BMPs to minimize potential water quality issues related to LID, hydromodification, identification of receiving waters. Potential BMPs include but would not be limited to, revegetation to stabilize disturbed soils, grading design that increases stormwater retention and infiltration, and maintenance programs to remove trash, debris, and waste. Other options include:

- Implement minimum BMPs as applicable to the project, such as installing storm drain stencils and/or maintaining landscape with minimal pesticide use.

- Infiltration and Biotreatment BMPs (where technically feasible), such as infiltration trenches, infiltration basins, bioretention, biofiltration swales and/or biofiltration strips.

- Maintenance programs to remove trash, debris, and waste, such as installing adequate receptacles, weekly waste collection, and/or waste bag dispensers to ensure trash is not discharged into the City's MS4.

Furthermore, the City's NPDES and Standard Urban Storm Water Mitigation Plan (SUSMP) regulations contained in Chapter 16.04 of the Municipal Code state that:

A. Subject new development and redevelopment projects are required to comply with SUSMP conditions assigned by the City that shall consist of: (1) LID structural and non-structural BMPs; (2) source control BMPs; and (3) structural and non-structural BMPs for specific types of uses.

B. As a condition for issuing a certificate of occupancy for new development or redevelopment project, the authorized enforcement officer shall require facility operators and/or owners to build all the stormwater pollution control best management practices and structural or treatment control BMPs that are shown on the approved project plans and to submit a signed certification statement stating that the site and all structural or treatment control BMPs will be maintained in compliance with the SUSMP and other applicable regulatory requirements.

C. The transfer or lease of a property subject to a requirement for maintenance of structural and treatment control BMPs shall include conditions requiring the transferee and its successors and assigns to either: (1) assume responsibility for maintenance of any existing structural or treatment control BMP; or (2) to replace existing structural or treatment control BMPs with new control measures or BMPs meeting the then current standards of the city and the SUSMP. Such requirement shall be included in any sale or lease agreement or deed for such property. The condition of transfer shall include a provision that the successor property owner or lessee conduct maintenance inspections of all structural or treatment control BMPs at least once a year and retain proof of inspection.

Following compliance with applicable laws and regulations, including preparation of a project specific WQMP (as required under the MS4 Permit), and implementation of recommended BMPs therein, long-term water quality impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact.

Based on the Basin Plan, the project site is located within the Central Basin, in the Montebello Forebay subarea. Sources of recharge to the Montebello Forebay include surface water/stormwater, imported water, groundwater, and recycled water. Sources of discharge from the Central Basin include pumping, subsurface outflow to adjacent basins and the ocean, and groundwater discharge to surface water. Based on the Geotechnical Report prepared for the project, the project site's depth to groundwater is approximately 49 feet bgs.

Short-Term Construction Impacts

The project would not have the potential to result in substantial impacts to groundwater supplies or recharge during construction. During the construction phase, ground disturbance is anticipated to reach a maximum of approximately 15 feet bgs along the majority of the site, a maximum of 20 feet for utilities, and a maximum of 75 feet for bridge piles. Should groundwater be encountered, and dewatering be required, the project would be required to comply with Los Angeles RWQCB and NPDES Dewatering Permit regulations, both of which regulate the discharge of dewatering wastes from construction and other similar types of discharges that pose an insignificant (de minimis) threat to water quality. To obtain regulatory coverage under this order, an applicant must submit a Notice of Intent (NOI) at least 45 days prior to discharge and basic information needed to characterize the dewatering discharge including a list of potential pollutants, maximum flow rates, and proposed treatment systems. A standard monitoring and reporting program is included as part of the permit. Adherence to existing NPDES requirements as discussed in Response 4.10(a) above, and acquisition of a Dewatering Permit would sufficiently mitigate short-term construction impacts in the events that groundwater is encountered during project construction. Impacts in this regard would be less than significant.

Long-Term Operational Impacts

The proposed project would not include any land uses or facilities that would require groundwater extraction or have the capacity to substantially decrease groundwater supplies or recharge. The proposed project would generally include construction of a warehouse and print shop facilities, associated parking lots, and landscaping; refer to Section 2.4, *Project Characteristics*. The project would result in an increase in impervious area on-site as compared to existing conditions. However, as noted above in Response 4.10(a), the project would be required to comply with the Los Angeles County MS4 Permit requirements and NPDES Permit No. CAS004001, Order No. R4-2012-0175. These permits require preparation of a WQMP that would necessitate implementation of multiple BMPs intended to provide for stormwater retention and infiltration, including measures such as infiltration trenches, infiltration basins, and/or bioretention. Thus, it is not anticipated that the increase of impervious surface that would result from project implementation would impede percolation of runoff into the groundwater basin underneath the project area. The project would not have the capacity to substantially interfere with groundwater recharge, such that there would be a net deficit in aquifer volume or lowering of the groundwater table level during long-term operations. Long-term operational impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:

1) Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Soil disturbance would temporarily occur during project construction due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, and grading. Disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via storm water runoff from the project site.

The project would be subject to compliance with the requirements set forth in the NPDES Stormwater General Construction Permit for construction activities; refer to Response 4.10(a). Compliance with the NPDES, including preparation of a SWPPP would reduce the volume of sediment-laden runoff discharging from the site. The implementation of BMPs such as storm drain inlet protection and fiber rolls would reduce the potential for sediment and storm water runoff containing pollutants from entering receiving waters. Therefore, project implementation would not substantially alter the existing drainage pattern of the site during the construction process such that substantial erosion or siltation would occur.

The long-term operation of the proposed warehouse and print shop facilities would not have the potential to result in substantial erosion or siltation on- or off-site. Further, project implementation is anticipated to have similar drainage patterns to existing on-site conditions and the project would be required to comply with City's MS4 permit as explained in Response 4.10(a). Thus, impacts in this regard are anticipated to be less than significant.

Mitigation Measures: No mitigation is required.

2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact. Refer to Response 4.10(c)(1), above. The project site is generally flat and is located within an urbanized area. The project site is not located within areas of potential flooding according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the project area.[2] The project would collect on-site stormwater runoff on the project site in accordance with the City's MS4 permit and City design standards. It is not anticipated that the project would increase surface runoff in a manner that would result in on- or off-site flooding. Thus, impacts in this regard are anticipated to be less than significant.

Mitigation Measures: No mitigation is required.

3) 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?

Less Than Significant Impact. Refer to Responses 4.10(a) and 4.10(c)(1), above. Although implementation of the project would result in an increase in impervious area, the proposed stormwater system would collect on-site stormwater at the project site resulting in less runoff leaving the project site than the existing condition. Therefore, the development is not expected to exceed the capacity of the existing/planned stormwater drainage systems. Additionally, the project would be required to comply with the City's MS4 permit, which would ensure that potential water quality impacts are minimized to a less than significant level. Thus, impacts in this regard are anticipated to be less than significant.

Mitigation Measures: No mitigation is required.

[2] Federal Emergency Management Agency, Flood Insurance Rate Map #06037C1664F and 06037C1803F, revised September 26, 2008.

4) Impede or redirect flood flows?

No Impact. According to the FEMA Flood Insurance Rate Map for the project area, the project site is located outside of the 100-year flood zone.[3] No impacts would result in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

Based on the Safety Element, Figure 9-3, *Dam Inundation*, of the General Plan, the project site is located within the flood inundation area of the Whittier Narrows Dam, a major flood control facility operated by the Corps. Although the potential for inundation exists during a major storm event, inundation is not anticipated to result in the release of pollutants as a result of the project. As stated in Response 4.9(a), chemical/materials storage, or other uses that could result in a release of pollutants would be subject to compliance with existing regulations, standards, and guidelines established by the U.S. EPA, State, County, and City. Thus, the risk of a release of pollutants during a potential inundation event would be less than significant.

Additionally, the project site is located approximately 22 miles east of the Pacific Ocean and is not situated within the tsunami inundation area.[4] Therefore, a less then significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As discussed in Responses 4.10(a) and 4.10(b) above, the project would comply with NPDES and RWQCB requirements, and would not have the capacity to conflict with a water quality control plan or groundwater management plan for the region. Therefore, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

[3] Ibid.
[4] California Geologic Survey, CGS Information Warehouse: Tsunami, available at https://maps.conservation.ca.gov/cgs/informationwarehouse/tsunami/, accessed on September 11, 2020.

4.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

a) Physically divide an established community?

No Impact. The proposed project would not result in impacts related to the division of an established community. The proposed warehouse and print shop facility would be constructed on primarily undeveloped land, within a developed area of the City. Surrounding land uses in proximity to the project site are comprised of industrial, residential, open space, and railroad uses. The surrounding uses are currently separated from the project site by existing public facilities (i.e., UPRR, I-605, local roads, etc.), and public access to the project is currently precluded. Thus, no impacts would result in this regard.

Mitigation Measures: No mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact.

GENERAL PLAN CONSISTENCY

The City of Pico Rivera General Plan Land Use Map designates the project site as "I; General Industrial" and "PF; Public Facilities." General Industrial designations are intended for a range of industrial businesses including manufacturing and assembly, large-scale warehousing and distribution uses, contractors' storage yards, and wholesale activities. Retail or service uses designed to meet the needs of businesses may be permitted subject to applicable zoning regulations. General Industrial areas are intended to make a positive contribution to the local economy and municipal revenues, and furnish local employment opportunities for area residents. The Public Facilities designation is intended to recognize existing publicly owned facilities, and to provide areas for the conduct of public and institutional activities, including public and private utilities. Within the project site, the Public Facilities designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east.

The proposed warehousing/print shop uses would be consistent with the General Industrial land use designation for the project site. However, as noted above, there is an existing abandoned rail alignment that traverses the site that is designated Public Facilities under the General Plan. The proposed project would require a General Plan Amendment to redesignate this Public Facilities corridor to be consistent with the remainder of the site (General Industrial). The existing rail alignment traversing the site has been abandoned for many years, and the former railroad ties/tracks have been removed. Upon the City's approval of the General Plan Amendment for the project, impacts in regard to consistency with the General Plan would be less than significant. Additionally, the project would be consistent with goals and policies of the General Plan in regard to air quality, energy, greenhouse gases, and noise; refer to Sections 4.3, 4.6, 4.8, and 4.13 of this Initial Study, respectively.

The Land Use Element of the General Plan also designates the project site as an "Opportunity Area" in the City. "Opportunity Areas" are identified as areas where the potential exists for redevelopment, economic development, and potential new growth. In accordance with the goals of the General Plan, the proposed warehousing and print shop uses would create new economic development and potential new growth within the City. The proposed project would represent a beneficial impact in this regard.

ZONING CODE CONSISTENCY

The City's Zoning Map zones the project site as "IPD; Industrial Planned Development" and "P-F; Public Facilities." Based on the Municipal Code, the intent and purpose of the IPD zone is to establish certain areas within the City that promote desirable industrial and sales related uses conducive to the physical characteristics of the land and surrounding development by integrating environmental land planning and development flexibility and encourage creative and innovative architectural design. The purpose of this zone is to encourage high quality industrial development in areas where existing unimproved land, underutilized, and/or deteriorating industrial activity should be revitalized. The Municipal Code state that the intent of the P-F zone is to recognize existing publicly owned facilities and to clearly distinguish certain areas within the city that will best facilitate the development and conduct of government and public related institutional activities. Within the project site, the P-F designation applies to former railroad right-of-way that traverses the site, extending from the existing UPRR right-of-way on the west to the railroad bridge over I-605 to the east.

Under Municipal Code Chapter 18.40, Land Use Regulations, the proposed warehousing and print shop uses are an acceptable use for the IPD zone, upon issuance of a Conditional Use Permit (CUP). In accordance with Chapter 18.40, a precise plan of design would be submitted to the City for the proposed project, as required within the IPD zone. Both the CUP and precise plan of design will be reviewed and considered by the City as part of the project application submitted by the proponent. In addition, the proposed project would include on-site parking in compliance with Chapter 18.44, Off-Street Parking and Loading, of the City's Municipal Code.

As noted above, the existing abandoned rail alignment that traverses the site is zoned P-F. The proposed project would require a zone reclassification to reclassify this P-F corridor to be consistent with the remainder of the site (IPD). The existing rail alignment has been abandoned for many years, and the former railroad ties/tracks have been removed.

Thus, with the approval of the CUP and zone reclassification for the proposed project, the project would be consistent with the City's Zoning Code and a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

4.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

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?

No Impact. According to the General Plan, there are no known mineral resources located within the City. In addition, according to the State Division of Mines and Geology, no lands within the City have been identified to contain significant aggregate resources.[1] No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

No Impact. Refer to Response 4.12 (a), above. No known mineral resources are located within the City, and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

[1] California Department of Conservation, *Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County, California*, 2010.

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4.13 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		
e. 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 mechanical energy transmitted by pressure waves in a compressible medium such as air, and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

REGULATORY SETTING

State of California

The State Office of Planning and Research (OPR) *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL). A noise environment of 50 CNEL to 60 CNEL is considered to be "normally acceptable" for residential uses. OPR recommendations also note that, under certain conditions, more restrictive standards than the maximum levels cited may be appropriate.

City of Pico Rivera

Pico Rivera General Plan. The City of Pico Rivera General Plan (Pico Rivera General Plan) *Noise Element* examines noise sources within the City and evaluates the potential for noise conflicts and identifies ways to reduce existing and potential future noise impacts. It contains the following applicable goals, policies, and implementation programs to achieve and maintain noise levels compatible with various land uses.

