

# Notice of Determination

**To:** \_\_\_\_\_ Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, CA 95814

**From:** Community Development Department  
Planning and Permitting Division  
City of Lancaster  
44933 Fern Avenue  
Lancaster, CA 93534

  X   County Clerk  
County of Los Angeles  
Environmental Filings  
12400 E. Imperial Hwy.  
Norwalk, CA 90650

**ORIGINAL FILED**

OCT 17 2023

**LOS ANGELES, COUNTY CLERK**

(Date received for filing)

**Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.**

Site Plan Review No. 23-004

**Project Title**

2023060708	Jocelyn Swain	(661) 723-6100
State Clearinghouse Number (If submitted to Clearinghouse)	Lead Agency Contact Person	Area Code/Telephone/Extension

**Project Location - General:** City of Lancaster, County of Los Angeles, State of California

**Project Location - Specific:** ±38 acres at the southeast corner of 47<sup>th</sup> Street West and William J Barnes Avenue (Assessor Parcel Numbers: 3105-001-011, -012, -013, -014)

**Project Applicant:** Northpoint Development, LLC/Jack Lac

**Project Description:** The proposed project consists of the construction and operation of a 647,756 square foot industrial/distribution warehouse on approximately 38 acres at the northeast corner of 45<sup>th</sup> Street West and Avenue G (see Figure 2). The proposed building would be centrally located within the project site, tilt-up concrete construction and approximately 50 feet in height. Most of the building would be utilized for storage and distribution purposes; however, up to 40,000 square feet of the proposed building would be utilized for office space. No cold or frozen storage would occur at this facility.

Loading docks and trailer parking spaces would be located on the north and south sides of the building. Employee and visitor parking would be located on the eastern and western sides of the building. A total of 94 loading dock spaces would be provided, evenly split between the two sides of the building; 48 loading docks would be installed with an additional 46 loading dock punch-outs available. 148 trailer parking spaces would be provided located near the loading dock areas. A total of 447 parking spaces would be provided for employees and visitors to the site, including 14 ADA spaces and 89 EV charging spaces along with 44 spaces for bicycle parking. Access to the project site would be from one driveway on Avenue G at the southeast corner of the project site and two driveways located along 45<sup>th</sup> Street West.

In addition to the building and parking on the site, landscaping would be provided throughout including in the employee parking lot and around the perimeter of the site. Enhanced landscaping will be provided along Avenue G to screen the loading docks from public view. Other improvements on the project site would include drainage basins, lighting, fencing, and utility improvements. Roof-top and battery storage would be installed to the extent feasible.

COPY

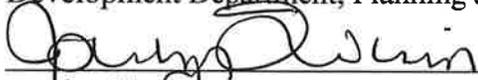
## **Notice of Determination**

Construction of the proposed project is anticipated to start in October 2023 and take approximately 12 months to complete ending in October 2024. Construction activities would occur Monday through Saturday, 7:00 a.m. to 8 p.m., with construction not occurring on Sundays and holidays. No import or export of material is anticipated during construction. The facility is anticipated to employ 242 individuals and could operate 24-hours per day.

This is to advise that the City of Lancaster (i.e., Lead Agency) has approved the above-described project on **October 6, 2023** and has made the following determinations regarding the above-described project:

1. The project will not have a significant effect on the environment.
2. A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A Statement of Overriding Considerations was not adopted for this project.
5. Findings were made pursuant to the provisions of CEQA.

This is to certify that the initial study is available to the General Public at Lancaster City Hall, Community Development Department, Planning and Permitting Division, 44933 North Fern Avenue, Lancaster, California.

  
Jocelyn Swain

Senior Planner  
Title

October 6, 2023  
Date

State of California—Natural Resources Agency  
**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**  
**2023 ENVIRONMENTAL FILING FEE CASH RECEIPT**

RECEIPT # 202310170510003
STATE CLEARING HOUSE # (If applicable) 2023060708

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY CITY OF LANCASTER COMMUNITY DEVELOPMENT DEPARTMENT PLANNING AND PERMITTING DIVISION			DATE 10/17/2023
COUNTY/STATE AGENCY OF FILING LACC			DOCUMENT NUMBER 2023225014
PROJECT TITLE SITE PLAN REVIEW NO. 23-004			
PROJECT APPLICANT NAME JOCELYN SWAIN			PHONE NUMBER
PROJECT APPLICANT ADDRESS 44933 FERN AVE	CITY LANCASTER	STATE CA	ZIP CODE 93534

PROJECT APPLICANT (Check appropriate box):

- Local Public Agency    
  School District    
  Other Special District    
  State Agency    
  Private Entity

**CHECK APPLICABLE FEES:**

- |   |            |             |
|---|------------|-------------|
| <input type="checkbox"/> Environmental Impact Report (EIR)  | \$3,839.25 | \$ 0.00     |
| <input checked="" type="checkbox"/> Negative Declaration (ND)(MND)                                  | \$2,764.00 | \$ 2,764.00 |
| <input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only) | \$850.00   | \$ 0.00     |
| <input type="checkbox"/> Projects Subject to Certified Regulatory Programs (CRP)                    | \$1,305.25 | \$ 0.00     |
| <input checked="" type="checkbox"/> County Administrative Fee                                       | \$50.00    | \$ 75.00    |
| <input type="checkbox"/> Project that is exempt from fees   |            |             |
| <input type="checkbox"/> Notice of Exemption  |            |             |
| <input type="checkbox"/> CDFW No Effect Determination (Form Attached)                               |            |             |
| <input type="checkbox"/> Other _____  |            | \$ 0.00     |

**PAYMENT METHOD:**

- Cash    
  Credit    
  Check    
  Other \_\_\_\_\_    
 \$ 2,839.00

SIGNATURE  X 	TITLE ITC
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<input type="checkbox"/> Other _____		\$ 0.00

**PAYMENT METHOD:**

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  Credit    
  Check    
  Other \_\_\_\_\_    
 \$ 2,839.00

SIGNATURE <b>X</b> 	TITLE ITC
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**From:** [Ashimine, Alan](#)  
**To:** [Curry, Donna](#)  
**Cc:** [Chandler Elliott](#); [Jack Lac](#); [Raszewski, Tracey](#); [Swain, Jocelyn](#)  
**Subject:** RE: RE: Fox Field West [Annexation 14-446](#)  
**Date:** Wednesday, November 08, 2023 10:52:51 AM  
**Attachments:** [SPR 23-004 Notice of Availability.PDF](#)  
[SPR 23-004 Notice of Determination -filed with receipt.pdf](#)

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**CAUTION: EXTERNAL EMAIL.**

Hi Donna – it was great speaking with you this morning, and I’m glad we were able to clear everything up. Please see below for a summary of our discussion:

*The Initial Study prepared for Site Plan Review No. 23-004 did indeed result in the adoption of a Mitigated Negative Declaration by the City of Lancaster. As we discussed, page 6 of the Initial Study provides the City’s CEQA determination for the project. Under most usual circumstances, the lead agency would check the box for “Mitigated Negative Declaration”; however, in this case, you have noted that the box for “previous analysis within an earlier EIR” has been checked.*

*The only reason this box is checked is because the proposed project is participating in the City of Lancaster’s VMT Mitigation Program. This is an in-lieu fee program that allows developers to pay a fee to mitigate VMT impacts if their project exceeds the City’s VMT threshold. As such, the Lancaster VMT Mitigation Program EIR is considered an “umbrella” document for this warehousing/distribution project, and the “previous analysis within an earlier EIR” box has correspondingly been checked.*

*The Initial Study provides project-level, project-specific analysis of all project impacts and determined that all impacts were mitigated to a level below significance under CEQA. The NOA and NOD for this MND are attached for reference.*

Hopefully this clarifies everything. Please note, I have copied Jocelyn Swain on this email in the event there are any follow up questions for the City, or if Jocelyn has any further feedback to provide.

Thanks again.

Alan Ashimine  
Michael Baker International  
Direct: 949.855.5710

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**From:** Raszewski, Tracey <Tracey.Raszewski@mbakerintl.com>  
**Sent:** Wednesday, November 1, 2023 11:16 AM  
**To:** Ashimine, Alan <aashimine@mbakerintl.com>  
**Cc:** Curry, Donna <dcurry@lacs.org>; Chandler Elliott <celliot@northpointkc.com>; Jack Lac <jlac@northpointkc.com>  
**Subject:** FW: EXTERNAL: RE: Fox Field West Annexation 14-446

Hi Alan. Can you please work through this with Donna, I have added her to this email? Feel free to call her, however if you set up a meeting or email, please copy me.

Thank you.

Best,

**Tracey Raszewski** | Project Manager  
**Michael Baker International** | *We Make a Difference*  
5 Hutton Centre Drive, Suite 500 | Santa Ana, CA 92707  
[O] 949-855-5771 | [M] 949-412-2807  
[tracey.raszewski@mbakerintl.com](mailto:tracey.raszewski@mbakerintl.com) | [www.mbakerial.com](http://www.mbakerial.com)

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**From:** Curry, Donna <[dcurry@lacs.org](mailto:dcurry@lacs.org)>  
**Sent:** Wednesday, November 1, 2023 11:07 AM  
**To:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

Hello again,

Sorry to be so picky but I'm going to get questioned on these. Obviously I didn't read each document page by page, but in scanning through and also the title, it doesn't seem to be project specific. If Lancaster prepared a MND for this, it should be on file with them-at least that's the norm. These documents seem to cover a much broader range of issues than just the parcels in this annexation. This annexation is for a proposed warehouse and the documents are for a Vehicle Miles Traveled EIR. If Alan can direct me to a place in these that talks about this particular project (the four APNs), I can highlight it for my managers. Otherwise they won't accept it. They are looking for a complete CEQA document that matches the project description/area stated in the annexation application.

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**From:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Sent:** Friday, October 27, 2023 10:36 AM  
**To:** Curry, Donna <[dcurry@lacs.org](mailto:dcurry@lacs.org)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

**CAUTION: EXTERNAL EMAIL.**

Hi Donna. I hope you don't mind I had Alan reach out directly to you to make sure I didn't waste your time going back and forth with me.

Here is the link that contains the Draft EIR and Final EIR associated with the VMT Mitigation Program which is what Alan determined you needed after working with you and Jocelyn at the city.

<https://eFTP.mbakerial.com/link/FTKoyeXNX8MKMFvVQzgtTj>

Let me know if you have any questions or concerns.

Thank you.

Best,

**Tracey Raszewski** | Project Manager  
**Michael Baker International** | *We Make a Difference*  
5 Hutton Centre Drive, Suite 500 | Santa Ana, CA 92707  
[O] 949-855-5771 | [M] 949-412-2807  
[tracey.raszewski@mbakerintl.com](mailto:tracey.raszewski@mbakerintl.com) | [www.mbakerial.com](http://www.mbakerial.com)

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**From:** Curry, Donna <[dcurry@lacs.org](mailto:dcurry@lacs.org)>  
**Sent:** Thursday, October 26, 2023 7:48 AM  
**To:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

The NOD states it was an MND

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**From:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Sent:** Thursday, October 26, 2023 7:40 AM  
**To:** Curry, Donna <[dcurry@lacs.org](mailto:dcurry@lacs.org)>  
**Cc:** Wang, Shirly <[shirlywang@lacs.org](mailto:shirlywang@lacs.org)>; Chandler Elliott <[celliott@northpointkc.com](mailto:celliott@northpointkc.com)>; Jack Lac <[jlac@northpointkc.com](mailto:jlac@northpointkc.com)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

**CAUTION: EXTERNAL EMAIL.**

Hi Donna. The IS/MND is 69 pages and can be downloaded here:

<https://www.cityoflancasterca.org/home/showpublisheddocument/45409/638235579938270000>

Thanks.

Best,

**Tracey Raszewski** | Project Manager  
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**From:** Curry, Donna <[dcurry@lacsds.org](mailto:dcurry@lacsds.org)>  
**Sent:** Thursday, October 26, 2023 7:19 AM  
**To:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Cc:** Wang, Shirly <[shirlywang@lacsds.org](mailto:shirlywang@lacsds.org)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

Hi Tracey,

Great! Electronically for sure. How many pages is it?

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**From:** Raszewski, Tracey <[Tracey.Raszewski@mbakerintl.com](mailto:Tracey.Raszewski@mbakerintl.com)>  
**Sent:** Thursday, October 26, 2023 7:03 AM  
**To:** Curry, Donna <[dcurry@lacsds.org](mailto:dcurry@lacsds.org)>  
**Cc:** Wang, Shirly <[shirlywang@lacsds.org](mailto:shirlywang@lacsds.org)>  
**Subject:** RE: EXTERNAL: RE: Fox Field West Annexation 14-446

**CAUTION: EXTERNAL EMAIL.**

Hi Donna. Please find the final NOD. Let me know if you have any questions. Do you need the complete environmental document that goes with it, if so, do you want it electronically or hard copies?

Thank you.

Best,

**Tracey Raszewski** | Project Manager  
**Michael Baker International** | *We Make a Difference*  
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COMMUNITY  
DEVELOPMENT

## City of Lancaster Initial Study

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1. **Project title and File Number:** Site Plan Review No. 23-004
2. **Lead agency name and address:** City of Lancaster  
Community Development Department  
Planning & Permitting Division  
44933 Fern Avenue  
Lancaster, California 93534
3. **Contact person and phone number:** Jocelyn Swain, Senior Planner  
City of Lancaster  
(661) 723-6100
4. **Location:** ±38 acres at the northeast corner of 45<sup>th</sup>  
Street West and Avenue G  
(APNs: 3105-001-011, -012, -013, 014)  
(see Figure 1)
5. **Applicant name and address:** Northpoint Development/Jack Lac  
3315 N Oak Trafficway  
Kansas City, MO 64116
6. **General Plan designation:** Light Industrial
7. **Zoning:** Specific Plan (SP) No. 95-02
8. **Description of project:**

The proposed project consists of the construction and operation of a 647,000 square foot industrial/distribution warehouse on approximately 38 acres at the northeast corner of 45<sup>th</sup> Street West and Avenue G (see Figure 2). The proposed building would be centrally located within the project site, tilt-up concrete construction and approximately 50 feet in height. Most of the building would be utilized for storage and distribution purposes; however, up to 40,000 square feet of the proposed building would be utilized for office space. No cold or frozen storage would occur at this facility.



**Figure 1, Project Location Map**

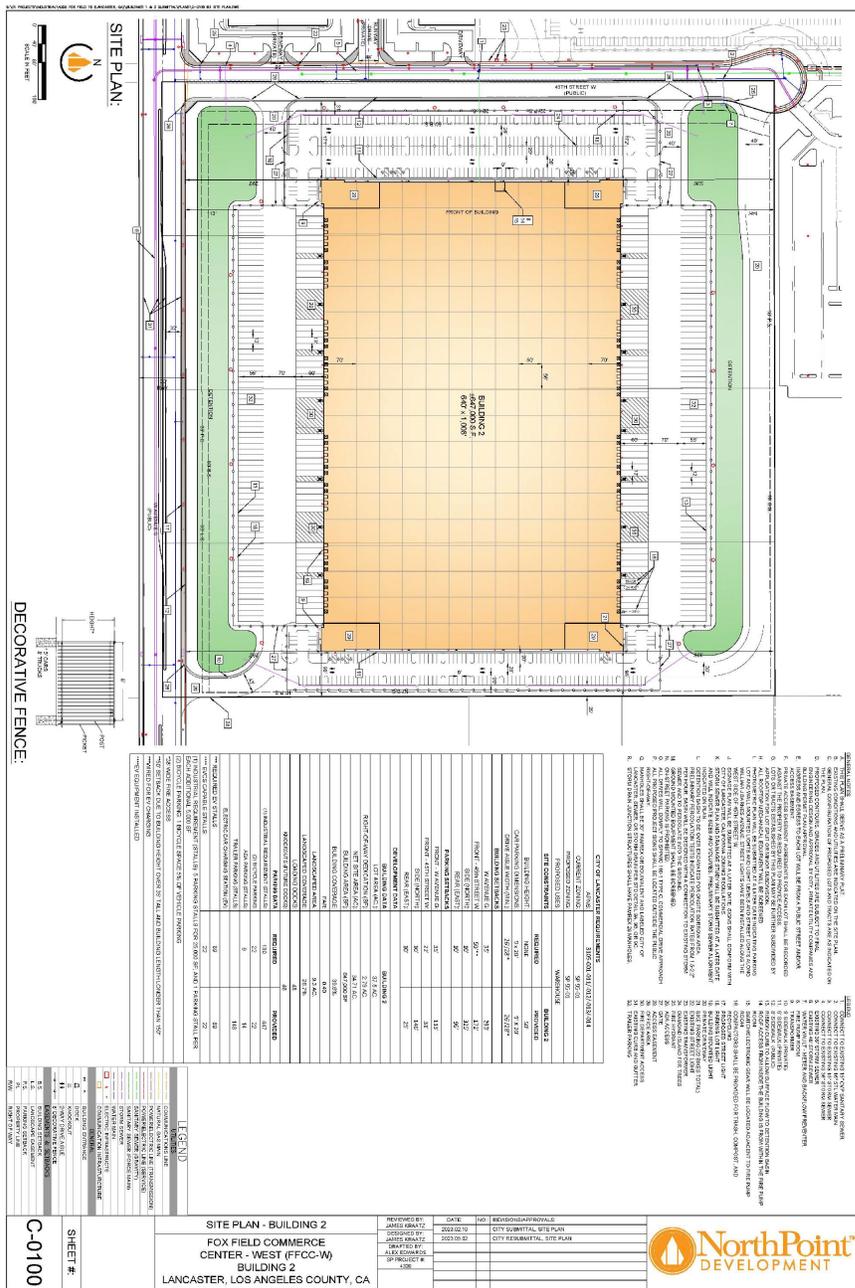


Figure 2, Conceptual Site Plan

Loading docks and trailer parking spaces would be located on the north and south sides of the building. Employee and visitor parking would be located on the eastern and western sides of the building. A total of 94 loading dock spaces would be provided, evenly split between the two sides of the building; 48 loading docks would be installed with an additional 46 loading dock punch-outs available. 148 trailer parking spaces would be provided located near the loading dock areas. A total of 447 parking spaces would be provided for employees and visitors to the site, including 14 ADA spaces and 89 EV charging spaces along with 44 spaces for bicycle parking. Access to the project site would be from one driveway on Avenue G at the southeast corner of the project site and two driveways located along 45<sup>th</sup> Street West.