- **Goal 11.1**: An acceptable noise environment for existing and future residents that also meets the business needs of the community.

    - **Policy 11.1-1: Land Use Compatibility**. Strive to achieve and maintain land use patterns that are consistent with the noise compatibility guidelines set forth in [General Plan] Table 11-1 (Table 4.13-1, *City of Pico Rivera Maximum Allowable Environmental Noise Standards*).

Table 4.13-1
City of Pico Rivera Maximum Allowable Environmental Noise Standards

Land Use	Hours of Day[1]	
	Exterior Noise Level from Property Line L_{dn}/CNEL, dB	Interior Noise Level L_{dn}/CNEL, dB[2]
Residential (Low Density, Multi Family, Mixed-Use)	65	45
Transient Lodging (Motels/Hotels)	65	45
Schools, Libraries, Churches, Hospitals/Medical Facilities, Nursing Homes, Museums	70	45
Theaters, Auditoriums	70	N/A
Playgrounds, Parks	75	N/A
Golf Courses, Riding Stables, Water Recreation	75	N/A
Office Buildings, Business Commercial and Professional	70	N/A
Industrial, Manufacturing, and Utilities	75	N/A

Notes: dBA = A-weighted decibel scale
1. The noise level standard is the maximum decibel level which may be imposed upon the referenced land use. Where a proposed use is not specifically listed on this table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the Planning Director.
2. This noise exposure maximum requires windows and doors to remain closed to achieve the acceptable interior noise level and will necessitate the use of an air conditioning unit and/or exterior noise level reduction measures such as a block wall and double pane windows.

Source: City of Pico Rivera, *General Plan Noise Element: Table 11-1*, October 2014.

- **Policy 11.1-2: Existing Noise Incompatibilities**. Within areas where existing or future noise levels exceed the guidelines set forth in [General Plan] Table 11-1 (Table 4.13-1), encourage establishment of noise buffers and barriers, modifications to noise-generating operations, and/or retrofitting of buildings housing noise-sensitive uses, where feasible and appropriate.

- **Policy 11.1-3: New Stationary Noise Sources**. Require new stationary noise sources to mitigate impacts on noise-sensitive uses consistent with the noise compatibility guidelines set forth in [General Plan] Table 11-1 (Table 4.13-1).

- **Goal 11.2**: Minimize disruptions to residential neighborhoods and businesses caused by transportation-related noise.

    - **Policy 11.2-4: Truck Routes**. Maintain a system of truck routes that avoid truck travel through or adjacent existing and future residential neighborhoods, to the extent feasible.

- **Goal 11.3**: Minimize disruptions to residential neighborhoods and businesses caused by construction related-related noise.

    - **Policy 11.3-1: Construction Noise**. Minimize construction-related noise and vibration by limiting construction activities within 500 feet of noise-sensitive uses from 7:00 A.M. to 7:00 P.M. seven days a week; after hour permission shall be granted by City staff, Planning Commission, or the City Council.

        - Require proposed development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan. This plan would depict the location of construction equipment storage and maintenance areas, and document methods to be employed to minimize noise impacts on adjacent noise sensitive land uses.

        - Require that construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

        - Require that haul truck deliveries be subject to the same hours specified for construction. Additionally, the plan shall denote any construction traffic haul routes where heavy trucks would exceed 100 daily trips (counting those both to and from the construction site). To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings.

    - **Policy 11.3-2: Vibration Standards**. Require construction projects and new development anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby noise-sensitive uses based on Federal Transit Administration criteria as shown in [General Plan] Table 11-2 (Table 4.13-2, *City of Pico Rivera Groundborne Vibration Impact Criteria for General Assessment*).

Table 4.13-2
City of Pico Rivera Groundborne Vibration Impact Criteria for General Assessment

Construction Time	Impact Levels (VdB)		
	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Category 1: Buildings where vibration would interfere with interior operations.	65[d]	65[d]	65[d]
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Notes: VdB= Vibration Velocity Level (LV)
Vibration levels are measured in or near the vibration-sensitive use.
a. "Frequent Events" is defined as more than 70 vibration events of the same source per day.
b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
c. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.
d. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.

Source: City of Pico Rivera, *General Plan Noise Element: Table 11-2*, October 2014.

Pico Rivera Municipal Code. The City of Pico Rivera Municipal Code (Pico Rivera Municipal Code) lists the following ordinances to help control noise impacts within the City.

Chapter 8.40 Noise

8.40.010 Unnecessary noises prohibited.

> *A. No person shall make, cause or suffer, or permit to be made, upon any premises owned, occupied or controlled by him, any unnecessary noises or sounds which are physically annoying to persons of ordinary sensitiveness, or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of any neighborhood.*

Chapter 18.42 Property Development Regulations

18.42.050 Special use conditions and chart notes.

> *Note 50. All construction activities on any lot or parcel shall take place only between the hours of seven a.m. and seven p.m. except for purposes of emergencies.*

County of Los Angeles

While the project site is located within the City of Pico Rivera, the nearest sensitive receptors, located adjacent to the project site on the south, are located within the unincorporated County of Los Angeles. As potential noise arising from the construction and operation of the project may impact these sensitive receptors, noise level requirements from the County of Los Angeles' General Plan and County Code were analyzed.

Los Angeles General Plan: The County of Los Angeles 2035 General Plan (Los Angeles General Plan) Noise Element is the guiding document for the County's noise policy. The purpose of the noise element is to reduce and limit the exposure of the general public to excessive noise levels. The noise element provides noise mitigation regulations and delineates Federal, State and City jurisdictions relative to rail, automotive, aircraft, and nuisance noise. It also sets forth noise management goals, objectives, policies, and programs of the County. The applicable Los Angeles General Plan Noise Element standards are implemented and enforced by the Los Angeles County Code.

Los Angeles County Code. The County applies the Noise Control Ordinance in Chapters 12.08 and 12.12 of the Los Angeles County Code (Los Angeles County Code), which is designed to protect people from objectionable non-transportation noise sources such as music, construction activity, machinery, pumps, and air conditioners. The Los Angeles County Code includes standards for stationary noise sources, such as non-transportation fans, blowers, pumps, turbines, saws, engines, and other (similar) machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property; as measured at the property line of the noise receptor. The county's exterior noise standards for stationary sources are presented in Table 4.13-3, *County of Los Angeles Exterior Noise Standards*.

Table 4.13-3
County of Los Angeles Exterior Noise Standards

Noise Zone	Noise Level Standard (dBA) [1,2]	
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Noise-Sensitive Area	45	45
Residential Properties	50	45
Commercial Properties	60	55
Industrial Properties	70	70
1. According to Los Angeles County Code Section 12.08.390, if the ambient noise levels exceed the exterior noise standards above, then the ambient noise level becomes the noise standard. If the source of noise emits a pure tone or impulsive noise, the exterior noise levels limits shall be reduced by five decibels. 2. If the measurement location is on a boundary property between two different zones, the noise limit shall be the arithmetic mean of the maximum permissible noise level limit of the subject zones; except when a intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.		
Source: Los Angeles County Code, Section 12.08.390.		

The following adjustments are applicable to the exterior standards in Table 4.13-3; noise levels at sensitive receptors may not exceed the standards:

- For a cumulative period of more than thirty minutes in any hour;
- Plus 5 dB for a cumulative period of more than fifteen minutes in any hour;
- Plus 10 dB for a cumulative period of more than five minutes in any hour;
- Plus 15 dB for a cumulative period of more than one minute in any hour; or
- Plus 20 dB for any period of time (L_{max}) If the ambient noise level exceeds the noise level standard for any of the above noise metrics, then the ambient noise level becomes the noise level standard for that noise metric. If the measurement location is on a boundary property between two different zones, the exterior noise level standard shall be the arithmetic mean of the noise levels standards for the two zones. Except as provided above, when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

County Code Section 12.08.400 presents interior noise standards for residential uses. This section states that no person shall operate or cause to be operated within a dwelling unit, any source of sound, or allow the creation of any noise that causes the noise level when measured inside a neighboring receiving dwelling unit to exceed the standards in Table 4.13-4, *County of Los Angeles Interior Noise Standards*.

Table 4.13-4
County of Los Angeles Interior Noise Standards

Noise Zone	Designated Land Use	Noise Level Standard (dBA)[1]	
		7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
All	Multifamily	45	40
	Residential	45	40
Source: Los Angeles County Code, Section 12.08.400.			

The following adjustments are applicable to the exterior standards in Table 4.13-4:

Noise levels at sensitive receptors may not exceed the standards

- For a cumulative period of more than five minutes in any hour;
- Plus 5 dB for a cumulative period of more than one minute in any hour; or
- Plus 10 dB for any period of time (L_{max}).

Los Angeles County Code Section 12.08.440 includes restrictions on construction noise. The County prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line. Exceptions are provided for emergency work of public service utilities or if a variance is issued by the Health Officer. The County also sets maximum noise level limits for mobile equipment (nonscheduled, intermittent, short-term operations for less than 10 days) at the affected structure as summarized in Table 4.13-5, *County of Los Angeles Mobile Construction Equipment Noise Limits*.

Table 4.13-5
County of Los Angeles Mobile Construction Equipment Noise Limits

Time of Day	Single-family Residential (dBA)	Multi-family Residential (dBA)	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60	64	70
Source: Los Angeles County Code, Section 12.08.440.			

Maximum noise levels from stationary equipment (repetitively scheduled and relatively long-term operations of 10 days or more) at the affected structure are summarized in Table 4.13-6, *County of Los Angeles Stationary Construction Equipment Noise Limits*.

Table 4.13-6
County of Los Angeles Stationary Construction Equipment Noise Limits

Time of Day	Single-family Residential (dBA)	Multi-family Residential (dBA)	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50	55	60
Source: Los Angeles County Code, Section 12.08.440.			

Los Angeles County Code Section 12.08.560 prohibits the operation of any device that creates vibration that is above 0.01 inch/second at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This threshold is pertinent to the evaluation of vibration-annoyance impacts from ongoing industrial uses to nearby sensitive receptors.

The County exempts all vehicles of transportation on private right-of-way and private property (with a few exceptions) that operate in a legal manner in accordance with vehicle-noise regulations within the public right-of-way, railway, or air space, or on private property, from the standards of the Los Angeles County Code Section 12.08.570. The County has no adopted ordinance regulating individual motor vehicle noise levels.

EXISTING MOBILE SOURCES

The majority of the existing noise from mobile sources in the project area is generated from vehicle sources along Beverly Boulevard to the north and I-605 to the east of the project site. Mobile source noise was modeled using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108), which incorporates several roadway and site parameters. The model does not account for ambient noise levels. Noise projections are based on modeled vehicular traffic as derived from the *Beverly Boulevard Warehouse Project Traffic Operations Report* (TOR) prepared by Michael Baker International (dated November 2020); refer to Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report*.[1] As shown in Table 4.13-7, *Existing Traffic Noise Levels*, mobile noise sources in the vicinity of the project site range from 61.7 dBA to 66.6 dBA.

Table 4.13-7
Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
Beverly Boulevard					
Paramount Boulevard to Rosemead Boulevard	28,600	65.2	223	103	-
Rosemead Boulevard to Durfee Avenue	35,400	66.1	257	119	-
Durfee Avenue to San Gabriel River Parkway	36,100	66.2	260	121	-
San Gabriel River Parkway to I-605 Southbound ramp	39,700	66.4	266	123	57
I-605 Southbound Ramp to Pioneer Boulevard	41,700	66.6	275	127	59
Pioneer Boulevard to Norwalk Boulevard	34,800	66.1	254	118	-
East of Norwalk Boulevard	38,200	66.5	270	125	-
Rosemead Boulevard					

[1] ADT volumes that include the planned I-605/Beverly Boulevard Interchange Improvement Project were utilized for the FHWA RD-77-108 noise modeling. This project includes various improvements at and surrounding the existing I-605/Beverly Boulevard interchange to reduce congestion and improve safety and traffic operations.

Table 4.13-7 (continued)
Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
North of Beverly Boulevard	32,000	65.7	241	112	-
South of Beverly Boulevard	30,400	65.2	221	103	-
San Gabriel River Parkway					
North of Beverly Boulevard	10,600	61.7	130	60	-
Pioneer Boulevard					
I-605 Northbound Ramp to Beverly Boulevard	16,700	62.6	149	69	-
Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level, - = Contour located within the roadway right of way.					
Source: Based on traffic data within the *Beverly Boulevard Warehouse Project Traffic Operations Report*, prepared by Michael Baker International, November 2020.					

EXISTING STATIONARY SOURCES

The project area is urbanized and generally built-out. Surrounding land uses in proximity to the project site are primarily comprised of industrial, residential, RV storage, commercial, and the UPRR railway. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment associated with existing industrial uses). The noise associated with these sources may represent a single-event noise occurrence, short-term or long-term/continuous noise.