In addition to the building and parking on the site, landscaping would be provided throughout including in the employee parking lot and around the perimeter of the site. Enhanced landscaping will be provided along Avenue G to screen the loading docks from public view. Other improvements on the project site would include drainage basins, lighting, fencing, and utility improvements. Roof-top and battery storage would be installed to the extent feasible.

Construction of the proposed project is anticipated to start in October 2023 and take approximately 12 months to complete ending in October 2024. Construction activities would occur Monday through Saturday, 7:00 a.m. to 8 p.m., with construction not occurring on Sundays and holidays. No import or export of material is anticipated during construction. The facility is anticipated to employ 242 individuals and could operate 24-hours per day.

**9. Surrounding land uses and setting:**

The project site is located at the northeast corner of 45<sup>th</sup> Street West and Avenue G and is currently vacant. The property to the east and south is undeveloped. The property to the west is developed with a small industrial business park along Avenue G containing such business as Brothers’ Swiss Inc., Griff Industries, Calvert Racing, and Streamline System Designs. The remainder of the property immediately to the west is vacant. Immediately north of the project site, is the California National Guard Armory. North of William Barnes Avenue is the Fox Field airport. This area contains the taxiways and runways for the airport along with a mix of industrial uses. A little bit further to the west, is the Sygma Distribution Facility and to the northeast is the Apollo Community Regional Park.

**Table 1  
Zoning/Land Use Information**

Direction	Zoning		Land Use
	City	County	
North	SP 95-02	N/A	California National Guard Armory
East	SP 95-02	N/A	Vacant
South	SP 95-02	N/A	Vacant
West	SP 95-02	N/A	Small industrial business park, vacant

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement.)

Approvals from other public agencies for the proposed project include, but are not limited to, the following:

- California Department of Fish and Wildlife
- Lahontan Regional Water Quality Control Board
- Los Angeles County Airport Land Use Commission
- Antelope Valley Air Quality Management District (AVAQMD)
- Southern California Edison
- Los Angeles County Sanitation District #14 (annexation)
- Los Angeles County Waterworks District 40 (annexation)
- Los Angeles County Fire Department

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with Assembly Bill (AB) 52, consultation letters for the proposed project were sent to three individuals associated with three tribes which have requested to be included. These letters were mailed via certified return receipt mail and included copies of the site plan/grading plan and the cultural resources report that was originally prepared for the project site. Table 2 identifies the tribes, the person to whom the letter was directed, and the date the letter was received.

**Table 2  
Tribal Notification**

<b>Tribe</b>	<b>Person/Title</b>	<b>Date Received</b>
Gabrieleno Band of Mission Indians – Kizh Nation	Andrew Salas – Chairman	March 20, 2023
Yuhaaviatam of San Manuel Nation	Ryan Nordness / Cultural Resources Analyst	March 20, 2023
Fernandeno Tataviam Band of Mission Indians	Sarah Brunzell, Manager, Cultural Resources Management Division	March 20, 2023

A response was received from the Fernandeno Tataviam Band of Mission Indians and the AB 52 process is ongoing. At the conclusion of the AB 52 process, any agreed upon measures will be included in the conditions of approval.



EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Use. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I. <u>AESTHETICS</u> . Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality or 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area?			X	

a. The City of Lancaster General Plan identifies five scenic areas in the City and immediately surrounding area (LMEA Figure 12.0-1). Views of these scenic areas are not generally visible from the project site or the immediately surrounding roadways. However, views of the open desert and mountains surrounding the Antelope Valley are available from the project site and nearby roadways (Avenue G, Williams Barnes Avenue, and 45<sup>th</sup> Street West). The proposed project consists of the construction and operation of an approximately 647,000 square feet industrial/distribution facility. This distribution facility is similar in appearance to the other distribution facilities located within the Fox Field Specific Plan area including Michaels, Rite-Aid, and Sygma. With implementation of the proposed project, the views would not change and would continue to be available from the roadways and project site. Therefore, no impact would occur.

b. The project site is not located along any designated State Scenic Highways. There are no State designated scenic routes or highways within the City of Lancaster. Additionally, there are no trees, rock outcroppings or buildings on the project site. However, the Antelope Valley Freeway (Highway 14) is designated in the City’s Master Environmental Assessment as a local scenic roadway because of the views of the mountain ranges to the north and south of the valley. The project site is located approximately 1.5 miles west of the Antelope Valley Freeway. While the

project site is near the freeway, the construction of the project would not impact the views available to the traveling motorists. Therefore, impacts would be less than significant.

- c. The proposed project is consistent with the zoning code and the Fox Field Specific Plan as it pertains to this use and zone (see Land Use and Planning section). The specific plan identifies the requirements for the aesthetics of individual developments within the specific plan area. The requirements are supplemented by the City's Design Guidelines which were adopted on December 8, 2009 (and updated on March 30, 2010). These guidelines provide the basis to achieve quality design for all development within the City. Therefore, impacts would be less than significant.
- d. The ambient lighting in the vicinity of the project site is low to moderate due to street lights, security and operational lighting from surrounding developments and the airport, vehicle headlights, and lighting from aircraft utilizing the Fox Field airfield. Additional vehicle headlights are distantly visible while traveling adjacent to the project site along Avenue G. Light and glare would be generated from the proposed project in the form of additional street lighting, parking lot/building security lighting and from motor vehicles associated with employees, visitors, and delivery trucks. All lighting associated with the proposed development would be shielded and focused downward onto the project site. Additionally, the proposed development would not produce substantial amounts of glare as the development would be constructed primarily from non-reflective materials. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<p>II. <u>AGRICULTURE AND FORESTRY RESOURCES.</u> 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:</p>				
<p>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?</p>				X
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>				X
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</p>				X
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>				X
<p>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?</p>				X

-

- a. The California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP) tracks and categories land with respect to agricultural resources. Land is designated as one of the following and each has a specific definition: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land.

The maps for each county are updated every two years. The latest available map for Los Angeles County is from 2018. According to the 2018 map, the project site is designated as Other Land. Other Land is defined as “land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

As the project site is not designated as farmland of importance by the State nor is it currently utilized for agricultural purposes, no impacts to agricultural resources would occur.

- b. The project site is zoned Specific Plan (SP) No. 95-02 with an underlying zoning of Light Industrial. These designations do not allow for agricultural uses. Additionally, the project site and the surrounding area are not subject to a Williamson Act contract. Therefore, no impacts would occur.
- c-d. According to the City of Lancaster’s General Plan, there are no forests or timberlands located within the City of Lancaster. Therefore, the proposed project would not result in the rezoning of forest or timberland and would not cause the loss of forest land or the conversion of forest land to non-forest land. Therefore, no impacts would occur.
- e. See responses to Items IIa-d.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. <u>AIR QUALITY</u> . Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

An air quality study was prepared for the proposed project by Michael Baker International and documented in a report entitled “Air Quality Assessment, SPR 23-004, Lancaster, California” and dated May 31, 2023. The following discussion is based, in part, on this report.

- a. Development proposed under the City’s General Plan would not create air emissions that exceed the Air Quality Management Plan (GPEIR pgs. 5.5-21 to 5.5-22). The project site is designated Specific Plan (SP) and zoned Specific Plan (SP) No. 95-02 (Fox Field Specific Plan) with an underlying zoning of Light Industrial. Distribution facilities, such as the one proposed, are allowed under the Fox Field Specific Plan. Additionally, the proposed project would be required to comply with all applicable Antelope Valley Air Quality Management District (AVAQMD) rules and regulations including Rule 219 (Equipment Permitting), Rule 402, Rule 403 (Fugitive Dust), and Rule 1113 (volatile organic compounds in architectural coatings), and Rule 1120 (asphalt paving). As such, any emissions associated with the proposed project have already been accounted for and the proposed project would not conflict with or obstruct the implementation of the Air Quality Management Plan and no impacts would occur.

Further, the proposed project would result in less than significant impacts regarding localized and regional air pollutant concentrations during project construction and operations with implementation of Mitigation Measure 1. As such, the project would not delay the timely

attainment of air quality standards or AVAQMD emission reductions goals. Therefore, impacts would be less than significant.

- b. The construction and operational emissions for the proposed project were calculated using California Emissions Estimator Model (CalEEMod) version 2022.1. The results of this analysis are summarized below. The was utilized to calculate the project's construction and operational air pollutant emissions. The detailed model runs can be found in the appendices to the air quality report.

### Construction

The project would be constructed in a single phase/duration. Construction activities would primarily include grading (including excavation for the detention basin), building construction, paving, and architectural coating. No import and/or export of material is anticipated. Table 3 summarizes the proposed project's anticipated construction emissions in pounds per day and Table 4 summarizes the anticipated construction emissions in tons/year. As can be seen in these tables all emissions would be less than the established thresholds with the exception of the unmitigated reactive organic gases (ROG) emissions.

Construction activities are also a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality and nuisance to those living and working in the area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from demolition, grading and construction is expected to be short-term and would cease upon project completion. The proposed project would be required to comply with AVAQMD Rule 403, Fugitive Dust, and as can be see in Tables 3 and 4, the project would not exceed the applicable PM<sub>10</sub> and PM<sub>2.5</sub> thresholds. Therefore, impacts would be less than significant.

The application of asphalt and surface coatings creates ROG emissions, which are O<sub>3</sub> precursors. As required, all architectural coatings for utilized on the building would comply with AVAQMD Rule 1113, which specifies the content of ROG in paint. As shown in Table 3, the maximum daily ROG emissions would exceed the air district's established thresholds. Mitigation Measure 1 would require the architectural coatings phase of the project to be extended from one month to 1.5 months to reduce the daily ROG emissions. This modified construction schedule is shown in Table 5. With the mitigation measure applied, the maximum daily ROG emissions would be reduced from 178 pounds per day to 120 pounds per day, which is below the threshold. All other emissions would be less than significant without mitigation.

### Operations

Long-term air quality impacts typically consist of mobile source emissions generated from project-related traffic (i.e., motor vehicle use by employees, deliveries travelling to and from the site), and emissions from stationary, area, and energy sources. Emissions associated with each of these sources were calculated and are summarized in Table 6 (pounds per day) and Table 7 (tons per year).

**Table 3**  
**Construction Emissions (pounds/day)<sup>1,2</sup>**

<b>Construction Year</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Unmitigated Construction Emissions</b>						
Year 1 (2023)	3.83	37.4	35.2	0.06	5.01	2.48
Year 2 (2024)	178	24.2	54.4	0.06	5.68	1.98
<b>Maximum Daily Emissions</b>	<b>178</b>	<b>37.4</b>	<b>54.4</b>	<b>0.06</b>	<b>5.68</b>	<b>4.41</b>
AVAQMD Thresholds <sup>3</sup>	137	137	548	137	82	65
Threshold Exceeded?	Yes	No	No	No	No	No
<b>Mitigated Construction Emissions<sup>4</sup></b>						
Year 1 (2023)	3.83	37.4	35.2	0.06	5.01	2.48
Year 2 (2024)	120	24.2	54.4	0.06	5.68	1.98
<b>Maximum Daily Emissions</b>	<b>120</b>	<b>37.4</b>	<b>54.4</b>	<b>0.06</b>	<b>5.68</b>	<b>4.41</b>
AVAQMD Thresholds	137	137	548	137	82	65
Threshold Exceeded?	No	No	No	No	No	No
<ol style="list-style-type: none"> <li>1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. The maximum daily emissions (from either summer or winter conditions) are presented.</li> <li>2. The reduction/credits for construction emissions applied in CalEEMod are based on the application of dust control techniques as required by AVAQMD Rule 403. The dust control techniques include the following: water exposed surfaces three times daily, and limit speeds on unpaved roads to 25 miles per hour.</li> <li>3. Threshold source: Antelope Valley Air Quality Management District, <i>California Environmental Quality Act (CEQA) and Federal Conformity Guidelines Table 6, Significant Emissions Thresholds</i>. August 2016. In developing these thresholds, AVAQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable.</li> <li>4. Mitigation Measure 1 requires project construction to extend architectural coating phase from one month (22 days) to 1.5 months (33 days).</li> </ol>						

**Table 4**  
**Construction Emissions (tons/year)<sup>1,2</sup>**

Construction Year	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Unmitigated Construction Emissions</b>						
Year 1 (2023)	0.10	0.80	1.18	<0.01	0.03	0.12
Year 2 (2024)	2.20	1.66	3.48	<0.01	0.06	0.40
<b>Maximum Daily Emissions</b>	<b>2.20</b>	<b>1.66</b>	<b>3.48</b>	<b>&lt;0.01</b>	<b>0.06</b>	<b>0.40</b>
AVAQMD Thresholds	25	25	100	25	15	12
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Mitigated Construction Emissions<sup>4</sup></b>						
Year 1 (2023)	0.10	0.80	1.18	<0.01	0.03	0.12
Year 2 (2024)	2.20	1.67	3.51	<0.01	0.06	0.40
<b>Maximum Daily Emissions</b>	<b>2.20</b>	<b>1.67</b>	<b>3.51</b>	<b>&lt;0.01</b>	<b>0.06</b>	<b>0.40</b>
AVAQMD Thresholds <sup>3</sup>	25	25	100	25	15	12
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<ol style="list-style-type: none"> <li>1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. The maximum daily emissions (from either summer or winter conditions) are presented.</li> <li>2. The reduction/credits for construction emissions applied in CalEEMod are based on the application of dust control techniques as required by AVAQMD Rule 403. The dust control techniques include the following: water exposed surfaces three times daily, and limit speeds on unpaved roads to 25 miles per hour.</li> <li>3. Threshold source: Antelope Valley Air Quality Management District, <i>California Environmental Quality Act (CEQA) and Federal Conformity Guidelines Table 6, Significant Emissions Thresholds</i>. August 2016. In developing these thresholds, AVAQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable.</li> <li>4. Mitigation Measure 1 requires project construction to extend architectural coating phase from one month (22 days) to 1.5 months (33 days).</li> </ol>						

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. The mobile source emissions were based on the total number of daily trips anticipated to be generated by the proposed project. According to the local transportation assessment, the proposed project is anticipated to generate approximately 892 daily trips. In addition, since the proposed project would include warehouse uses, it is expected to attract heavy-duty vehicle traffic, mainly in the form of large multi-axle trucks. CalEEMod default fleet mix was adjusted to account for the heavy-duty truck traffic that would be generated by the project.

**Table 5  
 Construction Schedule Per Mitigation Measure 1**

<b>Construction Phase</b>	<b>Proposed Start<sup>1</sup></b>	<b>Proposed Duration<sup>2,3</sup></b>	<b>Modified Duration<sup>2,4</sup></b>
Grading	October 2023	One month (22 days)	One month (22 days)
Building Construction	November 2023	Ten months (220 days)	Ten months (220 days)
Paving	May 2024	Two months (44 days)	Two months (44 days)
Architectural Coating	July 2024	One month (22 days)	1.5 months (33 days)

Notes:

- Proposed start days for each construction phase are estimated and may not represent the exact dates.
- Assuming a typical work week to be 5 days, one month of construction work would be approximately 22 days.
- Provided by project applicant.
- Mitigation Measure 1 requires project construction to extend architectural coating phase from one month to 1.5 months.

**Table 6  
 Maximum Operational Emissions (pounds/day)<sup>1</sup>**

<b>Source</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Maximum Operational Emissions</b>						
Mobile	3.37	12.9	33.6	0.12	3.14	0.75
Area	19.5	0.24	28.1	<0.01	0.04	0.05
Energy <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00
Stationary Source <sup>3</sup>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions<sup>4</sup></b>	<b>22.9</b>	<b>13.1</b>	<b>61.7</b>	<b>0.12</b>	<b>3.18</b>	<b>0.80</b>
AVAQMD Thresholds	137	137	548	137	82	65
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes:

- Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. The maximum daily emissions (from either summer or winter conditions) are presented.
- The project would not consume natural gas.
- The project would include one emergency generator and one firewater pump. As a conservative analysis, it is assumed that the emergency generator and firewater pump would operate for 24 hours per day during emergencies.
- Totals may be off due to rounding.