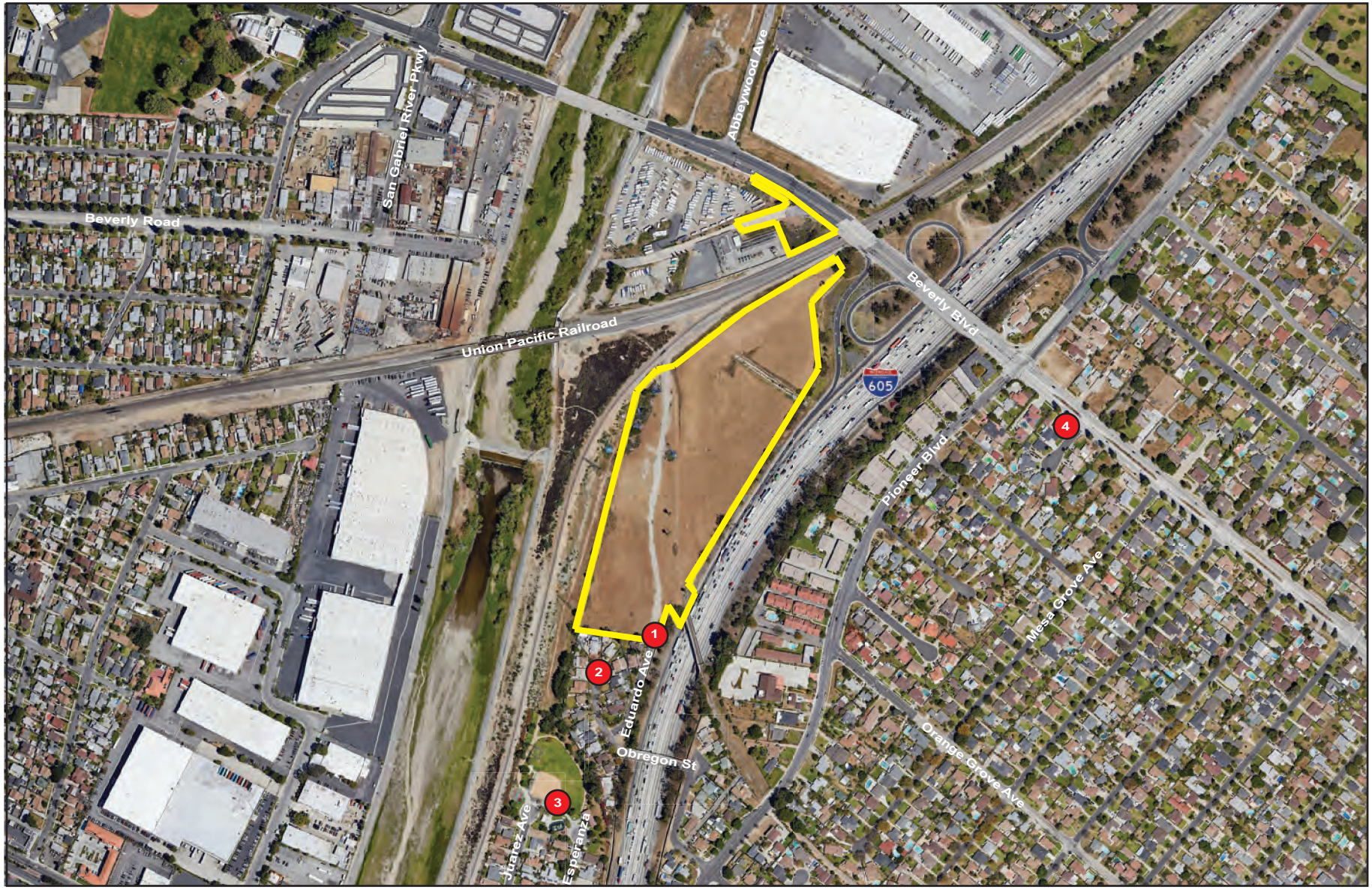
NOISE MEASUREMENTS

In order to quantify existing ambient noise levels in the project area, Michael Baker International (Michael Baker), conducted four short-term noise measurements on August 6, 2020; refer to Table 4.13-8, *Noise Measurements*. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. The ten-minute measurements were taken between 10:30 a.m. and 12:00 p.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day and relate closely with the noise standards for the project area. Exhibit 4-1, *Noise Measurement Locations*, depicts the location of the noise measurements.

Table 4.13-8
Noise Measurements

Site No.	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Peak (dBA)	Time
1	End of Eduardo Avenue, adjacent to the south of the project site.	69.4	65.1	74.7	98.9	10:33 a.m.
2	Oregon Street cul-de-sac.	58.3	54.6	73.1	92.5	10:47 a.m.
3	Near picnic benches within Amigo Park.	57.6	54.6	61.7	88.9	11:05 a.m.
4	Lenvale Avenue cul-de-sac.	66.6	46.6	85.8	106.5	11:25 a.m.
Source: Michael Baker International, August 6, 2020.						

Meteorological conditions when the measurements were taken were cloudy skies, cool temperatures, with moderately light wind speeds (less than 5 miles per hour), and low humidity. Measured noise levels during the daytime measurements ranged from 57.6 to 69.4 dBA L_{eq}. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The



Source: Google Earth Pro. July 2020

NOT TO SCALE

Michael Baker INTERNATIONAL

07/20 | JN 179201

Noise Measurement Locations

Project Site

BEVERLY BOULEVARD WAREHOUSE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Noise Measurement Locations

Exhibit 4-1

monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. The results of the field measurements are included in Appendix E, *Noise Data*.

SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of noise than are the general population. Land uses considered sensitive by the State of California include schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations (especially children, senior citizens, and sick persons) are present. Land uses less sensitive to noise are business, commercial, and professional developments. Noise receptors categorized as being least sensitive to noise include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, and transit terminals. These types of land uses often generate high noise levels. Moderately sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, and outpatient clinics. The nearest sensitive receptors are residences located directly to the south, adjacent to the project site boundaries, within the County of Los Angeles.[1] The nearest sensitive receptors in the City of Whittier are residential uses located approximately 300 feet to the east of the project site, across I-605. Similarly, the nearest sensitive receptors in the City of Pico Rivera are residential uses located approximately 1,275 feet to the west of the project site.

Impact Analysis

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?

Less Than Significant Impact With Mitigation Incorporated. It is difficult to specify noise levels that are generally acceptable to everyone; what is annoying to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels, or based on studies of the ability of people to sleep, talk, or work under various noise conditions. However, all such studies recognize that individual responses vary considerably. Standards usually address the needs of the majority of the general population.

As stated above, while the project site is located within the City of Pico Rivera, the nearest sensitive receptors are located within unincorporated County of Los Angeles. The closest sensitive receptors in the City of Whittier are located approximately 300 feet to the east of the project site, across I-605. The nearest sensitive receptors in the City of Pico Rivera are located approximately 1,275 feet to the west of the project site. In between these sensitive receptors in the City of Pico Rivera and the project site are two large warehousing uses and the UPRR railway. Due to the distance and intervening structures, noise levels generated from project construction and operation would be inaudible at sensitive receptors within the City of Whittier and City of Pico Rivera. Thus, only the adjacent sensitive receptors in the unincorporated County of Los Angeles were analyzed. The Los Angeles County Code includes regulations controlling unnecessary, excessive, and annoying noise within the County of Los Angeles, which are applicable to this analysis.

Short-Term Noise Impacts

Construction activities generally are temporary and have a short duration, resulting in periodic increases in the ambient noise environment. Construction activities would include grading, on-site earthwork, building construction, paving, and architectural coating. Ground-borne noise and other types of construction-related noise impacts typically occur during the initial earthwork phase. This phase of construction has the potential to create the highest levels of noise. Typical noise levels generated by construction equipment are shown in Table 4.13-9, *Maximum Noise Levels Generated by Construction Equipment*. It should be noted that the noise levels identified in Table 4.13-9 are maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. Operating cycles for these types

1 While the nearest sensitive receptor property line is located in the City of Whittier, adjacent to the southern portion of the project site, the nearest structure is located approximately 12 feet away.

of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

The closest sensitive receptors to the project site are the single-family residential uses immediately to the south of the project site. These sensitive uses may be exposed to elevated noise levels during project construction.

Table 4.13-9
Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at 50 Feet (dBA)
Concrete Saw	20	90
Crane	16	81
Augur Drill Rig	20	85
Concrete Mixer Truck	40	79
Backhoe	40	78
Dozer	40	82
Excavator	40	81
Forklift	40	78
Paver	50	77
Roller	20	80
Tractor	40	84
Water Truck	40	80
Grader	40	85
General Industrial Equipment	50	85

Note:
1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054),* January 2006.

Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time each piece is in operation, condition of each piece of equipment, and number of pieces that would operate on the site. Construction equipment produce maximum noise levels when equipment is operating under full power conditions (i.e., the equipment engine at maximum speed). However, equipment used on construction sites typically operates under less than full power conditions, or part power. To more accurately characterize construction-period noise levels, the average (L_{eq}) noise level associated with each construction stage is calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment simultaneously operating on part power. The estimated construction noise levels at the nearest noise-sensitive receptors is presented in Table 4.13-10, *Construction Noise Levels at Adjacent Residential Receptors*. To present a conservative analysis, the estimated noise levels were calculated for a scenario in which all heavy construction equipment were assumed to operate simultaneously in each phase of construction and be located at the construction area nearest to the affected receptors.

Table 4.13-10
Construction Noise Levels at Adjacent Residential Receptors

Nearest Sensitive Receptor to Project Site	Distance to Construction Activities (Feet)	Construction Phase	Estimated Exterior Construction Noise Level (dBA L_{eq})[1]	Estimated Exterior Construction Noise Level (dBA L_{eq}) with Mitigation[2]	Construction Noise Standard (dBA L_{eq})[3]	Exceeds Standards with Mitigation?
Southern Residences	20	Grading	92.7	72.7	75	**No**
	20	Paving	90.3	70.3	75	**No**
	275	Building Construction	79.9	59.9	75 / 60	**No**
	275	Architectural Coatings	61.9	41.9	60	**No**

Notes:
1. These noise levels conservatively assume the simultaneous operation of all heavy construction equipment at the same precise location.
2. Project estimated exterior construction noise levels with mitigation include a sound reduction of 20 dBA from Mitigation Measure NOI-2.
3. The Los Angeles County Code Section 12.08.440 identifies mobile (i.e., 75 dBA) and stationary (i.e. 60 dBA) noise standards for construction activities occurring in the vicinity of single-family residential uses. For the purposes of this analysis, mobile (i.e., 75 dBA) and/or stationary (i.e., 60 dBA) noise standards were applied to construction phases with mobile and/or stationary construction equipment.

Source: Federal Highway Administration, *Roadway Construction Noise Model (RCNM)*, 2006 (see Appendix E, *Noise Data*).

Pico Rivera Municipal Code Section 18.42.050 exempts construction activities from the noise standard providing that such activities take place between the hours of 7:00 a.m. to 7:00 p.m. except for purposes of emergencies. Los Angeles County Code Section 12.08.440 exempts construction activities from the noise standard providing that such activities take place between the hours of 7:00 a.m. to 7:00 p.m. (except Sundays and holidays) and the construction noise levels generated do not exceed the construction mobile noise standard (i.e., 75 dBA) or the construction stationary noise standard (i.e., 60 dBA) at single-family residential uses. As depicted in Table 4.13-10, adjacent residential receptors could be exposed to temporary and intermittent noise levels ranging from 61.9 to 92.7 dBA, which exceeds the County's construction mobile (i.e., 75 dBA) and construction stationary (i.e., 60 dBA) noise standards. It should be noted that the City does not have construction noise standards for residential uses. As previously noted, noise levels presented in Table 4.13-10 are conservative, as these noise levels assume the simultaneous operation of all construction equipment at the same precise location. In reality, construction equipment would be used throughout the project site and would not be concentrated at the point closest to the sensitive receptors.

To ensure compliance with the County's construction noise standards (outlined in Los Angeles County Code Section 12.08.440) and reduce construction-generated noise at nearby receptors, the proposed project would be required to implement Mitigation Measure NOI-1 and NOI-2. Mitigation Measure NOI-1 would require construction equipment to be equipped with properly operating and maintained mufflers and other state required noise attenuation devices. Further, as shown in Table 4.13-10, implementation of Mitigation Measure NOI-2 would reduce the project's construction noise levels below the County's construction mobile (i.e., 75 dBA) and construction stationary (i.e. 60 dBA) noise standards with the use of a temporary noise barrier or enclosure along the southern/southwestern portion of the project site to break the line of sight between the construction equipment and the adjacent residences. Therefore, project construction activities would not generate noise levels in excess of County standards with implementation of Mitigation Measures NOI-1 and NOI-2. A less than significant impact would occur in this regard.

Construction Truck Trips

Construction activities would also cause increased noise along access routes to and from the site due to movement of equipment and workers, as well as hauling trips. Grading of the project site would require the import of approximately 65,000 cubic yards and export of approximately 2,000 cubic yards, which would result in approximately 8,375 soil

hauling trips.[2] It is anticipated that construction worker trips would be a maximum of 349 trips per day, and vendor trips during the building construction phase would equate to a total of 136 trips per day.[3] As a result, mobile source noise would increase along access routes to and from the project site during construction. However, mobile traffic noise from construction trips would be temporary and would cease upon project completion.