**Table 7  
 Maximum Operational Emissions (tons/year)<sup>1</sup>**

Source	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Maximum Operational Emissions</b>						
Mobile	0.57	2.37	5.29	0.02	0.57	0.14
Area	3.14	0.02	2.53	<0.01	<0.01	<0.01
Energy <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00
Stationary Source <sup>3</sup>	0.06	0.26	0.15	<0.01	0.01	0.01
<b>Total Emissions<sup>4</sup></b>	<b>3.77</b>	<b>2.64</b>	<b>7.97</b>	<b>0.02</b>	<b>0.59</b>	<b>0.15</b>
AVAQMD Thresholds	25	25	100	25	15	12
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<ol style="list-style-type: none"> <li>1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. The maximum daily emissions (from either summer or winter conditions) are presented.</li> <li>2. The project would not consume natural gas.</li> <li>3. The project would include one emergency generator and one firewater pump. As a conservative analysis, it is assumed that the emergency generator and firewater pump would operate for 24 hours per day during emergencies.</li> <li>4. Totals may be off due to rounding.</li> </ol>						

Area source emissions would be generated from consumer products, architectural coatings, and landscaping. Energy would be consumed primarily from the use of electricity by the project for space heating and cooling, water heating, ventilation, lighting, appliances, landscaping equipment, and electronics. Criteria air pollutant emissions from electricity use were not quantified since criteria pollutants emissions occur at the site of the power plant, which is off-site. As such, only criteria air pollutant emissions from natural gas use were quantified; however, the project would not consume natural gas according to the applicant. One diesel emergency generator and one firewater pump are proposed on the project site for emergency purposes. For purposes of analysis, it was assumed that the emergency generator and firewater pump would operate for 24 hours per year during emergencies. As shown in Tables 6 and 7, both daily and annual total operational emissions would not exceed established AVAQMD thresholds and operational impacts would be less than significant.

Mitigation Measures

1. Prior to the issuance of grading permits, the applicant shall prepare and submit the final construction plan with an at least 1.5-month architectural coating phase to the Community Development Department, Planning and Permitting Division for review and approval.
2. The applicant shall submit the applicable permit applications and fees for any equipment or process that may not be exempt under District Rule 219, including emergency generators over 50 brake horsepower (bhp) to the Antelope Valley Air Quality Management District for processing and approval.

- c. 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. The California Air Resources Board 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. Residences, schools, daycare centers, playgrounds, medical facilities, among others, are considered sensitive receptor land uses by the AVAQMD.

According to the AVAQMD CEQA and Federal Conformity Guidelines, the following types of projects with sensitive receptors within the specified distance are required to prepare a Health Risk Assessment:

- Any industrial projects within 1,000 feet of a sensitive receptor land use
- Any distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet
- A dry cleaner using perchloroethylene within 500 feet; and
- A gasoline dispensing facility within 300 feet

The project proposes the construction of a distribution warehouse; as such, it shall be considered a distribution center. However, the nearest sensitive receptor to the project site is a park (Apollo Community Regional Park), located approximately 1,520 feet to the northeast of the project site. As the project is not located with 1,000 of any sensitive receptors, the project is not anticipated to expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1 and a Health Risk Assessment is not required.

Project construction may result in temporary increases in emissions of diesel particulate matter (DPM) associated with the use of off-road diesel equipment. Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. As such, exposure to construction generated DPM would not be anticipated to exceed applicable thresholds (i.e., incremental increase in cancer risk of 1 in one million) during project construction.

The proposed warehousing project is anticipated to generate approximately 892 total daily trips. However, the toxic air contaminants (TAC) amount to which the receptors are exposed is the primary factor used to determine health risk. Due to the distance of the proposed project from the nearest sensitive receptor (1,520 feet), it is not anticipated that the proposed project would result in significant impacts in this regard. As such, project operation is not anticipated to result in significant exposure to TAC and impacts in this regard would be less than significant.

However, since the construction of the proposed project would result in the disturbance of the soil, it is possible individuals could be exposed to Valley Fever. Valley Fever or coccidioidomycosis, is primarily a disease of the lungs caused by the spores of the *Coccidioides immitis* fungus. The spores are found in soils, become airborne when the soil is disturbed, and

are subsequently inhaled into the lungs. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley Fever is not contagious, and therefore, cannot be passed on from person to person. Most of those who are infected would recover without treatment within six months and would have a life-long immunity to the fungal spores. In severe cases, especially in those patients with rapid and extensive primary illness, those who are at risk for dissemination of disease, and those who have disseminated disease, antifungal drug therapy is used.

Nearby sensitive receptors as well as workers at the project site could be exposed to Valley Fever from fugitive dust generated during construction. There is the potential that cocci spores would be stirred up during excavation, grading, and earth-moving activities, exposing construction workers and nearby sensitive receptors to these spores and thereby to the potential of contracting Valley Fever. However, implementation of Mitigation Measures 14 (see Geology and Soils) which requires the project operator to implement dust control measures in compliance with AVAQMD Rule 403, and implementation of Mitigation Measure 3, below, which would provide personal protective respiratory equipment to construction workers and provide information to all construction personnel and visitors about Valley Fever, the risk of exposure to Valley Fever would be minimized to a less than significant level.

### Mitigation Measures

3. Prior to ground disturbance activities, the project operator shall provide evidence to the Development Services Director that the project operator and/or construction manager has developed a “Valley Fever Training Handout”, training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s) and schedule shall be submitted to the Development Services Director within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Development Services Director regarding the “Valley Fever Training Handout” and Session(s) shall include the following:
  - A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.
  - Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.
  - Training on methods that may help prevent Valley Fever infection.
  - A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training

materials/agenda, DVD, digital media files, or photographs.

The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan that addresses the potential presence of the *Coccidioides* spore and mitigates for the potential for *Coccidioidomycosis* (Valley Fever). Prior to issuance of permits, the project operator shall submit the Plan to the Los Angeles County Public Health for review and comment. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential *Coccidioides* spores. Measures in the Plan shall include the following:

- Provide HEP-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Cause contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use in enclosed cabs.
- Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.
- Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).
- Provide separate, clean eating areas with hand-washing facilities.
- Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
- Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.
- Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.
- Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Development Services Director. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within a specified radius of the project boundaries as determined by the Development Services Director. The radius shall not exceed three miles and is dependent

upon the location of the project site.

- When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.
- Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.
- Audit and enforce compliance with relevant Cal OSHA health and safety standards on the job site.

- d. Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. Construction of the proposed project is not anticipated to produce significant objectionable odors as any odors would be short-term in nature and cease upon project completion. Most objectionable odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. These types of uses are not part of the proposed project as the proposed project is an industrial distribution/warehouse facility. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV. <u>BIOLOGICAL RESOURCES</u> . Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
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?		X		
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?				X
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

- a. A biological resources assessment of the project site was conducted by Michael Baker International and documented in a report entitled “Results of a Biological Resources Assessment for SPR 23-004 – City of Lancaster, County of Los Angeles, California” and dated May 31, 2023. As part of the biological resources assessment, both a literature review and field survey were conducted.

A field survey of the project site was conducted on March 9, 2023. All vegetation on the subject site was mapped and all plant and wildlife species observed/detected were recorded. All observed species are listed in Table 8 (Plants) and Table 9 (Wildlife).

The project site is characteristic of a shadscale scrub habitat and is dominated by shadscale, allscale saltbush and other native desert scrub species. Evidence of disturbance is evidence on the northern and western boundaries due to off-road vehicle driving. No trees, including western Joshua tree, occur within the project site.

The project site does not contain suitable habitat for most sensitive plant species which are known to occur in the Antelope Valley. However, suitable habitat exists for both Alkali mariposa-lily and Rosamond eriastrum. While these species were not observed on the project site during the survey; they are known to have occurred in the general area. In order to ensure that impacts to these two species are less than significant, a mitigation measure has been identified below. With implementation of the mitigation measure, impacts to special status plant species would be less than significant.

**Table 8  
Observed Plant Species**

Fiddleneck ( <i>Amsinckia</i> sp.)	Fat-hen ( <i>Atriplex prostrata</i> )	Shadscale ( <i>Atriplex confertifolia</i> )
Pincushion ( <i>Chaenactis</i> sp.)	Sun cup ( <i>Camissonia</i> sp.)	Brome ( <i>Bromus</i> sp.)
Alkali heath ( <i>Frankenia salina</i> )	Rabbitbrush ( <i>Ericameria</i> sp.)	Buckwheat ( <i>Eriogonum</i> sp.)
Wall barley ( <i>Hordeum murinum</i> )	Prickly lettuce ( <i>Lactuca serriola</i> )	Pepperweed ( <i>Lepidium</i> sp.)
Allscale saltbush ( <i>Atriplex polycarpa</i> )	Coastal heron's bill ( <i>Erodium cicutarium</i> )	Nevada ephedra ( <i>Ephedra nevadensis</i> )
Booth's sun cup ( <i>Eremothera boothii</i> )	Summer cypress ( <i>Kochia scoparia</i> )	Big squirreltail grass ( <i>Elymus multisetus</i> )
Common goldfields ( <i>Lasthenia gracilis</i> )	Desert pepperweed ( <i>Lepidium fremontii</i> )	Clasping pepperweed ( <i>Lepidium perfoliatum</i> )
Spanish brome ( <i>Bromus madritensis</i> )	Snake's head ( <i>Malacothrix coulteri</i> )	Desert dandelion ( <i>Malacothrix glabrata</i> )
Pineapple weed ( <i>Matricaria discoidea</i> )	Mojave red sage ( <i>Neokochia californica</i> )	Northern pectocarya ( <i>Pectocarya penicillate</i> )
Fremont's phacelia ( <i>Phacelia fremontii</i> )	Common mediterranean grass ( <i>Schismus barbatus</i> )	Tumble mustard ( <i>Sisymbrium altissimum</i> )
Wirelettuce ( <i>Stephanomeria</i> sp.)	Bush seepweed ( <i>Suaeda nigra</i> )	

**Table 9  
Observed Animal Species**

Common raven ( <i>Corvus corax</i> )	California horned lark ( <i>Eremophila alpestris actia</i> )	White-crowned sparrow ( <i>Zonotrichia leucophrys</i> )
Whiptail ( <i>Aspidoscelis tigris</i> )	Sagebrush lizard ( <i>Sceloporus graciosus</i> )	Common side botched lizard ( <i>Uta stansburiana</i> )

No special status wildlife species were observed on the project site during the surveys. The likelihood of burrowing owls being present on the project site is considered low. No individuals, suitable burrows or any sign of burrowing owl were detected during the field survey. However, potentially suitable habitat exists on-site and it is possible that burrowing owls could occupy the site prior to the start of construction. To ensure impacts to burrowing owls are less than significant, a mitigation measure has been identified which would require preconstruction burrowing owl surveys in accordance with the California Department of Fish and Wildlife *Staff Report on Burrowing Owl Mitigation*. With implementation of the mitigation measure, impacts would be less than significant.

Swainson's hawk are not anticipated to occur on the project site as there are no trees on the project site. Some landscape trees associated with the nearby airfield and industrial development are present; however, these trees occur along active roadways/airfield reducing the suitability of the trees to support nesting Swainson's hawk. The nearest record of an active nest occurs approximately 3.7 miles northwest of the project site and was last active in 2016. The most recent record of an active nest is from 2020 and occurs approximately 6 miles north-northwest of the project site. As such, no impacts to Swainson's hawk would occur.

Desert tortoise and Mohave ground squirrel would not be expected to occur on the project site for the reasons detailed in the biological report and no impacts would occur. With incorporation of the mitigation measures listed below, impacts to biological resources would be less than significant.

#### Mitigation Measures

4. A nesting bird survey shall be conducted by a qualified biologist within 14 days prior to the start of construction/ground disturbing activities. If active bird nests are identified during the survey, the applicant shall contact the California Department of Fish and Wildlife to determine the appropriate mitigation/management requirements. Impacts to nesting birds will be avoided by delay of work or establishing a buffer of 500 feet around active raptor nests and 50 feet around other migratory bird species. A qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturbs the birds and if the buffer shall be increased. 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 bird nests in the restricted area.
5. Prior to the issuance of any construction related permits, the applicant shall retain a biologist to conduct a springtime sensitive plant survey specifically focused on alkali mariposa lilies and Rosamond eriastrum. In the event that a springtime survey cannot be conducted, the biologist shall map all habitat suitable for these special status plant species. The biologist's report shall include the total acreage of each special status species present or the suitable habitat for these species and the applicant shall be required to pay \$2,405/acre for these areas. The funds shall be placed into a designated account and utilized for the acquisition of conservation habitat within the Antelope Valley.

6. A pre-construction burrowing owl clearance survey shall be conducted no more than 30 days prior to any vegetation removal or ground disturbing activities to avoid impacts to burrowing owls and/or occupied burrows. The pre-construction clearance survey shall be conducted by a qualified biologist and in accordance with the methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Documentation of surveys and findings shall be submitted to the City of Lancaster for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures shall be required.

If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a “no-disturbance” buffer around the burrow location(s). The size of the “no-disturbance” buffer shall be determined in consultation with CDFW and be based on the species status (i.e., breeding, non-breeding) and proposed level of disturbance. If an occupied burrow is found within the development footprint and cannot be avoided, a burrowing owl exclusion and mitigation plan shall be prepared and submitted to CDFW for approval prior to initiating project activities.

- b. A jurisdictional delineation for the project site was prepared by Michael Baker International and documented in a report entitled “Delineation of State and Federal Jurisdictional Waters for Planning Case #SPR 23-004, located in the City of Lancaster, Los Angeles County, California” and dated June 1, 2023. The field work for the delineation was conducted on March 9, 2023 and April 5, 2023 using agency-approved methodology to identify and map jurisdictional limits on the project site.

Standing water was observed within the project site; however, no flowing water was observed. Standing water was present sporadically throughout the project area in areas that collected enough water to form various small ponds. Evidence of flow in the form of mud cracks was observed within the project area. No U.S. Army Corps of Engineers jurisdictional features were identified within the project site.

Although no identified creek flows through the project site, 1.77-acre of ponded water and evidence of ponded water, was noted in throughout the study area. These aquatic areas (non-wetland) would be regulated by the Regional Board as non-wetland waters of the State and any impacts to the jurisdictional areas would be subject to approval pursuant to the Porter-Cologne Act. A Report of Waste Discharge (WDR) would be required should impacts occur within the Regional Board’s jurisdiction. Additionally, any alteration occurring with CDFW jurisdiction would require a Section 1602 Lake or Streambed Alteration Agreement (LSAA) prior to commencement of construction activities.

### Mitigation Measures

7. Prior to the issuance of any grading or construction permits, the applicant shall obtain a Section 1602 Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife and notify the Regional Water Quality Control Board pursuant to Porter-Cologne to obtain a Report of Waste Discharge.
8. Mitigation for the loss of jurisdictional water shall be determined through consultation between the applicant, Regional Water Quality Control Board and the California Department

of Fish and Wildlife. This mitigation could include a combination of preserving existing jurisdictional waters within the project footprint, acquiring and conserving additional lands containing jurisdictional waters, and/or purchasing mitigation credits through an approved mitigation bank. Specific mitigation has not yet been identified, although it is expected to be identified through coordination with CDFW and RWQCB either during the permitting process or potentially through early coordination with those agencies.

- c. There are no State or federally protected wetlands on the project site as defined by Section 404 of the Clean Water Act. Therefore, no impacts would occur.
- d. 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.

Although the project area is undisturbed, with open areas located directly adjacent to the site's southern, eastern, and northern boundaries, wildlife movement into or out of the project site is likely reduced by the presence of surrounding roadways and the adjacent airfield (i.e., Avenue G, 45th Street West) and existing industrial developments to the north and west, which have fragmented the connection between the project site and naturally occurring vegetation communities. Although the project site is connected to native desert scrub habitat to the east, vehicle roadway/traffic, airline noise/disturbance, lighting, and presence of humans further decrease the suitability of the project site to serve as a significant wildlife movement corridor or linkage. Additionally, the project site is not located within any designated wildlife corridor. Therefore, impacts would be less than significant.

- e. The proposed project would not conflict with any local policies or ordinances, such as a tree preservation policy, protecting biological resources. The proposed project would be subject to the requirements of Ordinance No. 848, Biological Impact Fee, which requires the payment of \$770/acre to offset the cumulative loss of biological resources in the Antelope Valley as a result of development. This fee is required of all projects occurring on previously undeveloped land regardless of the biological resources present and is utilized to enhance biological resources through education programs and the acquisition of property for conservation. Therefore, no impacts would occur.
- f. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans which are applicable to the project site. The West Mojave Coordinated Habitat Conservation Plan only applies to federal land, specifically land owned by Bureau of Land Management. In conjunction with the Coordinated Management Plan, a Habitat Conservation Plan (HCP) was proposed which would have applied to all private properties within the Plan Area. However, this HCP was never approved by the California Department of Fish and Wildlife nor was it adopted by the local agencies (counties and cities) within the Plan Area. As such, there is no HCP that is applicable to the project site and no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V. <u>CULTURAL RESOURCES</u> . Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resources pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				X

a-c. A cultural resources report was previously prepared for the project site by CRM Tech. The results were documented in a report entitled “Historical/Archaeological Resources Survey Report, G40 Lancaster Project, Assessor’s Parcel Numbers 3105-001-011 through -014, City of Lancaster, Los Angeles County, California” and dated April 13, 2020. As part of this survey a detailed records search and field survey of the project site was conducted.