As discussed above, project construction would result in increased noise levels in the project area. Although the City does not have construction noise limits, the County limits mobile construction noise levels to 75 dBA (Los Angeles County Code Section 12.08.440). A maximum of 60 trips per day (i.e., construction worker trips, vendor trips, and truck hauling trips) are anticipated to occur along Eduardo Avenue, between the hours of 7:00 a.m. to 7:00 p.m. in compliance with Pico Rivera Municipal Code Section 18.42.050 and Los Angeles County Code Section 12.08.440. The operation of dump trucks would produce the loudest source of noise from construction truck trips. Based on FTA data, dump trucks generate a noise level of 72.5 dBA at a distance of 50 feet.[4] Affected structures along Eduardo Avenue contain either block walls or chain-link fence. The nearest affected structure is a residential use with a block wall along Eduardo Avenue, located approximately 25 feet from dump truck operations along Eduardo Avenue. The block wall would attenuate dump truck noise levels by approximately 10 dBA.[5] Therefore, accounting for the intervening block wall, dump truck noise levels would be approximately 68.5 dBA. The remaining affected structures (i.e., residential uses) contain chain-link fence along Eduardo Avenue. These affected structures are located approximately 38 feet from dump truck operations along Eduardo Avenue. At this distance, dump truck noise levels would be approximately 74.9 dBA. Therefore, mobile traffic noise from construction trips would not exceed the County's 75 dBA mobile construction noise standard. Thus, upon compliance with the City and County's allowable construction hours (Pico Rivera Municipal Code Section 18.42.050 and Los Angeles County Code Section 12.08.440), short-term noise impacts from construction equipment would be less than significant.

Long-Term Noise Impacts

Off-Site Mobile Noise

Future development generated by the proposed project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. According to the *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, a doubling of traffic volumes would result in a 3 dB increase in traffic noise levels, which is barely detectable by the human ear.[6]

Existing Conditions

According to Table 4.13-11, *Existing With Project Traffic Noise Levels*, under the "Existing" scenario, noise levels at a distance of 100 feet from the roadway centerline would range from approximately 61.7 dBA to 66.6 dBA, with the highest noise levels occurring along Beverly Boulevard, between the I-605 Southbound on-ramp and Pioneer Boulevard. The "Existing With Project" scenario noise levels at a distance of 100 feet from the roadway centerline would range from approximately 62.3 dBA to 66.6 dBA, with the highest noise occurring along the same roadway segment. As shown in Table 4.13-11, the noise levels would result in a maximum increase of 0.1 dBA as a result of the proposed project. As these noise level increases are below 3.0 dBA[7], a less than significant impact would occur in this regard.

[2] Based on California Emissions Estimator Model version 2020.4.0 (CalEEMod) outputs; refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*.

[3] Ibid.

[4] Federal Highway Administration, Roadway Construction Noise Model (RCNM), 2006.

[5] Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2016.

[6] U.S. Department of Transportation, *Highway Traffic Noise Analysis and Abatement Policy and Guidance, updated August 24, 2017*, https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed on October 7, 2020.

[7] According to the California Department of Transportation's *Traffic Noise Analysis Protocol*, dated May 2011, a 3.0 dB difference in noise level is generally the point at which the human ear will perceive a difference in noise level. As such, 3.0 dB is considered a conservative and reasonable threshold of significance, as the City of Pico Rivera does not have an established threshold in this regard.

Opening Year Conditions

The "Opening Year Without Project" and "Opening Year With Project" scenarios were compared (opening year has been analyzed as 2022). According to Table 4.13-12, *Opening Year Traffic Noise Levels*, under the "Opening Year Without Project" scenario, the noise levels would range from approximately 61.8 dBA to 66.6 dBA, with the highest noise levels occurring along Beverly Boulevard, between the I-605 Southbound on-ramp and Pioneer Boulevard. Under the "Opening Year With Project" scenario, the noise levels would range from approximately 61.8 dBA to 66.6 dBA, with the highest noise levels occurring along Beverly Boulevard, between the I-605 Southbound on-ramp to Pioneer Boulevard. As shown in Table 4.13-12, the noise levels would result in a maximum increase of 0.1 dBA as a result of the proposed project. This increase in noise would occur at three segments along Beverly Boulevard and Pioneer Boulevard. As these noise level increases are below 3.0 dBA, a less than significant impact would occur in this regard.

Cumulative Mobile Source Impacts

A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "Opening Year With Project" condition to "Existing" conditions. This comparison accounts for the traffic noise increase generated by a project combined with the traffic noise increase generated by related projects in the project vicinity including Pico Rivera, Whittier, and Montebello; refer to Table 7-6, Cumulative Projects, of the Traffic Operations Report provided in Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report* of this Initial Study. The cumulative projects consist of 12 residential, industrial, commercial, retail, and recreational uses. The following criterion has been utilized to evaluate the combined effect of the cumulative noise increase.

- Combined Effect. The cumulative with project noise level ("Opening Year With Project") would cause a significant cumulative impact if a 3.0 dB increase over existing conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use.

Although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criterion has been utilized to evaluate the incremental effect of the cumulative noise increase.

- Incremental Effects. The "Opening Year With Project" causes a 1.0 dBA increase in noise over the "Opening Year Without Project" noise level.

Table 4.13-11
Existing With Project Traffic Noise Levels

Roadway Segment	Existing					Existing With Project					Difference In dBA @ 100 Feet from Roadway
	ADT[1]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT[1,2]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
Beverly Boulevard											
Paramount Boulevard to Rosemead Boulevard	28,600	65.2	223	103	-	28,800	65.2	224	104	-	0.0
Rosemead Boulevard to Durfee Avenue	35,400	66.1	257	119	-	35,700	66.2	258	120	-	0.1
Durfee Avenue to San Gabriel River Parkway	36,100	66.2	260	121	-	36,400	66.3	262	121	-	0.1

Table 4.13-11 (continued)
Existing With Project Traffic Noise Levels

Roadway Segment	Existing					Existing With Project					Difference In dBA @ 100 Feet from Roadway
	ADT[1]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT[1,2]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
San Gabriel River Parkway to I-605 Southbound ramp	39,700	66.4	266	123	57	40,200	66.4	268	124	58	0.0
I-605 Southbound Ramp to Pioneer Boulevard	41,700	66.6	275	127	59	42,000	66.6	276	128	59	0.0
Pioneer Boulevard to Norwalk Boulevard	34,800	66.1	254	118	-	34,900	66.1	254	118	-	0.0
East of Norwalk Boulevard	38,200	66.5	270	125	-	38,300	66.5	271	126	-	0.0
Rosemead Boulevard											
North of Beverly Boulevard	32,000	65.7	241	112	-	32,100	65.7	242	112	-	0.0
South of Beverly Boulevard	30,400	65.2	221	103	-	30,500	65.2	221	103	-	0.0
San Gabriel River Parkway											
North of Beverly Boulevard	10,600	61.7	130	60	-	10,600	61.7	130	60	-	0.0
Pioneer Boulevard											
I-605 Northbound Ramp to Beverly Boulevard	16,700	62.6	149	69	-	16,900	62.6	150	70	-	0.0

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level- = Contour located within the roadway right of way.

Notes:
1. For the existing scenario, the average daily trips (ADTs) volumes that include the planned Interstate 605 improvement were utilized for the FHWA RD-77-108 noise modeling; refer to Appendix E.
2. "Existing With Project" ADT's were calculated by adding the "Project with the I-605 improvement: ADT's to the "Existing with I-605 improvement scenario"; refer to Appendix E.

Source: Based on traffic data within the *Beverly Boulevard Warehouse Project Traffic Operations Report*, prepared by Michael Baker International, November 2020.

Table 4.13-12
Opening Year Traffic Noise Levels

Roadway Segment	Opening Year Without Project					Opening Year With Project					Difference In dBA @ 100 Feet from Roadway
	ADT[1]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT[1]	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
Beverly Boulevard											
Paramount Boulevard to Rosemead Boulevard	28,800	65.2	224	104	-	29,000	65.3	225	104	-	0.1
Rosemead Boulevard to Durfee Avenue	35,700	66.2	258	120	-	36,000	66.2	260	121	-	0.0
Durfee Avenue to San Gabriel River Parkway	36,400	66.3	262	121	-	36,700	66.3	263	122	-	0.0
San Gabriel River Parkway to I-605 Southbound ramp	40,000	66.4	267	124	58	40,500	66.5	269	125	58	0.1
I-605 Southbound Ramp to Pioneer Boulevard	42,000	66.6	276	128	59	42,300	66.6	277	129	60	0.0
Pioneer Boulevard to Norwalk Boulevard	35,100	66.1	255	118	-	35,200	66.1	256	119	-	0.0
East of Norwalk Boulevard	38,500	66.5	272	126	-	38,600	66.5	272	126	-	0.0
Rosemead Boulevard											
North of Beverly Boulevard	32,300	65.8	243	113	-	32,400	65.8	243	113	-	0.0
South of Beverly Boulevard	30,600	65.2	222	103	-	30,700	65.2	222	103	-	0.0
San Gabriel River Parkway											
North of Beverly Boulevard	10,700	61.8	131	61	-	10,700	61.8	131	61	-	0.0
Pioneer Boulevard											
I-605 Northbound Ramp to Beverly Boulevard	16,800	62.6	149	69	-	17,000	62.7	150	70	-	0.1

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level, - = Contour located within the roadway right of way.

Notes:
1. The average daily trips (ADTs) volumes that include the planned Interstate 605 improvement were utilized for the FHWA RD-77-108 noise modeling; refer to Appendix E.

Source: Based on traffic data within the *Beverly Boulevard Warehouse Project Traffic Operations Report*, prepared by Michael Baker International, November 2020.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and reduces as distance from the source increases. Consequently, only the proposed project and growth due to occur in the project site's general vicinity (i.e., the 12 residential, industrial, commercial, retail, and recreational uses projects identified in the Traffic Operations Report) would contribute to cumulative noise impacts. Table 4.13-13, *Cumulative Traffic Noise Levels*, provides traffic noise effects along roadway segments in the project vicinity for "Existing," "Opening Year Without Project," and "Opening Year With Project" conditions, including incremental and net cumulative impacts. As indicated in Table 4.13-13, noise levels under the combined effects criterion would not exceed 3.0 dBA under the combined effect criterion or 1.0 dBA under the incremental effect criterion. As such, a cumulative noise impact would not occur. Therefore, there would not be any roadway segments that would be subject to significant cumulative impacts, as they would not exceed both the combined and incremental effects criteria. Therefore, the proposed project, in combination with cumulative background traffic noise levels, would result in less than significant cumulative impacts.

Table 4.13-13
Cumulative Traffic Noise Levels

Roadway Segment	Existing	Opening Year Without Project	Opening Year With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing and Future With Project	Difference in dBA Between Future Without Project and Future With Project	
Beverly Boulevard						
Paramount Boulevard to Rosemead Boulevard	65.2	65.2	65.3	0.1	0.1	***No***
Rosemead Boulevard to Durfee Avenue	66.1	66.2	66.2	0.1	0.0	***No***
Durfee Avenue to San Gabriel River Parkway	66.2	66.3	66.3	0.1	0.0	***No***
San Gabriel River Parkway to I-605 Southbound ramp	66.4	66.4	66.5	0.1	0.1	***No***
I-605 Southbound Ramp to Pioneer Boulevard	66.6	66.6	66.6	0.0	0.0	***No***
Pioneer Boulevard to Norwalk Boulevard	66.1	66.1	66.1	0.0	0.0	***No***
East of Norwalk Boulevard	66.5	66.5	66.5	0.0	0.0	***No***
Rosemead Boulevard						
North of Beverly Boulevard	65.7	65.8	65.8	0.1	0.0	***No***
South of Beverly Boulevard	65.2	65.2	65.2	0.0	0.0	***No***
San Gabriel River Parkway						
North of Beverly Boulevard	61.7	61.8	61.8	0.1	0.0	***No***
Pioneer Boulevard						
I-605 Northbound Ramp to Beverly Boulevard	62.6	62.6	62.7	0.1	0.1	***No***

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.
1. The average daily trips (ADTs) volumes that include the planned Interstate 605 improvement were utilized for the FHWA RD-77-108 noise modeling; refer to Appendix E.

Source: Based on traffic data within the *Beverly Boulevard Warehouse Project Traffic Operations Report*, prepared by Michael Baker International, November 2020.

Stationary Noise Impacts

The project proposes a warehousing/distribution building and a print shop facility. Stationary noise sources associated with the proposed project would include mechanical equipment, slow moving trucks, and parking activities. As noted above, the nearest sensitive receptors are located within the unincorporated County of Los Angeles. A discussion of the project's stationary noise sources is provided below.

Mechanical Equipment. HVAC systems typically result in noise levels that average 55 dBA at 50 feet from the source.[8] The nearest sensitive receptors, residential uses, are located approximately 280 feet southeast of the proposed HVAC units for the warehouse building and main office. HVAC units would be included on the roof of the structure and could be located toward the southern portion of the structure. These HVAC units would be screened by a parapet wall, which would reduce noise levels. At a distance of 280 feet, HVAC noise levels would attenuate to 40 dBA. Therefore, HVAC noise levels would not exceed the County's exterior daytime (i.e. 50 dBA) or nighttime (i.e. 45 dBA) noise standards for residential uses; refer to Table 4.13-3. Furthermore, HVAC noise levels would be much lower than the existing ambient noise within the project vicinity (58.3 to 69.4 dBA) as shown in Table 4.13-8. Thus, the proposed project would not result in noise impacts to nearby receptors from HVAC units, and the nearest receptors would not be directly exposed to substantial noise from on-site mechanical equipment. Impacts in this regard would be less than significant.

8 U.S. Environmental Protection Agency, *Community Noise*, 1971.

Slow-Moving Trucks. Typically, slow-moving, heavy-duty delivery trucks accessing loading docks can generate a noise level of approximately 79 dBA at a distance of 50 feet.[9] These are noise levels generated by a truck that is operated by an experienced "reasonable" driver with typically applied accelerations. Higher noise levels may be generated by the excessive application of power. Lower levels may be achieved but would not be considered representative of a nominal truck operation.