The records search was conducted at the South Central Coastal Information Center on February 26, 2020. The records search determined that small portions of the project site had been surveyed by previous studies; however, the entirety of the site had not been covered. Within one-mile of the site, 10 previous surveys had been conducted, but no cultural resources had been identified. On March 13, 2018, a survey of the project site was conducted by walking north-south pedestrian transects spaced 15 meters apart. No archaeological or historic cultural resources were identified on the project site.

As part of the due diligence for this project, the previously prepared report was peer reviewed and found to be adequate as documented in the memorandum prepared by Michael Baker International (Cultural and Paleontological Resources Identification Memorandum for the SPR 23-004 Project, City of Lancaster, Los Angeles County, California; May 18, 2023). The memorandum also addressed paleontological resources which is discussed in Section VII.f. No human remains, including those interred outside of formal cemeteries, were identified on the project site. Therefore, no impacts would occur.

While no specific tribal or cultural resources have been identified, the AB 52 process is still underway with the Fernandeno Tataviam Band of Mission Indians. Any requested mitigation measures will be added to the conditions of approval which could include Native American monitoring during construction activities. Additionally, mitigation measures have been included which outline the procedures to be followed in the event of accidental discovered of a cultural resource. With the mitigation measures identified, impacts would be less than significant.

Mitigation Measures

9. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall assess the find. Work on the portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Fernandeno Tataviam Band of Mission Indians and the San Manuel Band of Mission Indians shall be contacted regarding any pre-contact and/or post-contact historic era finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.
10. In the event that cultural resources are discovered during project activities, and the find deemed to be significant as defined by CEQA (as amended, 2015), the applicant shall retain a professional Native American monitored procured by the Fernandeno Tataviam Band of Mission Indians to observe all remaining ground-disturbing activities including, but not limited to, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, clearing, driving posts, auguring, blasting, stripping topsoil or similar activity and archaeological work. (This measure may be modified pending conclusion of the AB 52 process).
11. The applicant shall, in good faith, consult with the Fernandeno Tataviam Band of Mission Indians and the San Manuel Band of Mission Indians on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.
12. If human remains or funerary objects are encountered during any construction activities associated with the proposed project, work within 100-foot buffer shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5.
13. If significant Native American resources are discovered and avoidance cannot be ensured a Secretary of Interior qualified archaeologist shall be retained to develop a cultural resource Treatment Plan, as well as a Discovery and Monitoring Plan. A copy of the draft document shall be provided to the appropriate tribe(s) for review and comment. All in field investigation, assessment and/or data recovery pursuant to the Treatment Plan shall be monitored by a Tribal Monitor. Additionally, the applicant and the City of Lancaster shall consult with the appropriate tribe(s) on the discussion and treatment of any artifacts or other cultural materials encountered during the project.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI. <u>ENERGY</u> . Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficient?			X	

a. Project construction 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 used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, 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. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption.

Substantial reduction 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 non-recycled materials. The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials.

The proposed project would consume energy for interior and exterior lighting, heating/ventilation and air conditioning (HVAC), refrigeration, electronics systems, appliances, and security systems, among other things. The proposed project would be required to comply with Title 24 Building Energy Efficiency Standards, 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 Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider is subject to California’s Renewables Portfolio Standard (RPS). The RPS requires investor owned utilities electric service provides, and community choice aggregators (CCA) to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 50 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 project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards, as well as the project's design features and as such the project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Therefore, no impacts would occur.

Additionally, an energy assessment was prepared for the proposed project by Michael Baker International and documented in a report entitled "Energy Assessment, SPR 23-004, Lancaster, California" and dated May 31, 2023. This technical report provides additional information on regulatory requirements with respect to reductions in energy consumption and provides an estimate of the energy requirements for the building. The proposed distribution facility is anticipated to require approximately 3,857 megawatt hours (MWh) of electricity per year. This electricity demand would be satisfied through a variety of sources including the installation of solar and battery storage to the extent practicable. Therefore, impacts would be less than significant.

- b. In 1978, the California Energy Commission (CEC) established Title 24, California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. The 2016 standards went into effect on January 1, 2017 and substantially reduce electricity and natural gas consumption. Additional savings result from the application of the standards on building alterations such as cool roofs, lighting, and air distribution ducts.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. An updated version of both the California Building Code and the CalGreen Code went into effect on January 1, 2023.

In 2014, the City of Lancaster created Lancaster Choice Energy (LCE), allowing residents and businesses in Lancaster to choose the source of their electricity, including an opportunity to opt up to 100% renewable energy. SCE continues to deliver the electricity and provide billing, customer service and powerline maintenance and repair, while customers who choose to participate in this program, would receive power from renewable electric generating private-sector partners at affordable rates.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VII. <u>GEOLOGY AND SOILS</u> . Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
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?			X	
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?			X	
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

- a. The project site is not identified as being in or in proximity to a fault rupture zone (LMEA Figure 2-5). According to the Seismic Hazard Evaluation of the Lancaster East and West Quadrangles, the project site may be subject to intense seismic shaking (LMEA pg. 2-16). However, the

proposed project would be constructed in accordance with the seismic requirements of the Uniform Building Code (UBC) adopted by the, which would render any potential impacts to a less than significant level. The site is generally level and is not subject to landslides (SSHZ).

Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other events. This phenomenon occurs in saturated soils that undergo intense seismic shaking typically associated with an earthquake. There are three specific conditions that need to be in place for liquefaction to occur: loose granular soils, shallow groundwater (usually less than 50 feet below ground surface) and intense seismic shaking. In April 2019, the California Geologic Survey updated the Seismic Hazard Zones Map for Lancaster (SSHZ) (<https://maps.conservation.ca.gov/cgs/EQZApp/app/>). Based on these maps, the project site is not located in an area at risk for liquefaction. No impacts would occur.

- b. The project site is rated as having a low risk for soil erosion (USDA SCS Maps) when cultivated or cleared of vegetation. However, there remains a potential for water and wind erosion during construction. The proposed project would be required, under the provisions of the Lancaster Municipal Code (LMC) Chapter 8.16, to adequately wet or seal the soil to prevent wind erosion. Additionally, with implementation of the mitigation measure identified below, impacts would be less than significant.

#### Mitigation Measures

- 14. The applicant shall submit the required Construction Excavation Fee to the Antelope Valley Air Quality Management District (AVAQMD) prior to the issuance of any grading and/or construction permits. This includes compliance with all prerequisites outlined in District Rule 403, Fugitive Dust, including submission and approval of a Dust Control Plan, installation of signage and the completion of a successful onsite compliance inspection by an AVAQMD field inspector. Proof of compliance shall be submitted to the City.
- c. Subsidence is the sinking of the soil caused by the extraction of water, petroleum, etc. Subsidence can result in geologic hazards known as fissures. Fissures are typically associated with faults or groundwater withdrawal, which result in the cracking of the ground surface. According to Figure 2-3 of the City of Lancaster's Master Environmental Assessment, the closest sinkholes and fissures to the project site are located in the vicinity of 50th Street West and Avenue G. However, the project site is not known to be within an area of subject to sinkholes, subsidence (LMEA Figure 2-3) or any other form of soil instability. The proposed project would be required to have a geotechnical study prepared and all recommendations followed as part of the building permit process. These recommendations would ensure that any impacts associated with forms of soil instability would be less than significant. For a discussion of potential impacts regarding liquefaction, please refer to Item VI.a.
- d. The soil on the project site is characterized by a low shrink/swell potential (LMEA Figure 2-3), which is not an expansive soil as defined by Table 18-1-B of the Uniform Building Code. A soils report on the soils within the project site shall be submitted to the City by the project developer prior to grading of the property and the recommendations of the report shall be incorporated into the development of the property. Therefore, impacts would be less than significant.

- e. The proposed project would be tied into the sanitary sewer system. No septic or alternative means of waste water disposal are part of the proposed project. Therefore, no impacts would occur.
- f. The Natural History Museum of Los Angeles County conducted a records search for locality and specimen data for paleontological resources and provided a letter to Michael Baker with the results on February 26, 2023. The records search showed no previously identified fossil localities within the project site; however fossil localities from similar sedimentary deposits have occurred nearby. This information is documented in the Cultural and Paleontological Resources Identification Memorandum prepared for the proposed project.

The paleontological records search and fossil locality searches of online databases did not identify any paleontological resources within the project site. However, localities have been found at shallow depths and near the project site from rock formations similar to those underlying the project, including one locality with several mammal, reptile, and fish fossils. Per mitigation impact guidelines set forth by the Society of Vertebrate Paleontology (SVP 2010), due to the fossil sensitivity of the rock formations present within the project site (younger playa deposits of Holocene to late Pleistocene age), the project has a high potential to disturb paleontological resources within undisturbed bedrock.

#### Mitigation Measures

- 15. The contractor shall retain a Society of Vertebrate Paleontology (SVP) qualified paleontologist to provide or supervise a paleontological sensitivity training to all personnel planned to be involved with earth-moving activities, prior to the beginning of ground-disturbing activities. The training session shall focus on how to identify paleontological localities such as fossils that may be encountered and the procedures to follow if identified.
- 16. Prior to grading or excavation in sedimentary rock material other than topsoil, the contractor shall retain an SVP-qualified paleontologist to monitor these activities.

If any paleontological resources are encountered during construction or the course of any ground-disturbance activities, all such activities shall halt immediately. At this time, the applicant shall notify the City of Lancaster and consult with a qualified paleontologist to assess the significance of the find. The assessment will follow SVP standards as delineated in the *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (2010). If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined to be infeasible by the City. If avoidance is infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. The recommendations of the qualified paleontologist shall be implemented with respect to the evaluation and recovery of fossils, after which the on-site construction supervisor shall be notified and shall direct work to continue in the location of the fossil discovery. Any fossils recovered during mitigation shall be cleaned, identified, catalogued, and permanently curated with an accredited and permanent scientific institution with a research interest in the materials.

If no fossils have been recovered after 50 percent of excavation has been completed, full-time monitoring may be modified to weekly spot-check monitoring at the discretion of the qualified paleontologist. The qualified paleontologist may recommend to the client to reduce paleontological monitoring based on observations of specific site conditions during initial monitoring (e.g., if the geologic setting precludes the occurrence of fossils). The recommendation to reduce or discontinue paleontological monitoring in the project site shall be based on the professional opinion of the qualified paleontologist regarding the potential for fossils to be present after a reasonable extent of the geology and stratigraphy has been evaluated.

A qualified professional paleontologist is a professional with a graduate degree in paleontology, geology, or related field, with demonstrated experience in the vertebrate, invertebrate, or botanical paleontology of California, as well as at least one year of full-time professional experience or equivalent specialized training in paleontological research (i.e., the identification of fossil deposits, application of paleontological field and laboratory procedures and techniques, and curation of fossil specimens), and at least four months of supervised field and analytic experience in general North American paleontology as defined by the SVP.

17. If the fossils are determined to be significant, then the SVP-qualified paleontologist shall prepare and implement a data recovery plan. The plan shall include the following measures at a minimum:
  - The paleontologist shall ensure that all significant fossils collected are cleaned, identified, catalogued, and permanently curated with an appropriate institution with a research interest in the materials (which may include the Natural History Museum of Los Angeles County);
  - The paleontologist shall ensure that specialty studies are completed, as appropriate, for any significant fossil collected; and
  - The paleontologist shall ensure that curation of fossils is completed in consultation with the City of Lancaster. A letter of acceptance from the curation institution shall be submitted to the City of Lancaster.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII. <u>GREENHOUSE GAS EMISSIONS</u> . Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

- a. A greenhouse gas study was conducted by Michael Baker International for the proposed project and documented in a report entitled “ Greenhouse Gas Emissions Assessment, SPR 23-004, Lancaster, California” and dated May 31, 2023.

Direct project-related greenhouse gas (GHG) emissions include emissions from construction activities, area sources, mobile sources, and refrigerants, while indirect sources include emissions from energy consumption, water demand, and solid waste generation. The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate direct and indirect project related GHG emissions and are summarized in Table 10. As shown in Table 10, the combined direct and indirect GHG emissions would total 3,756 MTCO<sub>2</sub>e per year (4,140 tons CO<sub>2</sub>e per year). This is less than the AVAQMD threshold of 100,000 tons per year and impacts would be less than significant.

- b. The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The 2022 Scoping Plan provides measures to achieve Senate Bill (SB) 32 targets and the SCAG RTP/SCS contains measures to achieve VMT reductions required under SB 375. An analysis of the project’s consistency with the scoping plan is found in Table 11 while the RTP/SCS is discussed in the land use section.

Additionally, the City of Lancaster’s Climate Action Plan was adopted in March 2017. This plan identifies projects that would enhance the City’s ability to further reduce GHG emissions. A total of 61 projects across eight sectors were identified which include 1) traffic; 2) energy; 3) municipal operations; 4) water; 5) waste; 6) built environment; 7) community and 8) land use. Forecasts for both community and government operations were prepared for 2020, 2030, 2040, and 2050. Under all scenarios assessed, the City meets the 2020 target and makes substantial progress towards achieving post-2020 reductions.

**Table 10**  
**Estimated Greenhouse Gas Emissions**

Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	CO <sub>2</sub> e
	Metric Tons/Year <sup>1</sup>				
<b>Direct Emissions</b>					
Construction (amortized over 30 years) <sup>2</sup>	34.67	<0.01	<0.01	0.04	35.37
Mobile Source	2,083.00	0.05	0.23	3.37	2,155.00
Area Source	9.45	<0.01	<0.01	0.00	9.48
Refrigerants	0.00	0.00	0.00	0.02	0.02
Stationary Source	28.20	<0.01	<0.01	0.00	28.30
Total Direct Emissions <sup>2</sup>	2,155.32	0.05	0.23	3.43	2,228.17
<b>Indirect Emissions</b>					
Energy <sup>3</sup>	1,077.00	0.06	0.01	0.00	1,081.00
Water	259.00	4.34	0.10	0.00	399.00
Solid Waste	13.60	1.36	0.00	0.00	47.40
Total Indirect Emissions <sup>2</sup>	1,349.60	5.76	0.11	0.00	1,527.40
<b>Total Project Emissions (metric tons/year)</b>	<b>3,756 MTCO<sub>2</sub>e/year</b>				
<b>Total Project Emissions (tons/year)<sup>4</sup></b>	<b>4,140 tons CO<sub>2</sub>e/year</b>				
AVAQMD GHG Threshold	100,000 tons CO <sub>2</sub> e/year				
Notes:					
1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.					
2. Totals may be slightly off due to rounding.					
3. The project would not consume natural gas.					
4. Total project related GHG emissions was converted from metric tons of CO <sub>2</sub> e per year to tons of CO <sub>2</sub> e per year to compare to AVAQMD's GHG threshold. Source: U.S. Environmental Protection Agency, <i>Greenhouse Gas Equivalencies Calculator</i> , <a href="http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator">http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</a> , accessed May 23, 2023.					

**Table 11  
 Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors**

Actions and Strategies	Project Consistency Analysis
<b>Smart Growth/Vehicle Miles Traveled (VMT)</b>	
Reduce VMT per capita to 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	<b>Consistent.</b> The project would provide bicycle parking spaces and EV parking spaces, which would promote alternative modes of transportation to reduce VMT. Additionally, the project would pay the City’s VMT Impact Fee.
<b>New Residential and Commercial Buildings</b>	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030.	<b>Consistent.</b> The project would install energy efficient appliances, utilize water-efficiency irrigation, and install drought-tolerant landscape. According to the project Applicant, the project would be part of a nation-wide Leadership in Energy and Environmental Design (LEED) volume program which ensures all newly constructed buildings (by the project Applicant) are LEED-certified.
<b>Non-Combustion Methane Emissions</b>	
Divert 75% of organic waste from landfills by 2025	<b>Consistent.</b> SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The proposed project would have separate compactors for recycling, trash, and organics.

The proposed project would also be in compliance with the greenhouse gas emission goals and policies identified in the City of Lancaster’s General Plan (pgs. 2-19 to 2-24) and with the City’s Climate Action Plan. Specifically, the proposed project would be consistent with the following measures identified in the climate action plan. Therefore, impacts would be less than significant.

Energy

- Measure 4.2.1a: Renewable Energy Purchase Plan – All development receives its power from Lancaster Choice Energy unless the entity chooses to opt out. The standard mix provides power that is 35% renewable while customers can upgrade to the 100% renewable energy plan.

- Measure 4.2.1d: Battery Storage – Behind the Meter – The applicant will be utilizing a variety of power sources including solar and battery storage to ensure the availability of power for the facility.

#### Water

- Measure 4.4.2a: Sensor Technology – Water saving irrigation will be installed with landscaping on the project site. Different types of technology are available for the irrigation systems and it is possible that the developer will utilize sensor technology if it is the most effect for the type of landscaping being installed.

#### Waste

- Measure 4.5.1b: Recycling Incentives – Compactor facilities will be located at the docks to separate waste into trash, recycling and organics.

#### Community

- Measure 4.7.3a: Xeriscaping – All landscaping within the development would be native and/or drought tolerate in accordance with the City's Municipal Code.
- Measure 4.7.4c: Conservation Habitat Acquisition – All development projects are required to pay a Biological Impact Fee (\$770/acre) to offset the overall loss of biological resources within the Antelope Valley. This fee is utilized to fund the acquisition of habitat which is placed under a conservation easement. The proposed development would be required to pay approximately \$29,260.