The project proposes a warehouse building near the southern portion of the project site. The warehouse building would have 18 dock doors at the southern end, approximately 330 feet from the nearest sensitive receptor to the south. At a distance of 330 feet, slow moving and heavy-duty delivery trucks would generate a maximum noise of 62.6 dBA. Additionally, in compliance with Pico Rivera Municipal Code Chapter 18.40.050 Note 19(h), a 6-foot masonry wall would be constructed along the property line, which would break the line of sight and shield the nearest sensitive receptors from the dock noises, reducing noise levels by about 3 dBA.[10] As such, on-site slow-moving truck noise would be approximately 59.6 dBA. It should be noted that existing ambient noise levels near the sensitive receptors range from 58.3 to 69.4 dBA; refer to Table 4.13-8. Therefore, slow-moving truck noise levels would not be perceptible above ambient noise levels. Further, Los Angeles County Code Section 12.08.570 exempts transportation noise from motor vehicles on public right-of-way and private property. A less than significant impact would occur in this regard.

Loading Docks. Loading docks would predominantly produce noise from back-up alarms (also known as back-up beepers). These back-up beepers are required to warn on-site workers that trucks are reversing. Back-up beepers produce a typical volume of 97 dBA at one meter (3.28 feet) from the source. The property line of the nearest sensitive receptor (i.e., a residence) would be located approximately 330 feet south of the trailer loading docks. At this distance, exterior noise levels from back-up beepers would be approximately 57 dBA. However, the Los Angeles County Code Section 12.08.570 specifically exempts warning devices from noise level regulations. Therefore, a less than significant impact would occur in this regard.

Parking Areas. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Estimates of the maximum noise levels associated with some parking lot activities are presented in Table 4.13-14, *Typical Noise Levels Generated by Parking Lots*.

Table 4.13-14
Typical Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source
Car door slamming	63 dBA L_{eq}
Car starting	60 dBA L_{eq}
Car idling	61 dBA L_{eq}
Source: Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.	

It should be noted that parking lot noises are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower than what is identified in Table 4.13-14. Parking lot noise would occur within the on-site surface parking lot adjacent to sensitive receptors to the south. The nearest surface parking would be approximately 25 feet from the sensitive receptors. At this distance, parking noise levels would range from 66 to 69 dBA, based on data provided in Table 4.13-14 and considering distance attenuation. While parking lot noise may be as loud as 69 dBA,

9 Elliot H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.

10 Federal Highway Administration, *FHWA Construction Noise Model User's Guide*, January 2006.

these noise levels would be short-term and intermittent. Additionally, parking lot noise levels would not exceed the measured ambient noise levels within the vicinity of the sensitive receptors and project site (69.4 dBA near the proposed parking lot) as shown in Table 4.13-8. Furthermore, Los Angeles County Code Section 12.08.570 exempts transportation noise from motor vehicles on public right-of-way and private property. Therefore, noise generated from parking lots near the sensitive receptors would be short-term and would be below ambient noise levels. A less than significant impact would occur.

Mitigation Measures:

NOI-1 Prior to issuance of any grading or building permit, the project applicant shall demonstrate, to the satisfaction of the City of Pico Rivera City Engineer that the project complies with the following:

- Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices.

- Property owners and occupants located within 1,000 feet of the project boundary shall be sent a notice, at least 15 days prior to commencement of construction, regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the City of Pico Rivera Public Works Department prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

- The construction contractor shall provide evidence that a construction staff member will be designated as a Noise Disturbance Coordinator and will be present on-site during construction activities. The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City of Pico Rivera Public Works Department. All notices that are sent to residential units immediately surrounding the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

- The project applicant shall demonstrate to the satisfaction of the City of Pico Rivera City Engineer that construction noise reduction methods shall be used, including but not limited to, shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and the use of electric air compressors and similar power tools, to the extent feasible.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- In compliance with Los Angeles County Code Section 12.08.440, construction shall only occur between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday, with no work permitted on Sundays or holidays.

NOI-2 In order to reduce construction noise, a temporary noise barrier or enclosure shall be used along the southern and southwestern portion of the project site to break the line of sight between the construction equipment and the adjacent residences; Assessor's Parcel Number (APN) 8130-023-011, 8130-023-012, and 8130-023-017.

The temporary noise barrier shall have a sound transmission class (STC) of 20 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. In order to achieve this, the barrier may consist of 3-inch steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch-thick fiberglass blanket, a half-inch-thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding with a heavy duct seal around the perimeter. The length, height, and location of noise control barrier walls shall be adequate to assure proper acoustical performance. In addition, to avoid objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with American Society for Testing and Materials Test Method C423. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion. A provision for this noise attenuation feature shall be indicated on project plans and specifications for verification by the City of Pico Rivera City Engineer.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact With Mitigation Incorporated. Project construction can generate varying degrees of ground-borne vibration, depending on the construction procedure and the construction 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. Ground-borne vibration from construction activities rarely reach levels that damage structures.

Although the City of Pico Rivera has established a vibration threshold, the nearest sensitive receptors and structures are located in the unincorporated County of Los Angeles, thus the Pico Rivera vibration threshold would not apply. As previously discussed, the County as established a vibration threshold of 0.01 inch/second at or beyond the property boundary or the source. However, the County's vibration threshold is applicable to ongoing operational vibration impacts. Therefore, the Federal Transit Administration (FTA) vibration thresholds were utilized. The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building 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 vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment.

The project would utilize an impact pile driver during bridge construction. Based on FTA data, impact pile drivers generate 1.518 inch/second PPV at a distance of 25 feet. Sensitive receptors would be located further than 500 feet from proposed impact pile driver activities. However, the nearest structure (i.e., industrial use) would be locate approximately 230 feet from impact pile driver activities. At this distance, groundborne vibration generated by impact pile driver activities would be approximately 0.054 inch/second PPV. Therefore, impact pile driver vibration levels would not exceed the 0.2 inch/second PPV significance threshold for building damage and human annoyance.

The vibration produced by construction equipment utilized during the development of the warehousing/distribution building and a print shop facility are illustrated in Table 4.13-15, *Typical Vibration Levels for Construction Equipment*.

Table 4.13-15
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 26 feet (inches/second)	Approximate peak particle velocity at 25 feet (inches/second)	Approximate peak particle velocity at 12 feet (inches/second)
Large bulldozer	0.084	0.089	0.268
Loaded trucks	0.072	0.076	0.229
Small bulldozer	0.003	0.003	0.009
Vibratory Roller	0.198	0.210	0.631
Jackhammer	0.033	0.035	0.105

Notes:
1. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, September 2018. Table 12-2.
2. Calculated using the following formula:
   $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$
   where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
   PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*
   D = the distance from the equipment to the receiver

The highest degree of groundborne vibration during the warehousing/distribution building and print shop facility construction would be generated during the paving phase due to the operation of a vibratory roller. As seen in Table 4.13-15, vibration velocities from vibratory roller operations are approximately 0.631 inch/second peak particle velocity (PPV) at 12 feet and approximately 0.198 inch/second PPV at 26 feet from the source of activity.[11] As such, structures located greater than 26 feet from vibratory roller operations would not experience groundborne vibration above the 0.2 inch/second PPV significance threshold for building damage and human annoyance.

All residential structures surrounding the project site are located more than 26 feet from vibratory roller operations with the exception of the residences located approximately 12 feet to the south of the project boundary (Assessor's Parcel Numbers [APNs] 8130-023-017, 8130-023-012, and APN: 8130-023-011). At this distance, vibration velocities from vibratory roller operations would be approximately 0.631 inch/second PPV and would exceed the FTA significance threshold for building damage and human annoyance. Therefore, groundborne vibration generated from vibratory roller construction activities is potentially significant. Implementation of Mitigation Measure NOI-3 would ensure the use of a static (non-vibratory) roller, as an alternative to vibratory rollers, within 26 feet of the southern residences to ensure vibration levels do not exceed the 0.2 inch/second PPV significance threshold for building damage and human annoyance. With implementation of Mitigation Measure NOI-3, impacts would be reduced to less than significant.

Operational Vibration Impacts

Operation of the project would not include or require equipment, facilities, or activities that would result in perceptible groundborne vibration. Heavy duty trucks would travel to and from the project site on surrounding roadways. According to the FTA, it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads.[12] As such, it can be reasonably inferred that the operations of the project would not create perceptible vibration impacts to the nearest sensitive receptors. A less than significant impact would occur in this regard.

Mitigation Measures:

NOI-3 Prior to issuance of a grading permit, the project applicant shall prepare a paving control plan to ensure that the paving construction phase does not result in damage to existing residential structures to the south of the project site. The paving control plan shall be subject to approval by the City of Pico Rivera City Engineer. To reduce groundborne vibration levels, the paving control plan shall stipulate that static (non-

[11] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.
[12] Ibid.

vibratory) rollers be used, as an alternative to vibratory rollers, within 26 feet of the southern residential structures (Assessor's Parcel Numbers [APNs] 8130-023-017, 8130-023-012, and 8130-023-011). Vibratory roller operations shall be prohibited within 26 feet of APNs 8130-023-017, 8130-023-012, and 8130-023-011.

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?***

No Impact. The project site is not located within an airport land use plan and there are no public or private airports or airstrips within two miles of the project site. Thus, no impact would result in this regard.

Mitigation Measures: No mitigation is required.

4.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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)?			✓	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

a) 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. A project could induce population growth in an area, either directly (for example, by proposing new homes and/or businesses) or indirectly (for example, through extension of roads or other infrastructure). No residential uses would be developed as part of the project. Therefore, the project would not induce direct population growth in the City through new housing development.

The proposed project would involve the construction of a warehouse and print shop facility on vacant and undeveloped land. The addition of new facilities on a previously vacant site would increase employment within the City. Thus, the project would lead to an increase in the daytime employee population within the area. This additional employment created by the proposed project has the potential to result in an indirect growth in the City's population, since the potential exists that "future employees" (and their families) that currently reside outside of the City could choose to relocate to the City. Estimating the number of future employees who may choose to relocate to the City would be highly speculative, since many factors influence personal housing location decisions (e.g., family income levels and the cost and availability of suitable housing in the local area). Additionally, housing opportunities exist for the project's future employees in the communities surrounding the City.

The project would generate approximately 128 employees. Based on a conservative estimate of 128 employees relocating to Pico Rivera and the City's average household size of 3.76, project implementation would result in a population increase of approximately 481 persons.[1] Based on this information, population growth associated with the project would represent only a 0.7 percent increase above the City's estimated 2021 population of 63,157persons[2]

Potential population growth impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. The Southern California Association of Governments (SCAG) growth forecasts estimate the City's population to reach 69,100 persons by 2040, representing a total increase of 5,700 between 2016 and 2040.[3] SCAG's regional growth forecasts are based upon long-range development assumptions (i.e., General Plans) of the relevant jurisdiction. The project's anticipated population increase (481 persons) would represent approximately 8.4 percent of the City's anticipated population growth by 2040, or 0.6 percent of the City's projected population by 2040.

1 California Department of Finance Demographic Research Unit, *Report E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2021, with 2010 Benchmark*, Sacramento, California, May 1, 2021.
2 Ibid.
3 Southern California Association of Governments, *2025-2040 RTP/SCS Technical Report, Demographics and Growth Forecast,* September 3, 2020.

Although the proposed project would result in direct population growth, project would not induce substantial population growth exceeding existing local conditions (0.7 percent) or regional projections (0.5 percent). The project does not eliminate a barrier to growth, but rather complies with the City's planned growth within the project area since it is consistent with the General Plan land use designation and Municipal Code zoning for the majority of the project site. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site is currently located on vacant, undeveloped land. There is no existing housing on-site. Project implementation would not displace any existing housing or persons; thus, would not necessitate the construction of replacement housing elsewhere. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

4.15 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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, 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?			✓	

a) 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:

1) Fire protection?

Less Than Significant Impact. The Los Angeles County Fire Department (LACFD) provides fire prevention, protection, and control services to the City of Pico Rivera and the project site. There are three LACFD stations located in the City.[1] The station that would serve the project site is Fire Station 40, located at 4864 South Durfee Avenue, approximately 0.55 miles southwest of the site. According to the City's General Plan, the expected average response time for the first arriving LACFD station is four minutes for 90 percent of incidents.

The proposed project is not expected to require the construction of new or physically altered fire facilities. The proposed project would be subject to payment of development fees to the City and site plan review by both the City and LACFD. Additionally, the overall project design will be subject to compliance with the requirements set forth in the 2016 California Fire Code (CFC), CBC and Los Angeles County Code Title 32, *Fire Code*. The proposed project would include features such as fire-resistant construction materials, fire alarm/sprinkler systems, hydrants, and adequate fire access for emergency vehicles. Upon payment of development fees, site plan review, and adherence to local and State regulations, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

[1] City of Pico Rivera, *Fire Department*, http://www.pico-rivera.org/residents/fire.asp, accessed September 11, 2020.

2) Police protection?

Less Than Significant Impact. The Los Angeles County Sherriff's Department (LACSD) provides law enforcement services to the City. The Sherriff's Department provides one station for the City of Pico Rivera at 6631 Passons Boulevard, which is approximately 2.05 miles southwest of the project site.[2] According to the General Plan, the expected average response time for LACSD is four minutes for 90 percent of incidents.