Therefore, impacts with reflect to conflicts with an agency's plan, policies, or regulations would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. <u>HAZARDS AND HAZARDOUS MATERIALS.</u> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

a-b. The proposed project consists of the construction and operation of a 647,000 square foot industrial warehouse and distribution facility. In addition to the building, the project site would be improved with parking areas, drainage basins, and landscaping. The building would be of concrete tilt-up construction and typical construction materials would be utilized during the development of the proposed project. The Antelope Valley Freeway is designated as a hazardous materials transportation corridor (LMEA p. 9.1-4 and Figure 9.1-4). However, the project site is

approximately 2.5 miles west of the freeway and is not likely to be impacted by accidents on the freeway. All project operations would be in accordance with applicable regulations. Development of the project site would not involve the demolition of any structures and therefore, would not expose individuals or the environment to asbestos containing materials or lead-based paint. Therefore, impacts would be less than significant.

- c. The project site is not located within a quarter mile of an existing or proposed school. The closest school to the project site is Desert View Elementary School located at 1555 West Avenue H-10. This is approximately two miles southeast of the project site. Additionally, the proposed project would not emit hazardous emissions or handle hazardous/ acutely hazardous materials, substances, or waste. Therefore, no impacts would occur.
- d. A Phase I Environmental Site Assessment was prepared for the project site by Michael Baker International and documented in a report entitled "Phase I Environmental Site Assessment, SPR 23-004, Assessor's Parcel Numbers 3105-001-011 through -014, Lancaster, California" and dated April 19, 2023.

A survey of the project site and immediately adjoining properties was conducted on March 9, 2023. The property consists of undeveloped vacant land. No structures or paved roads are located on the subject property; however, portions of the site appear to have unpaved trails. Fencing was observed along the northern property line. During the survey no leaking or staining, above ground/under ground storage tanks, spills, polychlorinated biphenyls, wells, sewage disposal, drains, sumps, pits, ponds, or lagoons were observed on the project site. No indication of on-site solid waste disposal practices were observed; however, miscellaneous trash and debris was noted throughout the project site. Therefore, no recognized environmental concerns were observed on the project site.

Adjoining uses include vacant land, transportation uses, industrial uses, and the California National Guard Armory. Nothing was noted with cause for environmental concern. One off-site pad mounted transformer was observed near the southwestern corner of the project site. Polychlorinated biphenyls (PCBs) could be associated with the on-site transformer; however, the transformer appears to be in good condition and recently installed. As such, this transformer would not be a recognized environmental concern.

In addition to the site survey, a regulatory database search was conducted for the project and the immediately surrounding properties within the specified search distances by EDR. The subject site was not identified on any regulatory database. Six off-site regulatory properties were identified within a one-mile radius of the project site. Although six adjacent properties were listed, no report adjacent regulatory properties have been identified that also present a potential concern to groundwater underlying the project site. Reported adjacent regulatory properties are considered to have a low potential of affecting the project site for one or more of the following reasons: distance from the subject property, direction of anticipated groundwater flow, site status, and/or no contamination has been reported. Therefore, no impacts would occur.

- e. The project site is located within the boundaries of the General William J Fox Airfield Land Use Compatibility Plan. Within the plan, the project site is located in Zone D.

Zone D is designated “Primary Traffic Patterns” and prohibits hazards to flight (e.g., tall objects, visual/electronic forms of interference, increase in birds, etc.) and requires a deed notice. However, industrial uses are not prohibited and the project would not require an airspace review as the building is not over 100 feet. The project would also not exceed the maximum number of people per acre (300 people per single acre; 150 people average) as it is a distribution facility that is anticipated to employ approximately 242 individuals.

While employees and visitors to the site may notice an increase in noise when aircraft are taking off or landing, it is not likely to disrupt any project-related operations as all operations would occur inside the building. Therefore, impacts would be less than significant.

- f. Access to the project site would be taken from 45<sup>th</sup> Street West and Avenue G. Avenue G and 45<sup>th</sup> Street West are already improved roadways and the proposed project would add any improvements necessary to meet current standards. Neither 45<sup>th</sup> Street West nor Avenue G are identified as evacuation routes. However, the Antelope Valley Freeway (State Route 14) is designated as an evacuation route. Based on the traffic study prepared for the proposed project, the development is expected to generate approximately 892 daily trips with a mix of employee/visitor vehicles and large trucks. This amount of traffic is not anticipated to cause any operational or safety issues at any of the area intersections and the freeway can handle the increase in the traffic volumes. However, the proposed project would be condition to install any necessary improvements to ensure the smooth, efficient and safe operation of the surrounding roadways. Therefore, the proposed project would not impact or physically block any identified evacuation routes and would not interfere with any adopted emergency response plan.
- g. The property surrounding the project site is undeveloped and could be subject to vegetation fires. However, the project site is located within the boundaries of Fire Station No. 130, located at 44558 40<sup>th</sup> Street West. This fire station would serve the project site in the event of a fire with additional support available from other fire stations. Therefore, impacts from wildland fires would be less than significant.

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

- a. The project site is not located in the immediate vicinity of an open body of water or in an aquifer recharge area. The small lake at Apollo Park is located approximately 0.25 miles to the northeast and the Amargosa Creek (desert wash) is located approximately 2.5 miles to the east on the eastern side of the Antelope Valley Freeway. The proposed project would be required to comply

with all applicable provisions of the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program establishes a comprehensive storm water quality program to manage urban storm water and minimize pollution of the environment to the maximum extent practicable. The reduction of pollutants in urban storm water discharge through the use of structural and nonstructural Best Management Practices (BMPs) is one of the primary objectives of the water quality regulations. BMPs that are typically used to management runoff water quality include controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (grass swales, infiltration trenches and grass filter strips) into landscaping and implementing educational programs. The proposed project would incorporate appropriate BMPs during construction, as determined by the City of Lancaster Development Services Department. Therefore, impacts would be less than significant.

The proposed project consists of the construction of a 647,000 square foot industrial warehouse/distribution facility. The proposed project would contain a two drainage basins, and landscaping would be provided around the perimeter of the site and throughout the parking areas. Additionally, the proposed project would comply all applicable rules and regulations regarding wastewater and would be registered with the Sanitation District as an industrial wastewater generator. As such the proposed project would not violate water quality standards and impacts would be less than significant.

- b. The proposed project would not include any groundwater wells or pumping activities. All water supplied to the proposed project would be obtained from Los Angeles County Waterworks, District 40 upon annexation. Therefore, impacts would be less than significant.
- c. Development of the proposed project would increase the amount of surface runoff as a result of impervious surfaces associated the paving of the parking areas and the construction of the buildings. The proposed project would be designed, on the basis of a hydrology study, to accept current flows entering the property and to handle the additional incremental runoff from the developed sites. Therefore, impacts from drainage and runoff would be less than significant.

The project site is designated as Flood Zone X per the Flood Insurance Rate Map (FIRM) (06037C0405F). Flood Zone X is located outside of both the 100-year flood zone and the 500-year flood zone. Therefore, impacts would be less than significant.

- d. The project site is not located within a coastal zone. Therefore, tsunamis are not a potential hazard. The project site is relatively flat and does not contain any enclosed bodies of water and is not located in close proximity to any large bodies of water. Apollo Park contains a small lake which is located approximately 0.25 miles to the northeast. In the event of an earthquake, it is not anticipated that the lake would create a seiche that would impact the project site. Additionally, the project site would not be subject to mudflows. Therefore, no impacts would occur.
- e. The proposed project would not conflict with or obstruct the implementation of the applicable water quality control plan or sustainable groundwater management plan. For additional information, see responses X.a through X.c. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI. <u>LAND USE AND PLANNING</u> . Would the project:				
a) Physically divide an established community?				X
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?		X		

- a. The proposed project consists of the construction and operation of a 647,000 square foot industrial warehouse/distribution facility on approximately 38 acres. The project site is located within the Fox Field Specific Plan area which is designated for a mix of industrial type uses. The western and southern property boundaries are formed by 45<sup>th</sup> Street West and Avenue G, respectively. The property to the north is developed with the California National Guard Armory. The property to the east, south, and a portion of the property to the west is undeveloped. The remainder of the property to the west is developed with a small industrial business park with several industrial businesses. The proposed project would not block a public street, trail, or other access route or result in a physical barrier that would divide the community. Therefore, no impacts would occur.
- b. The proposed project is consistent with the City’s General Plan and the Fox Field Specific Plan (SP 95-02) and must be in conformance with the Lancaster Municipal Code. Table 12 provides a consistency analysis of the proposed project with respect to the relevant goals, objectives, and policies of the General Plan. The proposed project will be in compliance with the City-adopted Uniform Building Code (UBC) and erosion control requirements (Section VII). Additionally, as noted Section IV, the project site is not subject to and would not conflict with a habitat conservation plan or natural communities conservation plan. As the proposed project does not involve the provision of housing nor is housing permitted under the specific plan or light industrial zoning, a consistency analysis with the Housing Element was not conducted.

**Table 12  
General Plan Consistency Analysis**

<b>Goals, Objectives and Policies</b>	<b>Consistency Analysis</b>
<b>Policy 3.1.1:</b> Ensure that development does not adversely affect the groundwater supply.	No groundwater pumping will occur as part of the proposed project. All water supplied to the development will be provided by Los Angeles County Waterworks District #40 upon annexation in accordance with existing regulations and agreements.
<b>Policy 3.2.1:</b> Promote the use of water conservation measures in the landscape plans of new developments.	The landscaping proposed as part of the project would be aesthetically pleasing and native/drought tolerant in accordance with the City of Lancaster’s Municipal Code, Section 8.50 and the requirements of the Fox Field Specific Plan.
<b>Policy 3.2.5:</b> Promote the use of water conservation measures in the design of new developments.	The proposed facility will be designed and constructed in compliance with the Uniform Building Code and the California Green Building Code which include water conservation requirements.
<b>Policy 3.3.1:</b> Minimize the amount of vehicular mile traveled.	The proposed development will provide another source of jobs for the local economy. This will allow residents to work in the Antelope Valley instead of commuting to the Los Angeles basin for work. This would reduce the amount of VMT generated for work-based trips. Additionally, the project would pay the City’s VMT Mitigation Impact Fee to reduce their VMT impacts. This fee would be utilized to install alternative transportation improvements within the City.
<b>Policy 3.3.2:</b> Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.	The proposed project would install bicycle parking for employees and visitors. Additionally, site improvements along Avenue G and 45 <sup>th</sup> Street West would assist in making the area more pedestrian friendly.
<b>Policy 3.3.3:</b> Minimize air pollutant emissions by new and existing development.	The proposed project could comply with all air district regulations regarding air emissions and dust control. Mitigation has been included to reduce the daily ROG emissions during construction, minimize dust and ensure all equipment is properly permitted. All emissions associated with the construction and operation of the project would be less than significant with mitigation.

<p><b>Policy 3.4.2:</b> Preserve significant desert wash areas to protect sensitive species that utilize these habitat areas.</p>	<p>As discussed in the biological resources section, the project site contains approximately 1.77 acres of potential jurisdictional waters and may provide habitat for some special status plant species. Mitigation measures have been identified which would reduce impacts to less than significant levels.</p>
<p><b>Policy 3.4.4:</b> Ensure that development proposals, including City sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.</p>	<p>Section IV of this initial study discusses the biological resources on the project site and identifies mitigation measures to ensure impacts to these resources are less than significant.</p>
<p><b>Policy 3.5.1:</b> Minimize erosion problems resulting from development activities.</p>	<p>The proposed project will comply with all dust control and erosion measures. These include best management practices as identified in NPDES and the air quality regulations pertaining to dust control.</p>
<p><b>Policy 3.5.2:</b> Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring, and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movements.</p>	<p>A geotechnical study is required to be prepared by a registered professional engineer and submitted to the City as part of the grading and building plans. All recommendations within the study are required to be followed.</p>
<p><b>Policy 3.6.1:</b> Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.</p>	<p>The proposed project would be built in an area that has been designated for industrial type uses. It would provide additional job opportunities for local residents which would reduce the amount of energy consumed on transportation.</p>
<p><b>Policy 3.6.2:</b> Encourage innovate building, site design, and orientation techniques which minimize energy use.</p>	<p>The proposed project would be constructed in accordance with the Uniform Building Code and the California Green Building Code. To the extent feasible solar and battery storage would be incorporated onto the building.</p>
<p><b>Policy 3.6.3:</b> Encourage the incorporation of energy conservation measures in existing and new structures.</p>	<p>The proposed project would be constructed in accordance with the Uniform Building Code and the California Green Building Code. To the extent feasible solar and battery storage would be incorporated onto the building.</p>
<p><b>Policy 3.6.6:</b> Consider and promote the use of alternative energy such as wind energy and solar energy.</p>	<p>The proposed project would obtain its energy from Lancaster Choice Energy which provides energy from a variety of sources including wind and solar. Additionally, the proposed project would install solar panels and battery storage on the building to the extent feasible.</p>
<p><b>Policy 3.8.1:</b> Preserve views of surrounding</p>	<p>The proposed project would not block the</p>

<p>ridgelines, slope areas and hilltops, as well as other scenic vistas.</p>	<p>views of any scenic resources availability from the project site. Additionally, landscaping would installed around the perimeter of the site to help screen the loading docks from public view.</p>
<p><b>Policy 4.3.1:</b> Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.</p>	<p>The proposed development meets the noise standards of the City’s General Plan. Additionally, the closest sensitive noise receptor is Apollo Park located approximately 1,520 feet to the northeast.</p>
<p><b>Policy 4.3.3:</b> Ensure that the provision of noise attenuation does not create significant negative visual impacts.</p>	
<p><b>Policy 4.4.2:</b> Limit the uses surrounding airport facilities at Fox Field, Edwards Air Force Base, and Plant 42 to ensure their continued safe operation.</p>	<p>The proposed project is located within the boundaries of the Fox Field Airport Land Use Plan. The project complies requirements of the Land Use Plan and would not impact the operation of the Fox Field airfield.</p>
<p><b>Policy 4.5.1:</b> Ensure that activities within the City of Lancaster transport, use, store, and dispose of hazardous materials in a responsible manner which protects the public health and safety.</p>	<p>The proposed project would utilize common hazardous materials during its construction and operations including oils/lubricants, pesticides, cleaning agents, etc. All use would be in accordance with applicable rules and regulations. Additionally, no fueling operations would take place on the project site.</p>
<p><b>Policy 4.7.2:</b> Ensure that the design of new development minimizes the potential for fire.</p>	<p>The proposed project would be developed in accordance with all applicable fire code regulations. Additionally, fire hydrants would be installed both on/off site and the site is within the service boundaries of several fire stations.</p>
<p><b>Policy 9.1.2:</b> Maintain ongoing, open communication with area school districts, and take a proactive role to ensure that communication is maintained.</p>	<p>All projects are routed to the appropriate school districts for review to ensure that they can adequately provide for any new students as a result of development projects.</p>
<p><b>Policy 14.1.1:</b> Design the City’s street system to serve both the existing population and future residents.</p>	<p>The proposed project would improve both 45<sup>th</sup> Street West and Avenue G to meet the requirements established by the City of Lancaster and the Fox Field Specific Plan.</p>
<p><b>Policy 14.1.4:</b> Encourage the design of roads and traffic controls to optimize the safe traffic flow by minimizing turning movements, curb parking, uncontrolled access, and frequent stops.</p>	<p>Both 45<sup>th</sup> Street West and Avenue G would be fully improved to meet the amount of traffic utilizing these roadways. Additionally, the project would provide adequate parking on the project site.</p>
<p><b>Policy 14.2.2:</b> Manage the City’s roadway network so that it is aesthetically pleasing</p>	<p>The proposed project would install enhanced landscaping in a between Avenue G and the</p>

through the development and maintenance of streetscapes.	drainage basin on the project site. Additionally, Avenue G would be improved to have a meandering sidewalk along the project frontage.
<b>Policy 14.5.1:</b> Provide adequate roadways and a support system to accommodate both automobile and truck traffic.	The project site is located along Avenue G and 45 <sup>th</sup> Street West. These roadways would be able to handle the traffic generated by the proposed project.
<b>Policy 15.1.2:</b> Cooperate with local water agencies to provide an adequate water supply system to meet the standards for domestic and emergency needs.	The proposed project would obtain its water from Los Angeles County Waterworks District 40 upon annexation in accordance with existing regulations and requirements.
<b>Policy 15.3.1:</b> Direct growth to areas with adequate existing facilities and services, areas which have adequate facilities and services committed, or areas where public services and facilities can be economically extended.	The necessary utilities and services to support the proposed project are located within vicinity of the site or can be easily extended to serve the project site.
<b>Goal 16:</b> To promote economic self-sufficiency and a fiscally solvent and financially stable community.	The proposed project would generate approximately 242 new permanent jobs and revenues associated with the construction and operation of the facility.
<b>Policy 16.3.1:</b> Promote development patterns which will minimize the costs of infrastructure development, public facilities development and municipal service cost delivery.	The project site is located within an area that is designated for industrial uses and has the appropriate infrastructure to support those uses.
<b>Policy 17.1.4:</b> Provide for office and industrial based employment-generating lands which are highly accessible and compatible with other uses in the community.	The project site is located within an area that is designated for industrial uses and has the appropriate infrastructure to support those uses. Additionally, the close proximity to the Antelope Valley Freeway makes the project site easily accessible.
<b>Policy 18.2.2:</b> Encourage appropriate development to locate so that municipal services can be efficiently provided.	The project site is located within an area that is designated for industrial uses and has the appropriate infrastructure to support those uses or the infrastructure can be provided.

In addition to the City’s General Plan, the Southern California Association of Governments (SCAG) adopts a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) every five years. On May 7, 2020, SCAG adopted by 2020-2045 RPT/SCS, known as Connect SoCal for federal transportation community purposes only. On September 3, 2020, SCAG adopted Connect SoCal for all other purposes. The RTP/SCS identifies ten regional goals; these goals are identified in Table 13 along with the project’s consistency with these goals.

**Table 13**  
**Connect SoCal Consistency Analysis**

<b>Goals</b>	<b>Consistency</b>
<b>Goal 1:</b> Encourage regional economic prosperity and global competitiveness.	The proposed project is anticipated to generate 242 permanent jobs. This would help support the regional economic property and global competitiveness of the Antelope Valley and surrounding areas.
<b>Goal 2:</b> Improve mobility, accessibility, reliability and travel safety for people and goods.	The project site is approximately 2.5 miles west of the Antelope Valley Freeway along a major arterial. The close proximity to the freeway will facilitate the movement of goods.
<b>Goal 3:</b> Enhance the preservation, security, and resilience of the regional transportation system.	This goal is not applicable to the proposed project.
<b>Goal 4:</b> Increase person and goods movement and travel choices within the transportation system.	The proposed project would provide a distribution facility to increase the ability to move goods within a short period of time. However, the project would not make changes to the existing transportation network.
<b>Goal 5:</b> Reduce greenhouse gas emissions and improve air quality.	The proposed project would provide a warehouse distribution facility in close proximity to potential end users of the goods. It would also create 242 new jobs which would allow individuals to work local instead of community thereby reducing greenhouse gases and improving air quality.
<b>Goal 6:</b> Support health and equitable communities.	This goal is not applicable to the proposed project.
<b>Goal 7:</b> Adapt to a changing climate and support an integrated regional development pattern and transportation network.	See response to Goal 5.
<b>Goal 8:</b> Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	This goal is not applicable to the proposed project.
<b>Goal 9:</b> Encourage development of diverse housing types in areas that are supported by multiple transportation options.	There is no housing associated with the proposed project. This goal is not applicable to the proposed project.
<b>Goal 10:</b> Promote conservation of natural and agricultural lands and restoration of habitats.	This goal is not applicable to the proposed project.

Additionally, the project site is located within the boundaries of the General William J Fox Airfield Land Use Compatibility Plan. Specifically, the project site is located within Zone D of the plan which is designated as Primary Traffic Patterns. The proposed project meets the development requirements of plan. However, to ensure that no conflicts arise from the

development of the proposed project, the mitigation measure identified below requiring coordination with the Los Angeles County Airport Land Use Commission is required. With implementation of the identified mitigation measure, impacts would be less than significant.

Mitigation Measures

18. Prior to the start of construction, the applicant shall consult with the Los Angeles County Airport Land Use Commission to ensure any potential issues associated with the development of the proposed project and the operation of the airport are resolved.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII. <u>MINERAL RESOURCES.</u> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				X

a-b. The project site does not contain any current mining or recovery operations for mineral resources and no such activities have occurred on the project site in the past. According to the LMEA (Figure 2-4 and page 2-8), the project site is designated as Mineral Reserve Zone 3 (contains potential but presently unproven resources). However, it is considered unlikely that the Lancaster area has large valuable mineral and aggregate deposits. Therefore, no impacts to mineral resources would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII. <u>NOISE</u> . Would the project:				
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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?			X	

- a. A noise study was prepared by Michael Baker International to assess the construction and operational noise levels associated with the proposed project. The results of the study were documented in a report entitled “Noise Assessment, SPR 23-004, Lancaster, California” and dated May 31, 2023. As part of the analysis, short-term noise measurements were taken on March 9, 2023 at three locations around the project site. These measurements were taken during off-peak times (9:30 a.m. to 11 a.m.) to provide a more conservative baseline. The locations of the noise reading and the results can be found in Table 14.

**Table 14  
Noise Measurements (dBA)**

Site No.	Location	Leq	Lmin	Lmax	Peak	Start Time
1	Northwest corner of Apollo Park – southern parking lot	52.2	35	68.4	88.1	9:51 a.m.
2	100 feet north of Ave H and 50 <sup>th</sup> St West intersection	57.3	32.3	78.5	68.6	10:23 a.m.
3	90 feet southwest of 60 <sup>th</sup> St and Ave G	57.5	31.4	73.0	87.8	10:48 a.m.

Construction

Construction activities generally are temporary and have a short duration, resulting in periodic increases in the ambient noise environment. Construction activities would occur over approximately 12 months and would include the following phases: excavation, grading, building construction, paving, and architectural coating. Ground-borne noise and other types of construction-related noise impacts would typically occur during the grading phases. Typical noise levels generated by specific types of construction equipment at varying distances from a sensitive receptor are shown in Table 15. These distances were selected to match the distance the closest sensitive receptor (1,520 feet – Apollo Park) and the closest residential use (4,900 feet).

**Table 15  
Maximum Noise Levels Generated by Typical Construction Equipment (dBA)**

Type of Equipment	Acoustical Use Factor <sup>1</sup>	Lmax at		
		50 feet	1,520 feet	4,900
Backhoe	40	78	48	38
Concrete Mixer Truck	40	79	49	39
Concrete Saw	20	90	60	50
Crane	16	81	51	41
Dozer	40	82	52	42
Excavator	40	81	51	41
Forklift	20	75	45	35
Generator	50	81	51	41
Grader	40	85	55	45
Loader	40	79	49	39
Paver	50	77	47	37
Roller	20	80	50	40
Tractor	40	84	54	44
Water Truck	40	75	45	35
General Industrial Equipment	50	85	55	45
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.				

Construction noise levels in the project vicinity would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor’s vicinity. Construction generally occurs in several discrete phases, with each phase requiring different equipment with varying noise characteristics. These phases alter the characteristics of the noise environment generated on the proposed project site and in the surrounding community for the duration of the construction process.

Noise levels depicted in Table 15 represent maximum sound levels (L<sub>max</sub>), which are the highest individual sound occurring at an individual time period. As such, construction noise would not exceed the 80 dBA L<sub>max</sub> noise level limit at nearby sensitive receiver locations. Furthermore, the project would comply with the City's allowable construction hours specified in Municipal Code Section 8.24.040, *Loud, unnecessary and unusual noises prohibited - Construction and Building*, which permits construction activities between 7:00 a.m. to 8:00 p.m. Monday through Sunday. Compliance with the Municipal Code would minimize impacts from construction noise, as construction would be limited to the permitted times. Therefore, a less than significant noise impact would occur with respect to construction noise. However, construction best management practices with respect to noise have been included as mitigation measures below to ensure that impacts remain less than significant.

### Operations

The proposed project would result in some additional traffic on adjacent roadways, thereby potentially increasing vehicular noise in the vicinity of existing and proposed land uses. The most prominent source of mobile traffic noise in the project vicinity is along Avenue G and the Antelope Valley Freeway. According to the California Department of Transportation (Caltrans), a doubling of traffic (100 percent increase) on a roadway would result in a perceptible increase in traffic noise levels (3 dBA). The proposed project is anticipated to generate 892 total daily trips. The proposed project would not double the existing traffic volumes along roadways near the sensitive receptors and an increase in traffic noise along local roadways near the sensitive receptors would be imperceptible. Project-related traffic noise impacts would be less than significant.

Mechanical equipment, slow-moving trucks, back-up alarms for trucks, and parking lot activities would generate noise during on-site operations, which could occur 24-hours per day. These operations would be typical of a distribution/warehousing facility. Between 20 and 40 rooftop HVAC units would be installed on the roof of the building and generate noise levels of 60 dBA at 20 feet from the source.

HVAC units would be installed on the roof of the proposed warehouse building. Specifically, approximately 20 to 40 rooftop HVAC units are proposed on the warehouse building. Typically, mechanical equipment, such as HVAC units, generate noise levels of 60 dBA at 20 feet from the source. Noise generated by stationary sources typically attenuates at a rate of 6 dBA per doubling of distance from the source. Additionally, all roof top equipment would be screened from public view. Based on an attenuation rate, the noise generated by the HVAC units would not be perceptible at the closest sensitive receptors. As such, impacts would be less than significant in this regard.

The predominant noise source during on-site operations would be from on-site truck movements and idling. Typically, slow movements from these trucks can generate a maximum noise level of approximately 79 dBA at 50 feet. The nearest sensitive receptor to the project site is the Apollo Community Regional Park, located approximately 1,520 feet to the northeast of the project site. At this distance, noise levels from slow-moving trucks would be approximately 49 dBA. As such, impacts from truck operations on-site.

148 trailer parking stalls are proposed for the warehouse along the northern and southern project boundaries. In addition, a total of 90 loading docks would be provided along the northern and southern boundaries of the proposed warehouse. Medium- and heavy-duty trucks reversing into truck loading docks and parking stalls would produce noise from back-up alarms (also known as backup beepers). Back-up beepers produce a typical volume of 97 dBA at one meter (i.e., 3.28 feet) from the source. At the closest sensitive receptor, noise from the back-up beepers would be approximately 44 dBA. As such, impacts from back-up beepers would be less than significant.

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-byes may be an annoyance to nearby noise-sensitive receptors. Estimates of the maximum noise levels associated with some parking lot activities are below:

- Car door slamming – 61 dBA Leq
- Car starting – 36 dBA Leq
- Car idling – 56 dBA Leq

The proposed parking lot would have intermittent parking lot noise due to the movement of vehicles. These activities would not be audible at the nearest sensitive receptor. Therefore, noise associated with parking activities would be less than significant.

#### Mitigation Measures

19. Construction operations shall not occur between 8 p.m. and 7 a.m. on weekdays or Saturday or at any time on Sunday. The hours of any construction-related activities shall be restricted to periods and days permitted by local ordinance.
20. The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.
21. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
22. Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far away as practicable from noise-sensitive receptors.
23. The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.
24. No project-related public address or music system shall be audible at any adjacent receptor.
25. All noise producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed

original factor specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors, etc.) shall be equipped with shrouds and noise control features that are readily available for the type of equipment.

- b. Project construction can generate varying degrees of groundborne 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 the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

Construction of the proposed project would occur over approximately 12 months and would include excavation, grading, paving, building construction, and architectural coatings. The highest degree of groundborne vibration would be generated due to the operation of vibratory rollers during the paving phase. As previously mentioned, there are no sensitive receptor buildings located in the immediate vicinity of the project site. However, there is an existing commercial structure located approximately 160 feet west of the project site. Groundborne vibration decreases rapidly with distance. As a result, vibration velocities from the construction equipment would be barely perceptible at this distance. The maximum vibration level during construction would be approximately 0.0002 inch/second PPV to 0.0130 inch/second PPV at 160 feet.<sup>7</sup> As a result, construction groundborne vibration would not be capable of exceeding the 0.50 inch/second PPV significance threshold for vibration to the nearest structures and impacts would be less than significant.

- c. The nearest airport to the project site is the General William J. Fox Airfield, located to the north of the project site. The General William J. Fox Airfield Land Use Compatibility Plan indicates that the project site is located in Zone D, Primary Traffic Patterns. Noise generated by airport operations is not anticipated to affect workers and visitors to the project site as it is sporadic and all activities associated with the proposed project would occur indoors. A more detail analysis of the project's compatibility with the plan can be found in the land use section. As such impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. <u>POPULATION AND HOUSING.</u> Would the project:				
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?				X

a. The proposed project would not generate substantial population growth as the project is an industrial development and does not include residential uses. It is anticipated that the project would generate 242 new permanent jobs. It is possible that individuals could relocate to the Antelope Valley to work at the proposed distribution facility. However, it is much more likely that individuals currently living in the Antelope Valley would be hired to work at the distribution facility. Additionally, the project site is located an area that was planned for industrial development and the jobs, and by extension the population, created by the proposed project is already accounted for in the City's General Plan and regional planning documents.

The proposed development would be accessed from 30th Street West and the roadways in the general vicinity are already improved and no new roadways would be constructed. Therefore, impacts would be less than significant.

b. The project site is currently vacant. No housing or people would be displaced necessitating the construction of replacement housing elsewhere. Therefore, no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV. <u>PUBLIC SERVICES.</u>				
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:				
Fire Protection?			X	
Police Protection?			X	
Schools?			X	
Parks?			X	
Other Public Facilities?			X	

a. The proposed project would increase the need for fire and police services; however, the project site is within the current service area of both these agencies and the additional time and cost to service the site is minimal. The proposed project would not induce substantial population growth and therefore, would not substantially increase the demand on parks, schools or other public facilities. Additionally, this growth has been accounted for in the City's General Plan and within SCAG's population forecasts. Impacts would be less than significant.

Construction of the proposed project may result in an incremental increase in population and may increase the number of students in the Westside School District and Antelope Valley Union High School District. Proposition IA, which governs the way in which school funding is carried out, predetermines by statute that payment of developer fees is adequate mitigation for school impacts. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. <u>RECREATION</u> . Would the project:				
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?			X	
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?			X	

- a-b. The proposed project may generate additional population growth through the creation of new jobs and would contribute on an incremental basis to the use of the existing park and recreational facilities. The proposed project does not involve the construction of any parks or recreational amenities. However, the applicant would be required to pay applicable park fees which would offset the impacts to the existing parks. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. <u>TRANSPORTATION</u> . Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?		X		
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

a. The proposed project would not conflict with any programs, plans, ordinances and policies with respect to transportation systems including, bicycle and pedestrian facilities. The project site is located at the northeast corner of two major roadways, Avenue G and 45th Street West, and in close proximity to the Antelope Valley Freeway (2.5 miles west). Additionally, the proposed project would be installing sidewalks along Avenue G and 45th Street West and the proposed development would be required to provide bicycle facilities in accordance with the California Green Building Code. Therefore, impacts would be less than significant.

b. In July 2020, the City of Lancaster adopted standards and thresholds for analyzing projects with respect to vehicle miles traveled (VMT). A series of screening criteria were adopted and if a project meets one of these criteria, a VMT analysis is not required. These criteria are: 1) project site – generates fewer than 110 trips per day; 2) locally serving retail – commercial developments of 50,000 square feet or smaller; 3) project located in a low VMT area – 15% below baseline; 4) transit proximity; 5) affordable housing; and 6) transportation facilities. The proposed project does not meet any of the screening criteria and a VMT analysis was conducted for the proposed project by Fehr & Peers entitled “Lancaster Fox Field Commerce Center – West Warehouse Project VMT Analysis” and dated May 26, 2023.

The VMT analysis indicated that the proposed project needs to reduce its VMT by 1,697 in order to be 15% below the established thresholds adopted by the City of Lancaster (see Table 16). The report also indicated that physical improvements to mitigate these VMT are not readily available.

However, on January 24, 2023, the City of Lancaster City Council adopted the Vehicle Miles Traveled Impact Fee Mitigation Program and certified the accompanying Final Program Environmental Impact Report, Findings, and Statement of Overriding Considerations. The VMT

mitigation program allows developers to pay \$150 per VMT to mitigate their VMT impacts and tier off of the Program EIR. With payment of the fee, the proposed project’s VMT impacts would be less than significant.

**Table 16  
VMT Reduction Required**

<b>Home-Based Work VMT for Non-Residential</b>	<b>Project VMT Estimate</b>	<b>VMT Threshold (15% below baseline)</b>	<b>VMT Reduction Required</b>
VMT/Employee	14.5	7.6	6.9
Project VMT	3,567	1,870	1,697
<b>City of Lancaster VMT Impact Fee Program</b>			
Mitigation Fee per VMT			\$150
Mitigation Fee			\$254,550
Building Size (sf)			647,000
Fee per KSF			\$393

- c. The proposed project would be accessed by both 45th Street West and Avenue G. Both of these roadways are improved in the vicinity of the project. The proposed project would include additional improvements to these roadways to meet the ultimate design of the roadways and to ensure the smooth and efficient operation of the surrounding roadways. These improvements would not increase hazardous in the vicinity of the project nor create dangerous design situations. Therefore, no impacts would occur.
- d. The project site would be access from both 45th Street West and Avenue G which would provide adequate emergency access to the project site. Drive aisles within the project site would be design to the standards required by the Los Angeles County Fire Department, ensuring adequate emergency access. Therefore, no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. <u>TRIBAL CULTURAL RESOURCES</u> . Would the project:				
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:				
i) 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				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for in subdivision (c) of Public Resources 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.				X

- a. No cultural resources were identified on the project site during the surveys and no cultural resources sites have been previously identified within a mile of the project site. The AB 52 consultation process is ongoing; however, specific tribal resources are not anticipated to be identified. Mitigation measures have been included outlining procedures to be followed in the event of accidental discovery of previously unknown resources. Additionally, any measures requested as part of the AB 52 process will be included in the conditions of approval. Therefore, no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIX. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
a) Require or result in the relocation or construction or new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

- a. The proposed project would be required to connect to the existing utilities such as electricity, natural gas, water, wastewater, telecommunications, etc. These services already exist in the vicinity of the project site. Connections would occur on the project site or within existing roadways or right-of-ways. Connections to these utilities are assumed as part of the proposed project and impacts to environmental resources have been discussed throughout the document. As such, impacts would be less than significant.
- b. The Los Angeles County Waterworks District No. 40 has not indicated any problems in supplying water to the proposed project from existing facilities upon annexation. No new construction of water treatment or new or expanded entitlements would be required. Therefore, impacts would be less than significant.