The project proposes to construct a warehouse and print shop facility on vacant land. The project would provide additional planned employment opportunities and could result in indirect population growth within the City that could result in additional demand for police protection services; however, it is not anticipated that long-term operation of the project would require new or physically altered police facilities, the construction of which could cause significant environmental impacts. The project would be subject to development fees and site plan review by the City to ensure that it meets City and LACSD safety requirements provided under Municipal Code Title 15, Buildings and Construction, including unobstructed emergency access and security lighting to minimize potential concerns regarding public safety. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

3) Schools?

Less Than Significant Impact. The area surrounding the project site is served by the El Rancho Unified School District, which includes 14 public schools and two magnet schools in the City of Pico Rivera[3]. Charles A Buffum Elementary, is located approximately 0.45 mile east of the project site. Additionally, Benjamin F Tucker Elementary is located approximately 0.68 mile southeast of the project site.

The project proposes to construct a warehouse and print shop facility, which could result in indirect population growth within the City. However, the project would be subject to the requirements of AB 2926 and SB 50, which allows school districts to collect development impact fees to minimize potential impacts to school districts as a result of new development. Thus, upon payment of development fees by the project applicant consistent with existing State requirements, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

4) Parks?

Less Than Significant Impact. The project does not propose new or physically altered parks or recreational facilities. According to the City of Pico Rivera Parks and Facilities Department, the City maintains eight parks and five community centers, among other recreational programs and services.[4] The nearest park to the project site is Pico Park, located at 4220 Durfee Avenue, approximately 0.5 mile west of the project site. The proposed project is not expected to substantially impact the City's existing parks or recreational facilities. Although the project could indirectly increase population growth within the project vicinity, the potential increase is not anticipated to generate substantive additional demands for parkland or other recreational facilities. Less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

[2] Los Angeles County Sherriff's Department, *Pico Rivera Sherriff's Station,* https://lasd.org/pico-rivera/, accessed September 11, 2020.

[3] El Rancho Unified School District, *Our Schools* – El Rancho Unified School District, https://www.erusd.org/apps/pages/index.jsp?uREC_ID=1473231&type=d&pREC_ID=1625802, accessed September 11, 2020.

[4] City of Pico Rivera, Parks and Facilities website, http://www.pico-rivera.org/depts/parks/facilities/default.asp, accessed September 11, 2020.

5) Other public facilities?

Less Than Significant Impact. Other public services that could potentially be impacted by the proposed project include public libraries. Library services for the City of Pico Rivera are provided by the Pico Rivera Public Library and the Rivera Library. The closest public library to the project site is the Pico Rivera Public Library, located at 9001 Mines Avenue, approximately 1.34 miles west of the site. The proposed project is industrial in nature and would not result in impacts to public libraries. As noted above, the project would provide additional planned employment opportunities and could result in indirect population growth within the City that could result in additional demand for library services; however, it is not anticipated that long-term operation of the project would require new or physically altered library facilities, the construction of which could cause significant environmental impacts. Therefore, less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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4.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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?				✓

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?

Less Than Significant Impact. Refer to Response 4.15(a)(4). The proposed project would not result in a substantial increase in demand for parks or other recreational facilities, including the San Gabriel River Trail west of the project site and would not result in physical deterioration of these facilities. The project would lead to an increase in the daytime employee population within the area; however, as concluded in Response 4.14(a), unplanned direct and indirect population growth impacts would be less than significant. As such, less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

No Impact. Refer to Response 4.15(a)(4). The project does not include recreational facilities, nor would it require the construction or expansion of existing recreational facilities. No impacts would result in this regard.

Mitigation Measures: No mitigation is required.

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4.17 TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			✓	
b. Would the project 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 uses (e.g., farm equipment)?				✓
d. Result in inadequate emergency access?		✓		

This section is based upon the Beverly Boulevard Warehouse VMT Assessment Memorandum (VMT Memorandum) prepared by Michael Baker, dated July 9, 2021 and the Beverly Boulevard Warehouse Traffic Operations Report (TOR) prepared by Michael Baker, dated July 9, 2021. The VMT Memorandum and the TOR are provided as part of Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report*).

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The proposed project would not result in significant impacts related to conflicts with a program, ordinance, or policy addressing the circulation system including the Los Angeles County Bicycle Master Plan, General Plan, Municipal Code regulations and standards, and Los Angeles County Congestion Management Plan. The project would be consistent with City standards including Municipal Code Title 15, Buildings and Construction, which adopts the California Building Code standards and regulations related to access and circulation, and would be subject to review by the City's Public Works Department during final design to ensure adherence to local requirements for internal site circulation, bridge design, secondary access, and primary access from Beverly Boulevard.

Transit service near the project site is provided by Montebello Bus Lines (MBL). Specifically, MBL provides service via Route 40 Beverly boulevard and Route 90 Express. Route 90 provides access directly to downtown Los Angeles, as well as neighboring communities. There are two Route 40 transits stops within the vicinity of the project site located at the Beverly Boulevard intersections with Abbeywood Avenue (adjoining the northwest portion of the project site) and Pioneer Boulevard (approximately 0.2-mile southeast of the project site). The closest Route 90 Express service bus stop is located at the Beverly Boulevard and Durfee Avenue intersection (approximately 0.6-mile northwest of the project site). Metro rail service does not exist in proximity to the project site. The project would not interfere or conflict with MBL transit service or stops within the site vicinity, and no impacts would occur in this regard.

The project site is located within approximately 0.05-mile of the San Gabriel River Bicycle Path to the west. The bike path is classified as a Class I - Bike Path by the Los Angeles County Department of Public Works. According to the *Los Angeles County Bicycle Master Plan* and the City's General Plan, there are no dedicated bicycle routes within the project area. The project would not interfere or impact any existing bicycle routes or facilities within the project area, and the project would also include a bridge/sidewalks over the UPRR alignment for bicyclist/pedestrian connectivity

between the project site and Beverly Boulevard, and the project would provide 22 bicycle parking spaces for employees and customers. Impacts would not occur in this regard.

As noted in Section 2.0, *Project Description*, sidewalk improvements would be provided for pedestrian connectivity. The proposed sidewalk would connect to existing sidewalk along the southerly side of Beverly Boulevard, continue over the proposed bridge and around the western and southern sides of the print shop and end at the warehouse building. Impacts in regard to pedestrian mobility would not be significant.

Mitigation Measures: No mitigation is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. The VMT Memo prepared for the project follows the CEQA guidance for determining transportation impacts in accordance with SB 743. The City has not yet established VMT analysis procedures at this time; therefore, in lieu of the City adopting and setting its own VMT metric and thresholds, this analysis is consistent with the approach provided in the *Los Angeles County Public Works Transportation Impact Guidelines*, dated July 23, 2020 (County Guidelines). The *Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018 (Technical Advisory) has been used as a secondary resource.

Land use projects that meet the County Guidelines screening thresholds identified in Table 4.17-1, *Screening Criteria for Land Use Projects Exempt from VMT Calculation*, are assumed to result in a less than significant transportation impact under CEQA and do not require a detailed quantitative VMT assessment. The project does not meet any of the Screening Criteria for land use projects which would allow a determination of a less than significant impact on VMT, thus a project-specific VMT assessment is required.

Table 4.17-1
Screening Criteria for Land Use Projects Exempt from VMT Calculation

Screening Criteria	OPR Recommended Screening Criteria	Project Evaluation	Result
3.1.2.1 – Non-Retail Project Trip Generation Screening Criteria	Does the development project generate a net increase of 110 or more daily vehicle trips?	Project is anticipated to generate approximately 800 daily trips.	Does Not Meet Criteria
3.1.2.2 – Retail Project Site Plan Screening Criteria	Does the project contain retail uses that exceed 50,000 square feet of gross floor area?	The project includes industrial (warehouse) and service (copy, print, and express ship store) uses.	Does Not Meet Criteria
3.1.2.3 – Proximity to Transit Based Screening Criteria	Is the project located within a one-half mile radius of a major transit stop or an existing stop along a high-quality transit corridor?	The project is not located within a Transit Priority Area.	Does Not Meet Criteria
3.1.2.4 – Residential Land Use Based Screening Criteria	Are 100% of the units, excluding manager's units, set aside for lower income households?	Project does not include any residential housing.	Does Not Meet Criteria
Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.			

Project Trip Generation

The number of project site trips was estimated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual (10th Edition). Table 4.17-2, *Trip Generation Rates*, provides the trip generation rates and Table 4.17-3, *Project Trip Generation*, shows the trip generation calculations for the proposed project.

Table 4.17-2
Trip Generation Rates

Land Use	ITE Land Use Code	Vehicle Type Breakdown		Daily Trip Rate	AM Peak Hour		PM Peak Hour	
					Rate	In/Out	Rate	In/Out
Warehouse	150	Passenger Car	69%	1.201/KSF	0.117	77% / 23%	0.131	27% / 73%
		2 Axle Truck	6.8%	0.118/KSF	0.012		0.013	
		3 Axle Truck	5.5%	0.096/KSF	0.009		0.010	
		4+ Axle Truck	18.7%	0.325/KSF	0.032		0.036	
		Total Truck	31.0%	0.539/KSF	0.053		0.059	
		Total		1.74/KSF	0.170		0.190	
Copy, Print, Express Ship Store	920	Passenger Car	100%	74.2/KSF	2.78	75% / 25%	7.42	44% / 56%

Notes: KSF = 1,000 square feet, Warehousing vehicle breakdown based on ITE-South Coast Air Quality Management District's (SCAQMD) High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).
Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

Table 4.17-3
Project Trip Generation

Land Use	ITE Land Use Code	Intensity	Vehicle Type Breakdown		Daily Trips	AM Peak Hour			PM Peak Hour		
						Volume	In	Out	Volume	In	Out
Warehouse	150	357.903 ksf	Passenger Car	69%	430	42	32	10	47	13	34
			2 Axle Truck	6.8%	42	4	3	1	5	1	4
			3 Axle Truck	5.5%	34	3	2	1	4	1	3
			4+ Axle Truck	18.7%	116	11	8	3	13	4	9
			Total Truck	31.0%	192	18	13	5	22	6	16
			Total:		**622**	**60**	**45**	**15**	**69**	**19**	**50**
Copy, Print, Express Ship Store	920	2.5 ksf	Passenger Car	100%	**186**	**7**	**5**	**2**	**19**	**8**	**11**
Total:					**808**	**67**	**50**	**17**	**88**	**27**	**61**

Notes: KSF = 1,000 square feet
Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

VMT Threshold of Significance

Table 4.17-4, *County Guidelines Impact Thresholds*, shows the thresholds of significance per the County Guidelines. As shown, the primary site use (industrial warehouse) is not directly addressed in the guidance. Since the County Guidelines do not provide direct guidance and City-specific thresholds have not been developed, an assumption was made regarding an appropriate and reasonable threshold for the purposes of this analysis.

Table 4.17-4
County Guidelines Impact Thresholds

Project Type	VMT Metric	Threshold of Significance
Residential	VMT/Capita	The project's residential VMT per capita would not be 16.8% below the existing residential VMT per capita for the Baseline Area in which the project is located.
Office	VMT/Employee	The project's employment VMT per employee exceeding would not be 16.8% below the existing employment VMT per employee for the Baseline Area in which the project is located.
Regional Service Retail	Total VMT	The project would result in a net increase in existing total VMT.
Land Use Plans	VMT/Service Population	The plan total VMT per service population (residents and employees) would not be 16.8% below the existing VMT per service population for the Baseline Area in which the plan is located.
Other Land Use Types	Varies based on land use type	Contact Public Works to determine which of the above area an appropriate threshold of significance to be utilized.

Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

The VMT metric is based on the two uses planned for the site. The warehouse component of the project would be a combination of employee trips and truck trips. Per the Technical Advisory, trucks are excluded from the assessment and thus only employees are considered under the warehouse evaluation. The County Guidelines do not specify a metric for warehouse, and as summarized in Table 4.17-4, other project types metrics are at the discretion of the local agency. The copy, print, express ship store component of the project would be a combination of employee trips and patron trips. Given the mix of employee and patron trips anticipated for this site and since the County Guidelines state that the local agency may select the appropriate metric for use in the analysis, VMT per service population was considered for the overall project VMT metric in this analysis.

Service population is defined as the total employees for the site and the total patrons to the facility (per day). Table 4.17-5, *Baseline Impact Criteria*, shows the impact thresholds as provided in the County Guidelines. The project falls within the South County area. The impact metric for the South County Area for the Project is 16.8% below the Baseline, or 25.9 VMT/Service Population.

Table 4.17-5
Baseline Impact Criteria

Baseline VMT for North and South County			
Baseline Area	**Residential VMT per Capita**	**Employment VMT per Employee**	**Total VMT per Service Population**
North County	22.3	19.0	43.1
South County	12.7	18.4	31.1
VMT Impact Criteria (16.8% Below Area Baseline)			
Baseline Area	**Residential VMT per Capita**	**Employment VMT per Employee**	**Total VMT per Service Population**
North County	18.6	15.8	35.9
South County	10.6	15.3	25.9

Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

Project Level VMT Analysis

The VMT Memorandum included project specific travel demand modeling evaluation using the Southern California Association of Governments (SCAG) regional Travel Demand Model (TDM). The model was provided to the City by SCAG for use on this Project in August 2020. The 2016 SCAG RTP model with 2020 Socio-Economic Data (SED) was used for the evaluation of project and background VMT.