- c. The project site is located outside the jurisdictional boundaries of District No. 14; however, the District can provide service upon annexation. All wastewater would be treated at the Lancaster Water Reclamation Plant which has a design capacity of 18 million gallons per day (mgd) and currently produces an average recycled water flow of 13.9 mgd. The proposed project would discharge to a local sewer line for conveyance to the Districts' Rosamond Outfall Replacement Trunk Sewer, located in 20th Street West at Avenue F-8. This trunk sewer has a capacity of 67.7 mgd and conveyed a peak flow of 19.4 mgd when last measured in 2021. The proposed project would generate 19,925 gallons of wastewater per day. The proposed project would not require the expansion of existing facilities or the construction of new facilities. Therefore, impacts would be less than significant.
  
- d. Solid waste generated within the City limits is generally disposed of at the Lancaster Landfill located at 600 East Avenue F. This landfill is a Class III landfill which accepts agricultural, nonfriable asbestos, construction/demolition waste, contaminated soil, green materials, industrial, inert, mixed municipal, sludge, and waste tires. It does not accept hazardous materials. Assembly Bill (AB) 939 was adopted in 1989 and required a 25%o diversion of solid waste from landfills by 1995 and a 50% diversion by 2005. In 2011, AB 341 was passed which required the State to achieve a 75% reduction in solid waste by 2030. The City of Lancaster also requires all developments to have trash collection services in accordance with City contracts with waste haulers over the life of the proposed project. These collection services would also collect recyclable materials and organics. The trash haulers are required to be in compliance with applicable regulations on solid waste transport and disposal, including waste stream reduction mandated under AB 341.

The proposed project would generate solid waste during construction and operation which would contribute to an overall impact on landfill services (GPEIR pgs. 5.13-25 to 5.13-28 and 5.13-31); although the project's contribution would be minimal. However, the existing landfill has capacity to handle the waste generated by the proposed project. Additionally, the proposed project would be in compliance with all State and local regulations regarding solid waste disposal. Therefore, impacts would be less than significant.

- e. See Item XIX.d.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XX. <u>WILDFIRE</u> . If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impact an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildlife risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
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?				X
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?				X

a. See Item IX.f.

b-d. The project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. The project site is located within the service boundaries of Fire Station No. 130 which would provide service in the event of a fire. Additionally, the proposed project would be constructed in accordance with all existing and applicable building and fire codes. Therefore, no impacts would occur as a result of wildfires.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<u>XXI. MANDATORY FINDINGS OF SIGNIFICANCE.</u>				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulative 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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a-c. The proposed project consists of the construction and operation of a 647,000 square foot industrial warehouse/distribution facility in the SP 95-02 zone. Other projects have been approved and/or submitted within approximately one mile of the project site (Table 17). These projects are also required to be in accordance with the City's zoning code and General Plan.

Cumulative impacts are the change in the environment, which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable projects.

The proposed project would not create any impacts with respect to: Agriculture and Forest Resources, Mineral Resources, Tribal Resources and Wildfire. The project would create impacts to other resource areas and mitigation measures have identified for Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Land Use, Noise, and Transportation. Many of the impacts generated by projects are site specific and generally do not influence the impacts on another site. All projects undergo environmental review and have required mitigation measures to reduce impacts when warranted. These mitigation measures reduce environmental

impacts to less than significant levels whenever possible. Therefore, the project's contribution to cumulative impacts would not be cumulatively considerable.

**Table 17  
Related Projects List**

<b>Case No.</b>	<b>Location</b>	<b>APNs</b>	<b>Acres</b>	<b>Description</b>	<b>Status</b>
SPR 21-15	SWC of Ave G & 14 Freeway	3114-011-031	68.14	1,240,630 sf industrial/distribution facility	Under Review
SPR 23-003	SEC of 47 <sup>th</sup> St W & William Barnes Ave	3105-001-042	32	581,000 sf industrial/distribution facility	Under Review
CUP 17-33	NEC of Ave G & 40 <sup>th</sup> St W	3107-016-005	3	49,800 sf of cannabis cultivation and manufacturing	Approved
SPR 22-06	South side of Ave H between 25 <sup>th</sup> St W & 27 <sup>th</sup> St W	3114-012-020		20,750 sf bldg. for stone cutting/cement storage	Under Review
SPR 23-002	NEC of 35 <sup>th</sup> St W & Ave H	3107-026-077, -079	20	395,000 sf industrial/distribution	Under Review
TTM 63215	42 <sup>nd</sup> St W & Ave H	3105-017-001, -017	20	85 lot residential subdivision in the R-7,000 zone	Under Review
SPR 17-03	SWC 50 <sup>th</sup> St W & Ave H		38	Electric school bus manufacturing facility	Under Review

List of Referenced Documents and Available Locations\*:

AIR:	Air Quality Assessment, SPR 23-004, Lancaster, California, Michael Baker International, May 31, 2023	DSD
BRR1:	Results of a Biological Resources Assessment for SPR 23-004- City of Lancaster, County of Los Angeles, California, Michael Baker International, May 31, 2023	DSD
BRR2:	Delineation of State and Federal Jurisdictional Waters for Planning Case # SPR 23-004, located in the City of Lancaster, Los Angeles County, California, Michael Baker International, June 1, 2023	DSD
CRS:	Cultural and Paleontological Resources Identification Memorandum for SPR 23-004 Project, City of Lancaster, Los Angeles County, California, Michael Baker International, May 18, 2023	DSD
ENG:	Energy Assessment, SPR 23-004, Lancaster, California, Michael Baker International, May 31, 2023	DSD
ESA:	Phase I Environmental Site Assessment, SPR 23-004, Assessor’s Parcel Numbers 3105-001-011 through -014, Lancaster, California, Michael Baker International, April 19, 2023	DSD
FIRM:	Flood Insurance Rate Map	DSD
GPEIR:	Lancaster General Plan Environmental Impact Report	DSD
GRN:	Greenhouse Gas Emissions Assessment, SPR 23-004, Lancaster, California, Michael Baker International, May 31, 2023	DSD
LACSD:	Los Angeles County Sanitation District letter, February 28, 2023	DSD
LACW:	Los Angeles County Waterworks email, March 9, 2023	DSD
LGP:	Lancaster General Plan	DSD
LMC:	Lancaster Municipal Code	DSD
LMEA:	Lancaster Master Environmental Assessment	DSD
NOI:	Noise Assessment, SPR 23-004, Lancaster, California, Michael Baker International, May 31, 2023	DSD
SSHZ:	State Seismic Hazard Zone Maps	DSD
USGS:	United States Geological Survey Maps	DSD
USDA SCS:	United States Department of Agriculture Soil Conservation Service Maps	DSD
VMT:	Lancaster Fox Field Commerce Center – West Warehouse Project VMT Analysis, Fehr & Peers, May 26, 2023	DSD

\* DSD: Development Services Department  
 Community Development Division  
 Lancaster City Hall  
 44933 Fern Avenue  
 Lancaster, California 93534

# VEHICLE MILES TRAVELED MITIGATION PROGRAM

FINAL

PROGRAM ENVIRONMENTAL IMPACT REPORT

DECEMBER 2022

PREPARED FOR



PREPARED BY

**Michael Baker**  
INTERNATIONAL

**FINAL  
PROGRAM ENVIRONMENTAL IMPACT REPORT**

**Vehicle Miles Traveled  
Mitigation Program**

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SCH NO. 2021090175

Lead Agency:



**CITY OF LANCASTER**  
44933 Fern Avenue  
Lancaster, California 93534  
**Contact: Jocelyn Swain**  
**Senior Planner**  
**661.723.6249**  
[jswain@cityoflanasterca.org](mailto:jswain@cityoflanasterca.org)

Prepared by:

**MICHAEL BAKER INTERNATIONAL**  
5 Hutton Centre Drive, Suite 500  
Santa Ana, California 92707  
**Contact: Alan Ashimine**  
**949.472.3505**

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## 1.0 Introduction

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## **1.0 INTRODUCTION**

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the City of Lancaster, as the lead agency, has evaluated the comments received on the *Vehicle Miles Traveled Mitigation Program Public Review Draft Program Environmental Impact Report* (Draft PEIR) (State Clearinghouse No. 2021090175).

The Draft PEIR for the proposed Vehicle Miles Traveled Mitigation Program (herein referenced as the project) was distributed to responsible and trustee agencies, interested groups, and organizations. The Draft PEIR was made available for public review and comment for a period of 45 days. The public review period for the Draft PEIR established by the CEQA Guidelines commenced on August 8, 2022 and ended September 22, 2022.

The Final EIR consists of the following components:

- Section 1.0 – Introduction;
- Section 2.0 – Responses to Comments;
- Section 3.0 – Errata; and
- Section 4.0 – Mitigation Monitoring and Reporting Program.

Due to its length, the text of the Draft PEIR is not included with this document; however, it is included by reference in this Final PEIR. None of the corrections or clarifications to the Draft PEIR identified in this document constitutes “significant new information” pursuant to CEQA Guidelines Section 15088.5. As a result, recirculation of the Draft PEIR is not required.



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## 2.0 Responses to Comments

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## 2.0 RESPONSES TO COMMENTS

In accordance with CEQA Guidelines Section 15088, the City of Lancaster, as the lead agency, evaluated the written comments received on the Draft PEIR for the Vehicle Miles Traveled Mitigation Program (project) and has prepared the following responses to the comments received. This Responses to Comments document is part of the Final PEIR for the project in accordance with CEQA Guidelines Section 15132.

A list of commenters on the Draft PEIR is presented in Table 2-1, *List of Commenters on the Draft PEIR*. Each comment has been assigned a letter number. Individual comments within each communication have been numbered so comments can be cross-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

**Table 2-1  
List of Commenters on the Draft PEIR**

<b>Comment Letter No.</b>	<b>Commenter</b>	<b>Letter Dated</b>
1	Abu Yusuf, Civil Engineer Los Angeles County Public Works	September 7, 2022
2	Erinn Wilson-Olgin, Environmental Program Manager I California Department of Fish and Wildlife – South Coast Region	September 22, 2022
3	Mitchell M. Tsai, Attorney Southwest Regional Council of Carpenters	September 22, 2022

# COMMENT LETTER 1

**From:** [Abu Yusuf](#)  
**To:** [Swain, Jocelyn](#)  
**Cc:** [Arthur Sohikian](#); [Jay Nelson](#); [Josephine Gutierrez](#); [Kent Tsujii](#); [Hank Hsing](#); [Vander Hyde, Candice](#)  
**Subject:** RE: VMT Mitigation Program  
**Date:** Wednesday, September 7, 2022 2:13:33 PM

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Jocelyn,

We have reviewed the Draft EIR for the City of Lancaster's VMT Mitigation Program and have no comments. Appendix 11 of the EIR included a list of potential active transportation projects that can play a vital role in reducing VMT, and we will work with Candice and other City staff to look for opportunities to leverage the City's efforts and extend these improvements in our unincorporated areas in North LA County.

1-1

Abu Yusuf  
Civil Engineer  
Los Angeles County Public Works  
Office: (626) 458-3940



**RESPONSE TO COMMENT LETTER NO. 1**

Abu Yusuf, Civil Engineer  
Los Angeles County Public Works  
September 7, 2022

- 1-1 The commenter states that the Los Angeles County Public Works has reviewed the Draft PEIR and has no comments. Additionally, the commenter states that the Los Angeles County Public Works will work with City staff in the future to implement the VMT-reducing transportation improvements near unincorporated areas of northern Los Angeles County identified in Appendix 11.2, *VMT-Reducing Projects*, of the Draft PEIR. This comment is acknowledged, and no additional response is required.



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](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
 CHARLTON H. BONHAM, Director



September 22, 2022

Jocelyn Swain  
 City of Lancaster  
 44933 Fern Avenue  
 Lancaster, CA 93534  
[JSwain@cityoflanasterca.org](mailto:JSwain@cityoflanasterca.org)



**Subject: Comments on the Draft Environmental Impact Report for the Vehicle Miles Traveled (VMT) Mitigation Program Project, SCH #2021090175, Los Angeles County**

Dear Ms. Swain:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) for the Vehicle Miles Traveled (VMT) Mitigation Program (Project) from the City of Lancaster (City). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own 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.

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.

Jocelyn Swain  
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## Project Description and Summary

**Objective:** The proposed Project aims to establish mitigation for projects that exceed the City's VMT thresholds in the form of a mitigation impact fee. The program identifies relevant transportation demand management strategies and VMT-Reducing projects within the City to be funded by the impact fee. The Project has identified various VMT-Reducing improvement projects (found in Exhibit 3-3 of the DEIR) sited throughout the City. Types of VMT-Reducing projects include intersection improvements, bike-specific roadway improvement, pedestrian-specific improvements, off-street paths, and traffic calming. Areas identified for development of off-street paths are located around the undeveloped western portion of the City, which can be cause for biological concern. The impact fee was calculated based on the cost to implement identified VMT-Reducing improvements and programs divided by the projected growth in Citywide VMT. The maximum allowable mitigation fee per VMT is \$425. These funds would be utilized to fund active transportation infrastructure projects in the City to help the City meet its VMT reduction goals. The overall intent of the program is to streamline the Senate Bill 743 compliance process for development projects while funding future VMT improvement projects to reduce Citywide VMT.

**Location:** The City is in the Antelope Valley in northern Los Angeles County, approximately 70 miles north of downtown Los Angeles. Unincorporated Los Angeles County surrounds the City on all sides. Additional surrounding jurisdictions include unincorporated Kern County further to the north and the City of Lancaster 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).

## Specific Comments

### Comment #1: Impacts on Western Joshua Trees (*Yucca brevifolia*) and Woodlands

**Issue:** Development facilitated by the Project could impact western Joshua trees and woodlands, which can be found throughout the Lancaster area.

**Specific impacts:** Development of the VMT-Reducing projects, especially in areas shown in Exhibit 3-3 listed as "Off street path" with little to no existing development may result in loss of individual western Joshua trees as well as acres of Joshua tree woodlands.

**Why impact would occur:** Take of western Joshua tree is defined as any activity that results in the removal of a western Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more western Joshua trees (CDFW 2022a). Development of some VMT-Reducing sites could result in the loss or impacts to individual trees and Joshua tree woodlands. Impacts on western Joshua trees and Joshua tree woodlands could occur as a result of clearing a project

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Jocelyn Swain  
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site for development. As a result, the Project could remove western Joshua trees, eliminate and modify habitat, and crush and/or bury living seeds in the soil, rendering living seeds inviable and/or causing them to be killed.

The DEIR states “any activity that results in the removal of a Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more Joshua trees is subject to an Incidental Take Permit from CDFW”. However, it does not prescribe, require, or impose specific actions that would substantially mitigate for impacts on a candidate species or natural community that CDFW considers to be a Sensitive Natural Community. The DEIR does not require any future development facilitated by the Project to undertake measures to mitigate for impacts on western Joshua trees as a natural community. As a result, the Project could result in unmitigated impacts.

**Evidence impact would be significant:** The western Joshua tree is a species designated as candidate for listing as threatened pursuant to CESA (Fish & G. Code, § 2050 *et seq.*). The western Joshua tree is granted full protection of a threatened species under CESA. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). The DEIR does not describe or disclose any compensatory mitigation required for the Project’s impact on western Joshua trees, their seedbank, or in situ western Joshua trees adjacent to a VMT-Reducing project. Accordingly, the Project may have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status by CDFW.

CDFW considers Joshua tree woodlands to be a sensitive plant community. Impacts to a Sensitive Natural Community should be considered significant under CEQA unless impacts are clearly mitigated below a level of significance. Without appropriate mitigation, the Project may result in significant impacts on a Sensitive Natural Community if development facilitated by the Project would remove, encroach into, or disturb (e.g., fuel modification) such resources. Accordingly, the Project would continue to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a species or natural community identified as a candidate, sensitive, or special status species by CDFW.

**Recommended Potentially Feasible Mitigation Measure(s) Required for Future Projects Facilitated by the VMT Program:**

**Mitigation Measure #1:** The City should require project applicants to submit an Incidental Take Permit (ITP) Application to CDFW that provides the following information (at a minimum):

1. An analysis of individual western Joshua trees (clonal and non-clonal) and western Joshua tree seedbank that would be impacted both within the Project site and within 300 feet of the Project site;
2. An analysis of the acres of natural communities supporting western Joshua trees that would be impacted both within the Project site and within 300 feet of the Project site provided according to alliance and/or association-based natural communities found in the [Manual of California Vegetation](#) (MCV), second edition (Sawyer et al. 2009);
3. A map of the Project’s site plan overlaid on location of western Joshua trees and natural communities; and
4. A discussion of whether development could impact any in-situ western Joshua trees

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Jocelyn Swain  
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adjacent to the Project site.

**Mitigation Measure #2:** The City should provide compensatory mitigation for any VMT-Reducing project's impact on western Joshua trees at no less than 2:1, or as required in an ITP for western Joshua trees issued by CDFW. Mitigation should be higher if the project will impact a western Joshua tree population that is increasing through seedling recruitment. Mitigation lands provided by the City should (at a minimum):

1. Support western Joshua trees of similar density, abundance, and age structure;
2. Support natural communities of similar native plant species composition, density, structure, and function to habitat that was impacted;
3. Support nursery plants for western Joshua tree recruits; and
4. Not be exposed or have the potential to be exposed to disturbances such as OHV activity, illegal access, and encroachment from pending or future development.