This analysis uses the SCAG Regional Travel Demand Model (TDM) toto conduct project-specific travel demand modeling. The 2016 SCAG RTP model with 2020 Socio-Economic Data (SED) was used for the evaluation of project and background VMT.

Based on the VMT Memorandum, employee forecasts for the warehouse were based on the ratio of trips generated based on area versus trips generated per employee and employee forecasts for the copy, print, express ship store were an assumption based on experience with operations of similar uses. A total of 128 employees are estimated for the project as a whole, as summarized in Table 4.17-6, *Employee Estimates*. Additionally, the number of copy, print, express ship store patrons were estimated by removing the employee trips from the total trip generation and assuming two trips per patron (one trip to the facility and one leaving the facility), as shown in Table 4.17-7, *Print Shop Patron Estimate*.

Table 4.17-6
Employee Estimates

Category	Value
Number of Employees	5
Assumed Daily Trips Per Employee	3
Estimated Number of Employee Trips	15
Estimated Daily Trips (Trip Generation Analysis*)	186
Patron Trips**	171
Assumed Daily Trips Per Patron	2
Number of Patrons***	86

Notes:
* Daily trip estimate (2.5 ksf * 74.2 trips/ksf = 186 trips/ksf)
** Patron Trips = 186 total trips – 15 employee trips
*** Number of Patrons = 171 patron trips / 2 trips per patron = 86 patrons
Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

Table 4.17-7
Print Shop Patron Estimate

Land Use	Thousand Square Feet (KSF)	ITE Land Use Code	Trips Per KSF*	Trips Per Employee**	Total Number of Employees
Warehousing	357.903	150	1.74	5.05	123
Print Shop	2.500	920	--	--	5***
TOTAL					128

Notes:
* Per ITE Trip Generation Manual, 10th Edition.
** Per ITE Trip Generation Manual, 10th Edition (warehouse).
*** Assumption based on anticipated use.
Source: Michael Baker International, Beverly Boulevard Warehouse VMT Assessment Memorandum, July 9, 2021; refer to Appendix F.

The VMT travel demand model calculation results are shown in Table 4.17-8, *Project VMT Summary*. As stated previously, the impact threshold is assumed to be based on service population. The project is estimated to generate a daily total (Production-Attraction, PA) VMT of 4,207. The resulting VMT/Service Population is 19.66 (4,207 VMT / 214 service population).[1] A comparison of the Project VMT/Service Population (19.66 VMT/Service Population) to the Citywide VMT/Service Population (27.21 VMT/Service Population) shows that the Project VMT/Service Population is anticipated to be 72.25 percent of the City VMT/Service Population. Since the project is 15 percent below the Citywide VMT/Service Population threshold, the project is not anticipated to result in a significant transportation impact under SB 743.

Table 4.17-8
Project VMT Summary

Description	Year 2020	
	South County Baseline	Year 2020 Project
Total Population	--	--
Total Employment	--	128
Patrons	--	86
Total Service Population	--	214
Daily Total PA VMT	--	4,207
VMT/Service Population	**25.9**	**19.66 (75.9% of the Baseline)**
Is Project above or below Impact Threshold?	**Below**	
Transportation Impact?	**NO**	

Note: Impact Threshold of 16.8% below the South County Baseline (31.1 VMT/Service Population) equals 25.9 VMT/Service Population.
Source: Michael Baker International, *Beverly Boulevard Warehouse VMT Assessment Memorandum*, July 9, 2021; refer to Appendix F.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project does not propose changes to the City's circulation system, such as sharp curves or dangerous intersections, and would not introduce incompatible uses to area roadways (e.g., farm equipment). Rather, the project proposes alterations to existing entrances and driveways that would improve circulation within the area. The project proposes to construct a vehicular/bicycle/pedestrian bridge that would span over the UPRR to provide connectivity between Beverly Boulevard and the project site. The project would utilize the existing SCE driveway and entrance along Beverly Boulevard as the primary access point to the bridge and project site. The project access point would be designed to accommodate motor vehicles and be compatible with the City's existing circulation system. Additionally, the existing access point to the project site at Eduardo Avenue would be maintained as a secondary site access location. The existing gate would also be maintained and off-site improvements are not anticipated. As discussed in Section 2.0, *Project Description*, inbound traffic would enter the site from Beverly Boulevard via a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket, which would be restriped to accommodate 150 feet of queuing. As such, the project would not increase hazards due to a geometric design feature or incompatible use and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

d) Result in inadequate emergency access?

Less Than Significant Impact. As detailed above in Response 4.17(c), the project would include two access points for the project, one of which would have limited use as a secondary emergency access (Eduardo Avenue). The

[1] The 128 employees and 86 print shop patrons make up the total 214 service population.

proposed access and circulation improvements would meet fire and other emergency access requirements as the City will conduct a Site Plan Review prior to issuing any permits per City standards.

The proposed project would require improvements along Beverly Boulevard, which may result in temporary impacts to circulation that could impede emergency access. Inbound vehicular traffic would enter the site from Beverly Boulevard via a new yield protected, eastbound right-turn lane and an existing unprotected, westbound left-turn pocket. The left-turn pocket along westbound Beverly Boulevard would be restriped to accommodate 150 feet of queuing. Project construction activities could result in short-term temporary impacts to street traffic along Beverly Boulevard. To address this temporary issue, Mitigation Measure TR-1 would be implemented. Mitigation Measure TR-1 would require implementation of a Transportation Management Plan (TMP), which would include various provisions to ensure continuous and adequate emergency access during the construction process. The TMP could include measures such as construction signage, pedestrian protection, limitations on timing for lane closures to avoid peak hours, temporary striping plans, construction vehicle routing plans, and the need for a construction flag person to direct traffic during heavy equipment use. With implementation of Mitigation Measure TR-1, the impact would be less than significant.

Mitigation Measures:

TR-1 Prior to the initiation of construction, the City of Pico Rivera shall ensure that a Traffic Management Plan (TMP) has been prepared for the proposed project and incorporated into the final project plans, specifications, and estimates (PS&E). The TMP shall include measures to minimize the potential safety impact during the short-term construction process, when partial lane closures may be required. It shall include, but not be limited to, measures such as construction signage, pedestrian protection, limitations on timing for lane closures to avoid peak hours, temporary striping plans, construction vehicle routing plans, and the need for a construction flag person to direct traffic during heavy equipment use. The TMP shall be incorporated into project specifications for verification prior to final plan approval.

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4.18 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, 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:				
1) 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), or			✓	
2) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		✓		

The analysis of cultural resources is partially based upon the *Cultural and Paleontological Resources Assessment Report for the Pico Rivera Industrial Project, City of Pico Rivera, Los Angeles County, California* (Cultural Assessment), prepared by Cogstone (dated August 2020); refer to Appendix C, *Cultural Assessment*.

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB 52 also defines a new category of resources under CEQA called tribal cultural resources. Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

Signed into law in 2004, Senate Bill 18 (SB 18) requires that cities and counties notify and consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural sites. Cities and counties must provide general and specific plan amendment proposals to California Native American Tribes that have been identified by the Native American Heritage Commission as having traditional lands located within the city's boundaries. If requested by the Native American Tribes, the city must also conduct consultations with the tribes prior to adopting or amending their general and specific plans.

As required under AB 52 and SB 18, the City of Pico Rivera distributed letters to tribes, based on a tribal consultation list provided by the Native American Heritage Commission (NAHC) dated July 1, 2020. The letters provided a description of the project, and notified each tribe of the opportunity to consult with the City regarding the proposed

project. As of the conclusion of the 90-day tribal response period under SB18, no tribal responses have been received by the City.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, 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:

1) 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), or

Less Than Significant Impact. Refer to Response 4.5(a). Based on the Cultural Assessment prepared for the project, two historic built environment resources were encountered during the field survey: a drainage ditch and a railroad segment associated with the previously documented UPRR (P-19-186112). However, the drainage ditch and railroad segment were determined not 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) that would be affected by the project. Thus, impacts to historic resources would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

2) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. As noted above, the City solicited consultation with potentially affected Native American tribes regarding the proposed project in accordance with AB 52 and SB 18. No tribes responded to the City's solicitation for consultation. Based on the literary records search and the intensive field survey conducted for the Cultural Assessment, no archaeological resources were identified in the area of potential effect (APE). Based on the results of the field survey and records search, 17 cultural resources occur within a one-mile radius from the designated APE. The cultural resources include one archaeological site and 16 historic built environment resources. The records search identified a total of 39 previous studies that were completed within a one-mile radius, and four previous studies that included a portion of the APE.

No cultural resources are known to occur or were observed on-site. However, given the proximity of the project site to resources identified within the archaeological records search, the Cultural Assessment concluded that the APE has a moderate sensitivity for prehistoric cultural resources. As such, Mitigation Measure CUL-1 is recommended which would require archaeological and Native American monitoring to minimize impacts related to the potential discovery of previously unknown archaeological/tribal cultural resources. In the event that archaeological/tribal cultural resources are encountered during earth disturbing activities, all work would be required to be halted in the vicinity of the find (a minimum of a 50-foot radius) until the resources can be properly evaluated by a qualified archaeologist. If warranted, and in consultation with the Native American monitor, the archaeologist would have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. In the event Native American resources are discovered, the City shall consult with the Native American monitor and affected tribe(s). Upon implementation of this mitigation measure, potential impacts to unknown tribal cultural resources that may underlie the project site would be reduced to less than significant levels.

Mitigation Measures: Refer to Mitigation Measure CUL-1 within Section 4.5, *Cultural Resources*.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, or 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?			✓	

a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact.

Water

The project site and its surrounding area are served by the City of Pico Rivera Water Authority (PRWA), one of two water purveyors for the City. The other supplier is the Pico Water District (PWD). According to the *City of Pico Rivera Water Authority 2015 Urban Water Management Plan* (UWMP), PRWA's primary source of potable water supply has been groundwater extracted from the Central Basin Municipal Water District's (CMBWD) groundwater aquifer; which is comprised of a number of sources: 1) natural recharge from precipitation and runoff from regional/local watersheds; 2) artificial recharge supplied through purchased imported water; and 3) treated effluent from regional wastewater treatment facilities. Based on the UWMP, groundwater supplies have been generally sufficient to meet the area's water demands.

Based on the UWMP, the City's projected water demand is currently 5,365 acre-feet per year (AFY).[1] The UWMP projects that water demand in 2035 would increase to 5,412 AFY. The UWMP includes an analysis of water supply reliability projected through 2035. Based on the analysis, the City would be capable of providing adequate water supply to its service area under a normal supply and demand scenario, single dry-year supply and demand scenario, and multiple dry-year supply and demand scenario through 2035. Thus, the PRWA UWMP accounts for increased demand as growth within the City occurs. In addition, the project is consistent with the City's planned growth within the project area.

The proposed project would entail the construction and development of a warehouse and print shop facility on vacant land, thus, resulting in construction of new pipelines and utilities to accommodate the new development and increased water demand on-site. The proposed project would install a domestic water pipeline, water service laterals, and an irrigation service line, each with associated meter and back flow preventor (BFP), to connect to the City's existing water infrastructure. Payment of standard water connection and user fees to PRWA would ensure that potential impacts to existing water facilities are adequately offset. It is not anticipated that project implementation would require construction of new or expanded water facilities that could result in substantial environmental impacts. A less than significant impact would occur in this regard.

Wastewater

The Los Angeles County Sanitation District (LACSD) oversees treatment facilities that serve the City of Pico Rivera.[2] Wastewater generated by the proposed project would be treated at the Los Coyotes Water Reclamation Plant (WRP). WRP is located in the City of Cerritos, and provides primary, secondary, and tertiary treatment at a capacity of 37.5 million gallons of wastewater per day (mgd).[3]

As mentioned above, the project would entail the construction and development of a new warehouse and print shop facility on vacant land requiring new pipelines and utilities to accommodate the proposed new development. Given the remaining capacity of 37.4 mgd available at the WRP, [4] and an estimated increase of average water waste flow from the project site of approximately 9,0973 gallons per day (gpd), sufficient capacity exists to serve the project. New wastewater treatment facilities or expansion of existing facilities would not be necessary. Notwithstanding, the project would be required to pay standard wastewater connection fees and ongoing user fees to LACSD to ensure that sufficient wastewater treatment capacity is available. Based on payment of fees and existing LACSD treatment capacity, it is not anticipated that project implementation would require construction of new or the expansion of existing wastewater facilities that would result in a substantial environmental impact. Less than significant impacts would occur in this regard.

Stormwater

Stormwater and non-stormwater runoff generated within City limits is transported through the MS4, and then discharged, untreated, into local waterbodies such as the San Gabriel River. Existing stormwater facilities on-site include a concrete-lined drainage ditch that traverses the site in an east to west direction and a drainage culvert located at the north-eastern side of project site. The project would require removal of the existing concrete-lined drainage ditch and implementation of water quality features sized to meet the project's design capture volume in accordance with the City's MS4 permit requirement; refer to Section 4.10, *Hydrology and Water Quality*. Therefore, it is not anticipated that project implementation would require construction of new or expanded stormwater facilities that could result in substantial environmental impacts. As discussed in Section 4.10, compliance with relevant laws, ordinances, and regulations would ensure the project's impacts associated with the proposed storm drain improvements are less than significant.

[1] City of Pico Rivera, *Pico Rivera Water Authority 2015 Urban Water Management Plan*, June 2016.

[2] City of Pico Rivera, *Utilities Division*. http://www.pico-rivera.org/depts/pw/utilities.asp. Accessed October 1, 2020.

[3] Los Angeles County Reclamation Plant, *Los Coyotes Water Reclamation Plant*. https://www.lacsd.org/services/wastewatersewage/facilities_information/wwfacilities/wwtreatmentplant/loscoyoteswrp.asp Accessed September 16,2020.

[4] Los Angeles County Sanitation District. *Table 1: Loadings for Each Class of Land Use*. https://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3531. Accessed October 6, 2020.

Dry Utilities

The General Plan indicates that So Cal Gas and SCE are responsible for the provision of natural gas and electric services within the City, respectively. The project would involve constructing new private on-site dry utility lines to serve the proposed warehousing and print shop uses. Payment of standard utility connection fees and ongoing user fees to So Cal Gas and SCE would be required to ensure these utility services would be able to accommodate the proposed development. Construction of the project's dry utilities would be subject to compliance with all applicable building and construction requirements identified within Title 15 of the City's Municipal Code (Buildings and Construction). As such, project impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less Than Significant Impact. Refer to Response 4.19(a). Based on the UWMP, the City would be capable of providing adequate water supply to its service area under a normal supply and demand scenario, single dry-year supply and demand scenario, and multiple dry-year supply and demand scenario through 2035. The UWMP projections are based upon growth and buildout as provided within the City's General Plan, and the proposed project is consistent with the site's land use designation of General Industrial. Payment of standard water connection fees and ongoing user fees to PRWA would ensure that the project's impacts on water demand are adequately offset. Further, the project would be required to comply with water efficiency standards in the 2019 California Building Energy Efficiency Standards and CALGreen. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. As discussed in Response 4.19(a), project implementation would result in an increase in wastewater generation compared to existing conditions. However, the project is not anticipated to be a substantial source of wastewater. The WRP has adequate capacity to serve the project's projected demand for wastewater treatment. Therefore, the project's impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. Nasa Services collects all solid waste generated in the City.[5] In 2018, a total of 59,365 tons of solid waste were disposed in the 13 permitted landfills serving the City.[6] Among the sites, Olinda Alpha Landfill, El Sobrante Landfill, Azusa Land Reclamation, and the Frank R. Bowerman Sanitary Landfill, admitted the majority of the City's waste.[7]

[5] City of Pico Rivera, *Trash and Sweeper Services*. http://www.pico-rivera.org/depts/pw/sweeper.asp. Accessed 10/01/2020.

[6] CalRecycle, *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility,* https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility, accessed September 21, 2020.

[7] CalRecycle, *Transported Solid Waste*, https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Statewide/TransportedSolidWaste, accessed September 21 ,2020.

Construction

All construction activities would be subject to conformance with relevant Federal, State, and local requirements related to solid waste disposal. Specifically, the project would be required to demonstrate compliance with the California Integrated Waste Management Act of 1989 (AB 939), which requires all California cities to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible." AB 939 requires that at least 50 percent of waste produced is recycled, reduced, or composted. Local jurisdictions, including the City of Pico Rivera, are monitored by the State (CalRecycle) to verify if waste disposal rates set by CalRecycle are being met that comply with the intent of AB939. As of the latest data available (2018), the City has met the target rates set by CalRecycle.[8]

The project would also be required to demonstrate compliance with CALGreen, which includes design and construction measures that act to reduce construction-related waste though material conservation measures and other construction-related efficiency measures. Compliance would be verified by the City through review of project plans and specifications. Compliance with these programs would ensure the project's construction-related solid waste impacts are less than significant.

Operation

Based on the project's air quality and GHG modeling, project operations are expected to generate approximately 327 tons of waste per year, or approximately 0.9 tons per day (tpd); refer to Appendix A, *Air Quality/Greenhouse Gas/Energy Data*. This represents less than one percent of the daily permitted throughput capacities identified in Table 4.19-1, *Landfills Serving the City*, below. As such, the project is not anticipated to generate solid waste in excess of State or local standards (such as waste disposal targets established under AB 939), 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 in this regard.

Table 4.19-1
Landfills Serving the City

Landfill/Location	Amount Disposed by City in 2018 (tons/day)	Maximum Daily Throughput (tons per day)	Remaining Capacity (cubic yards)	Anticipated Closure Date
Olinda Alpha Landfill 1942 North Valencia Avenue, Brea, CA 92823	44,011	8,000	148,800,000	12/31/2021
El Sobrante Landfill 10910 Dawson Canyon Road Corona, CA 91719	2,906	16,054	143,977,170	01/01/2051
Azusa Land Reclamation 1211 West Gladstone Street, Azusa, CA 91702	1,265	8,000	51,512,201	01/01/2045
Frank R. Bowerman Sanitary Landfill 11002 Bee Canyon Access Road Irvine, CA 92618	10290	11,500	205,000,000	12/31/2053
Notes: Antelope Valley Public Landfill, Chiquita Canyon Sanitary Landfill, Clean Harbors Buttonwillow LLC, Commerce Refuse-To-Energy Facility, Lancaster Landfill and Recycling Center, Mid-Valley Sanitary Landfill, Prima Deshecha Landfill, Simi Valley Landfill & Recycling Center, and Southeast Resource Recovery Facility are excluded from Table 4.19-1 as these facilities accepted less than one percent of the City's solid waste in 2018 (the last available reporting year).				
Source: CalRecycle, *SWIS Facility/Site Search*. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. accessed September 21, 2020.				

Mitigation Measures: No mitigation is required.

[8] https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006.

e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Refer to Response 4.19(d), above. The proposed project would comply with all Federal, State, and local statutes (including AB 939) and regulations related to solid waste management and reduction during construction and operations. Less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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4.20 WILDFIRE

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. According to the California Department of Forestry and Fire Protection's *Los Angeles County Fire Hazard Severity Zones in SRA Map*, the City of Pico Rivera is not located in or near a State Responsibility Area nor is the City designated as a very high fire hazard severity zone.[1] No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

No Impact. Refer to Response 4.20(a).

Mitigation Measures: No mitigation is required.

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?

No Impact. Refer to Response 4.20(a).

Mitigation Measures: No mitigation is required.

[1] California Department of Forestry and Fire Protection, *Los Angeles County Fire Hazard Severity Zones in SRA Map*, updated May 15, 2018.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As noted in Response 4.20(a), the project is not located within a State Responsibility Area or very high fire hazard severity zone. Given the low fire risk and high developed nature of the project site and surrounding area, the risk of post-fire flooding, runoff, slope instability, and drainage changes is considered low. Refer to Section 4.10, *Hydrology and Water Quality*, for an analysis of impacts related stormwater drainage and runoff.

Mitigation Measures: No mitigation is required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to 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, 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?		✓		
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)?		✓		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a) Does the project have the potential to 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, 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?

Less Than Significant Impact With Mitigation Incorporated. As discussed in Section 4.4, *Biological Resources*, no special-status plant species or vegetation communities are expected to occur on-site and the project site has a low potential to support the following special-status wildlife: Cooper's hawk (*Accipiter cooperii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), burrowing owl (*Athene cunicularia*), yellow-breasted chat (*Icteria virens*), coast horned lizard (*Phrynosoma blainvillii*), coastal California gnatcatcher (*Polioptila californica californica*), and least Bell's vireo (*Vireo bellii pusillus*). All remaining special-status wildlife species are not expected to occur within the project site. As such, project implementation is not anticipated to result in a substantial impact, either directly or through habitat modifications, on any sensitive species. Since the proposed project may result in the removal of on-site ornamental vegetation and trees, the proposed project could result in potential impacts to nesting birds protected by the MBTA. Mitigation Measure BIO-1 has been included in order to minimize potential impacts to nesting birds in the event any mature trees are affected during the avian nesting season.

As described within Sections 4.5, *Cultural Resources*, and Section 4.18, *Tribal Cultural Resources*, there are two historic built environment resources located within the project site: a drainage ditch and a railroad segment associated with the previously documented UPRR (P-19-186112). However, neither resource is considered an historical resource under CEQA. Additionally, no archaeological resources are known to occur onsite. Should an unexpected resource be uncovered during the grading and excavation process, implementation of Mitigation Measure CUL-1 would reduce potential impacts to unknown cultural resources. Thus, impacts in this regard would be less than significant.

As discussed within Section 4.7, *Geology and Soils*, no previous fossil localities have been recorded within the project site, and no paleontological resources were observed during the field analysis conducted for the project. More than eight feet below the modern surface, middle to late Pleistocene older alluvium sediments, which are assigned a

moderate potential for fossils due to similar deposits producing fossils at that depth near the project site occur. As such, Mitigation Measure GEO-2 shall require paleontological monitoring during excavations that are more than eight feet below the ground surface into native sediments. With Mitigation Measure GEO-2 implemented, impacts in this regard would be less than significant.

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)?

Less Than Significant Impact With Mitigation Incorporated. The project site is currently undeveloped and vacant. The project is not anticipated to result in substantial population growth within the area, either directly or indirectly. Although the project may incrementally affect other resources that were determined to be less than significant, the project's contribution to these effects is not considered "cumulatively considerable," in consideration of the relatively nominal impacts of the project and mitigation measures provided. As noted in Section 4.13, a total of 12 related cumulative projects were identified within the project vicinity, within the jurisdictions of Pico Rivera, Whittier, and Montebello; refer to Table 7-6, Cumulative Projects, of the Traffic Operations Report provided in Appendix F, *Vehicle Miles Traveled Memorandum/Traffic Operations Report* of this Initial Study. The cumulative projects consist of 12 residential, industrial, commercial, retail, and recreational uses. Implementation of mitigation measures at the project-level would reduce the potential for the incremental effects of the proposed project to be considerable when viewed in connection with the effects of these identified related cumulative projects. As such, impacts in this regard would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated. Previous sections of this Initial Study reviewed the proposed project's potential impacts related to aesthetics, air quality, geology and soils, GHG, hydrology/water quality, noise, hazards and hazardous materials, and other issues. As concluded in these previous discussions, the proposed project would result in less than significant environmental impacts with implementation of the recommended mitigation measures. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

4.22 REFERENCES

The following references were utilized during preparation of this Initial Study. These documents are available for review at the City of Pico Rivera Community and Economic Development Department, located at 6615 Passons Boulevard, Pico Rivera, California 90660, and on the associated website as indicated below, if applicable.

1. California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2017*, https://ww3.arb.ca.gov/cc/inventory /pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf, accessed September 30, 2020.

2. California Air Resources Board, *EMFAC 2017 Web Database*, https://www.arb.ca.gov/emfac/2017/, accessed October 1, 2020.

3. California Air Resources Board, *2017 Scoping Plan*, November 2017.

4. California Department of Conservation, *Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County*, California, 2010.

5. California Department of Finance Demographic Research Unit, *Report E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2021, with 2010 Benchmark*, Sacramento, California, May 1, 2021.

6. California Department of Fish and Wildlife, *California Regional Conservation Plans Map*, April 2019.

7. California Department of Forestry and Fire Protection, Los Angeles County Fire Hazard Severity Zones in SRA Map, updated May 15, 2018.

8. California Department of Transportation, *Scenic Highways*, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed July 22, 2020.

9. California Energy Commission, *California Energy Demand 2018-2030 Revised Forecast*, February 2018.

10. California Energy Commission, *Electricity Consumption by County*, http://www.ecdms. energy.ca.gov/elecbycounty.aspx, accessed October 5, 2020.

11. California Energy Commission, *2019 Building Energy Efficiency Standards*, dated March 2018.

12. California Energy Commission, *2019 Integrated Energy Policy Report*, February 20, 2020, https://efiling.energy.ca.gov/ GetDocument.aspx?tn=232922&DocumentContentId=65363, accessed October 8, 2020.

13. California Environmental Protection Agency, *Cortese List Data Resources*, https://calepa.ca.gov/SiteCleanup/CorteseList/, accessed on September 4, 2020.

14. California Geologic Survey, *CGS Information Warehouse: Tsunami*, available at https://maps.conservation.ca.gov/cgs/ informationwarehouse/tsunami/, accessed on September 11, 2020.

15. California Waterboards, Los Angeles – R4. Revised March 2020. *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/ programs/basin_plan/. Accessed on September 10, 2020.

16. CalRecycle, *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*, https://www2.calrecycle.ca.gov/ LGCentral/DisposalReporting/Destination/DisposalByFacility, accessed September 21, 2020.

17. CalRecycle. *Jurisdiction Diversion/Disposal Rate Summary.* https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006, accessed September 21, 2020.

18. :CalRecycle, *SWIS Facility/Site Search*. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. accessed September 21, 2020.

19. City of Pico Rivera, *Fire Department*, http://www.pico-rivera.org/residents/fire.asp, accessed September 11, 2020.

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4.23 REPORT PREPARATION PERSONNEL

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5.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study/Environmental Checklist, we recommend that the City of Pico Rivera prepare a mitigated negative declaration for the Beverly Boulevard Warehouse Project. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the City of Pico Rivera's determination (see Section 6.0, *Lead Agency Determination/Mitigated Negative Declaration*).

December 2021
Date

Alan Ashimine, Project Manager
Michael Baker International

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6.0 LEAD AGENCY DETERMINATION/MITIGATED NEGATIVE DECLARATION

On the basis of 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 in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION has been 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 "potentially significant unless mitigated" 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. An 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 potentially 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: 

Title: Project Planner

Printed Name: Hector Hernandez

Agency: City of Pico Rivera

Date: December 2021

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