**Mitigation Measure #3:** The City should require the project applicants to protect mitigation lands in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and, increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to impacts on western Joshua trees.

**Recommendation #1:** The City should revise the DEIR to require future applicants to disclose the Project's impacts in subsequent CEQA documents on western Joshua tree by providing the following information:

1. The Project's potential impact on western Joshua tree seedbank within the Project site;
2. The Project's potential impact on western Joshua trees and seedbank adjacent to the Project site;
3. The Project's potential impact on each unique native and non-native natural community supporting western Joshua trees within and adjacent to the Project site;
4. The Project's construction, operation, and maintenance activities that could impact western Joshua trees and seedbank within and adjacent to the Project site; and
5. The Project's cumulative impact on western Joshua tree.

**Recommendation #2:** Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project require all current and future project CEQA document address all the project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will

2-2  
cont'd

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meet the requirements of an ITP. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an ITP.

2-2  
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## **Comment #2: Impacts to Streams**

**Issue:** Development of potential VMT-Reducing sites facilitated by the Project could impact streams.

**Specific impacts:** Development on some of the potential VMT-Reducing sites, especially those in undeveloped areas sited for off-street paths, may result in erosion and earth movement that could impair streams. These impacts may occur in ephemeral, intermittent, or perennial streams. In addition, vegetation along streams may need to be removed or may be degraded through habitat modification (e.g., loss of water source, encroachment, and edge effects leading to introduction of non-native plants).

**Why impacts would occur:** According to Exhibit 3-3 of the DEIR, off-street paths sited in the northern central part of the City have Amargosa Channel and other ephemeral streams located in the vicinity to these areas. Development of these sites could affect riparian habitat during project construction and operation. Development on these and potentially other sites may result in ground-disturbing activities and vegetation removal. Ground-disturbing activities and vegetation removal could result in erosion. Siltation or runoff downstream could impair streams and herbaceous vegetation. Herbaceous vegetation adjacent to streams protects the physical and ecological integrity of these water features and maintains natural sedimentation processes. Therefore, project sites that would impact vegetation adjacent to streams, but not the stream itself, could still impact the stream.

2-3

In addition, the DEIR recognizes the potential need for Section 1602 Lake and Streambed Alteration Agreement but does not prescribe, require, or impose specific actions that would substantially mitigate for impacts on streams and associated natural communities. The DEIR does not require future development facilitated by the Project to undertake any measures to mitigate for impacts on streams and associated natural communities. As a result, the Project could result in unmitigated impacts.

**Evidence impacts would be significant:** 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 natural 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;
- 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.

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when a project activity may substantially adversely affect fish and wildlife resources. The Project may result in significant

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impacts on streams and associated natural communities if development of VMT-Reducing sites identified by the Project or future projects would be in close proximity to these resources. Without appropriate mitigation, the Project continues to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on fish and wildlife resources, including rivers, streams, or lakes and associated natural communities identified by CDFW.

**Recommended Potentially Feasible Mitigation Measure(s) Required for Future Projects Facilitated by the VMT Program:**

**Mitigation Measure #4:** Project specific analyses should prepare a jurisdictional delineation and impact assessment provided along with the project's biological resources technical studies.

**Mitigation Measure #5:** If any river, stream, or lake are present and may be impacted, the project should be required to avoid impacts by implementing appropriate vegetative buffers and/or setbacks adjoining the stream or wetland feature to reduce impacts of the project on these resources.

**Mitigation Measure #6:** If avoidance is not feasible, the project applicant should be required to notify CDFW pursuant to Fish and Game Code 1602 and obtain an LSA Agreement from CDFW prior to obtaining a grading permit. The project applicant should comply with the mitigation measures detailed in a LSA Agreement issued by CDFW. The project applicant should also provide compensatory mitigation at no less than 2:1 for the impacted stream and associated natural community, or at a ratio acceptable to CDFW. Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for more information (CDFW 2022b).

**Recommendation #3:** CDFW recommends the DEIR require any projects to include an analysis of potential impacts in subsequent CEQA documents on biological resources resulting from any proposed water diversion. At a minimum, the analysis should evaluate a study reach that includes the channel downstream from a project site. The study reach should extend a minimum of one mile downstream or an appropriate distance determined by both a qualified biologist and hydrologist, whichever is greater. The analysis of the study reach should discuss changes in hydrology and hydraulics, including the following:

1. Under pre-project (i.e., baseline) conditions, the volume of water flow from both the project area and study reach during a) the wet (November through March); b) the dry season (April through October); and c) above-average and below-average water year (i.e., wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year). The analysis should clearly define above-average or below-average rainfall year.
2. Under proposed project conditions, the percent reduction in flow from both the project area and study reach for a wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year.
3. A quantitative analysis comparing the flow from the project area and other tributaries into the study reach, and their relative contribution to the hydrograph of the study reach.
4. An analysis of potential project-related changes to river hydraulics in both concrete-lined and soft-bottom reaches. This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change).

2-3  
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**Recommendation #4:** 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 lead agency/project applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, a project's 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. 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 or restoration; and/or protection and management of mitigation lands in perpetuity.

2-3  
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### Additional Recommendations

**Recommendation #5: Biological Review** – CDFW recommends modifying BIO-MM-1 to include underlined language and remove language with strikethrough:

“Transportation improvements funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and not exempt from CEQA), and with the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, as determined by the City of Lancaster Development Services Department, Community Development Division, shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Division. The assessment shall include biological field survey(s) of the project site to characterize the extent and quality of habitat that would be impacted by development. Surveys shall, include baseline surveys, protocol-level surveys, tree inventories to confirm the presence of any special status species within or immediately adjacent to proposed impact areas. Surveys shall be conducted by qualified biologists and/or botanists in accordance with California Department of Fish and Wildlife and/or United States Fish and Wildlife Services survey protocols for target species. Biological Resources Assessments should provide and include the following:

2-4

1. A complete, recent, assessment of rare, threatened, and endangered species, regionally and locally unique species, and sensitive habitats at the project site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of land around the project site should also be addressed. A nine-quadrangle search of CDFW's California Natural Diversity Database (CNDDDB) should be conducted to obtain current information on any previously reported sensitive species and habitat (CDFW 2022c);
2. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). Adjoining habitat areas should be included where project construction and activities could lead to direct or indirect impacts off site;
3. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the area of potential effect. The

Jocelyn Swain  
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Manual of California Vegetation (MCV), second edition, should be used to inform this mapping and assessment:

4. A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) [Online Inventory of Rare and Endangered Plants of California](#) (CNPS 2022) as well as the Calflora's [Information on Wild California Plants](#) database (Calflora 2022);
5. A discussion regarding project-related indirect impacts on biological resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)]; and
6. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the project site.

If no special status/sensitive species, sensitive habitats/natural communities, or Federally protected wetlands are observed during the field survey, then no further mitigation will be required. If biological resources are documented on the project site, the project proponent shall comply with the applicable requirements of the regulatory agencies and shall apply mitigation determined through the agency permitting process.”

**Recommendation #6: Nesting Birds** – CDFW recommends modifying BIO-MM-2 to include underlined language and remove language with strikethrough:

“To avoid disturbance of nesting birds, activities related to construction projects carried out under the Plan, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season, February 15 through September 15 (as early as January 1 for some raptors). If this is not feasible, a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than ~~fourteen (14)~~ seven (7) days prior to the start of any vegetation removal or ground disturbing activities associated with a transportation improvement project. The survey shall be conducted by a qualified biologist and cover all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. The nesting bird pre-construction survey shall be conducted on foot inside the area of proposed development, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. Further, if an active bird nest is found, the qualified biologist should identify the specific bird species and establish a “no-disturbance” buffer around the active nest to avoid potential direct and indirect impacts. It is further recommended that the qualified biologist periodically monitor any active bird nests to determine if project-related activities disturb the birds and if the “no disturbance” buffer should be increased. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist. 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.”

2-4  
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It should be noted that the temporary halt of Project activities within nesting buffers during nesting season does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. Additional mitigation would be necessary to compensate for the permanent removal of nesting habitat within the Project site based on acreage of impact and vegetation composition. CDFW shall be consulted to determine proper mitigation for impacts to occupied habitat depending on the status of the bird species. Mitigation ratios would increase with the occurrence a California Species of Special Concern and would further increase with the occurrence of a CESA-listed species.

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**Recommendation #6: Data** – CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which 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 2022d). This includes all documented occurrences of special status species. The City should ensure the data has been properly submitted, with all data fields applicable filled out, prior to Project ground-disturbing activities. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred. The City should provide CDFW with confirmation of data submittal.

2-5

**Recommendation #7: Mitigation and Monitoring Reporting Plan** – 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). A final MMRP shall reflect results following additional plant and wildlife surveys and the Project’s final on and/or off-site mitigation plans.

2-6

### 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 Lancaster 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).

2-7

### Conclusion

We appreciate the opportunity to comment on the Project to assist the City in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City 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 Felicia Silva, Environmental Scientist, at [Felicia.Silva@wildlife.ca.gov](mailto:Felicia.Silva@wildlife.ca.gov) or (562) 292-8105.

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Jocelyn Swain  
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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](mailto:Erinn.Wilson-Olgin@wildlife.ca.gov)  
Victoria Tang, Los Alamitos – [Victoria.Tang@wildlife.ca.gov](mailto:Victoria.Tang@wildlife.ca.gov)  
Ruby Kwan-Davis, Los Alamitos – [Ruby.Kwan-Davis@wildlife.ca.gov](mailto:Ruby.Kwan-Davis@wildlife.ca.gov)  
Felicia Silva, Los Alamitos – [Felicia.Silva@wildlife.ca.gov](mailto:Felicia.Silva@wildlife.ca.gov)  
Julisa Portugal, Los Alamitos – [Julisa.Portugal@wildlife.ca.gov](mailto:Julisa.Portugal@wildlife.ca.gov)  
Frederic Rieman, Los Alamitos – [Frederic.Rieman@wildlife.ca.gov](mailto:Frederic.Rieman@wildlife.ca.gov)  
Cindy Hailey, San Diego – [Cindy.Hailey@wildlife.ca.gov](mailto:Cindy.Hailey@wildlife.ca.gov)  
CEQA Program Coordinator, Sacramento – [CEQACommentLetters@wildlife.ca.gov](mailto:CEQACommentLetters@wildlife.ca.gov)  
Office of Planning and Research  
State Clearinghouse, Sacramento – [State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

#### References:

- [CDFWa] California Department of Fish and Wildlife. 2022. Trimming of western Joshua trees and removal of dead western Joshua trees. What is “Take”? Available from: <https://wildlife.ca.gov/Conservation/CESA/WJT>
- [CDFWb] California Department of Fish and Wildlife. 2022. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>
- [CDFWc] California Department of Fish and Wildlife. 2022. California Natural Diversity Database. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Maps-andData#43018408-cnddb-in-bios>
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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](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



**Attachment A: Draft Mitigation and Monitoring Reporting Plan**

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect results following additional plant and wildlife surveys and the Project’s final on and/or off-site mitigation plans.

<b>Biological Resources (BIO)</b>			
<b>Mitigation Measure (MM) or Recommendation (REC)</b>		<b>Timing</b>	<b>Responsible Party</b>
<b>MM-BIO-1- Joshua Tree ITP</b>	The City shall require project applicants to submit an ITP Application to CDFW that provides the following information (at a minimum): <ol style="list-style-type: none"> <li>1) An analysis of individual western Joshua trees (clonal and non-clonal) and western Joshua tree seedbank that would be impacted both within the Project site and within 300 feet of the Project site;</li> <li>2) An analysis of the acres of natural communities supporting western Joshua trees that would be impacted both within the Project site and within 300 feet of the Project site provided according to alliance and/or association-based natural communities found in the <a href="#">Manual of California Vegetation</a> (MCV);</li> <li>3) A map of the Project’s site plan overlaid on location of western Joshua trees and natural communities; and</li> <li>4) A discussion of whether housing development could impact any in-situ western Joshua trees adjacent to the Project site.</li> </ol>	Prior to Project construction and activities	City of Lancaster/Project Applicant
<b>MM-BIO-2- Joshua Tree Mitigation</b>	The City shall provide compensatory mitigation for any VMT-Reducing sites or future project’s impact on western Joshua trees at no less than 2:1, or as required in an ITP for western Joshua	Prior to Project	City of Lancaster/Project Applicant

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	<p>trees issued by CDFW. Mitigation shall be higher if the project will impact a western Joshua tree population that is increasing through seedling recruitment. Mitigation lands provided by the City shall (at a minimum):</p> <ol style="list-style-type: none"> <li>1) Support western Joshua trees of similar density, abundance, and age structure;</li> <li>2) Support natural communities of similar native plant species composition, density, structure, and function to habitat that was impacted;</li> <li>3) Support nursery plants for western Joshua tree recruits; and</li> <li>4) Not be exposed or have the potential to be exposed to disturbances such as OHV activity, illegal access, and encroachment from pending or future development.</li> </ol>	<p>construction and activities</p>	
<p><b>MM-BIO-3-Mitigation Lands</b></p>	<p>The City shall require the project applicants to protect mitigation lands in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that shall be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and, increased human intrusion. A conservation easement and endowment funds shall be</p>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Project Applicant</p>

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	fully acquired, established, transferred, or otherwise executed prior to impacts on western Joshua trees.		
<b>REC-1-Impacts to Joshua Tree</b>	<p>The City should revise the DEIR to require future applicants to disclose the project’s impacts in subsequent CEQA documents on western Joshua tree by providing the following information:</p> <ol style="list-style-type: none"> <li>1) The Project’s potential impact on western Joshua tree seedbank within the Project site;</li> <li>2) The Project’s potential impact on western Joshua trees and seedbank adjacent to the Project site;</li> <li>3) The Project’s potential impact on each unique native and non-native natural community supporting western Joshua trees within and adjacent to the Project site;</li> <li>4) The Project’s construction, operation, and maintenance activities that could impact western Joshua trees and seedbank within and adjacent to the Project site; and</li> <li>5) The Project’s cumulative impact on western Joshua tree.</li> </ol>	Prior to Project construction and activities	City of Lancaster/Project Applicant
<b>REC-2-ITP Issuance</b>	Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project require all current and future project CEQA document address all the project’s impact on CESA endangered, threatened, and/or candidate species. The Project’s CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an ITP. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project’s impact on a CESA endangered, threatened, and/or candidate species proposed in the Project’s CEQA document may not necessarily satisfy mitigation required to obtain an ITP.	Prior to Project construction and activities	City of Lancaster/Project Applicant
<b>MM-BIO-4-Jurisdictional Delineation</b>	Project specific analyses shall prepare a jurisdictional delineation and impact assessment provided along with the project’s biological resources technical studies.	Prior to Project	City of Lancaster/Project Applicant

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		construction and activities	
<b>MM-BIO-5-Stream Buffers</b>	If any river, stream, or lake are present and may be impacted, the project shall be required to avoid impacts by implementing appropriate vegetative buffers and/or setbacks adjoining the stream or wetland feature to reduce impacts of the project on these resources.	Prior to Project construction and activities	City of Lancaster/Project Applicant
<b>MM-BIO-6-LSA Notification</b>	If avoidance is not feasible, the project applicant shall be required to notify CDFW pursuant to Fish and Game Code 1602 and obtain an LSA Agreement from CDFW prior to obtaining a grading permit. The project applicant shall comply with the mitigation measures detailed in a LSA Agreement issued by CDFW. The project applicant shall also provide compensatory mitigation at no less than 2:1 for the impacted stream and associated natural community, or at a ratio acceptable to CDFW. Please visit CDFW's <a href="#">Lake and Streambed Alteration Program</a> webpage for more information (CDFW 2022c).	Prior to Project construction and activities	City of Lancaster/Project Applicant
<b>REC-3-Water Diversion Biological Analysis</b>	CDFW recommends the DEIR require any approved or future projects to include an analysis of potential impacts in subsequent CEQA documents on biological resources resulting from any proposed water diversion. At a minimum, the analysis should evaluate a study reach that includes the channel downstream from the Project site. The study reach should extend a minimum of one mile downstream or an appropriate distance determined by both a qualified biologist and hydrologist, whichever is greater. The analysis of the study reach should discuss changes in hydrology and hydraulics, including the following:  1. Under pre-project (i.e., baseline) conditions, the volume of water flow from both the project area and study reach during a) the wet (November through March); b) the dry season (April through October); and c) above-average and below-average water year (i.e., wet season/above-average water year, wet season/below-average water year, dry season/above-average	Prior to Project construction and activities	City of Lancaster/Project Applicant

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	<p>water year, and dry season/below-average water year). The analysis should clearly define above-average or below-average rainfall year.</p> <ol style="list-style-type: none"> <li>2. Under proposed project conditions, the percent reduction in flow from both the project area and study reach for a wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year.</li> <li>3. A quantitative analysis comparing the flow from the project area and other tributaries into the study reach, and their relative contribution to the hydrograph of the study reach.</li> </ol> <p>An analysis of potential project-related changes to river hydraulics in both concrete-lined and soft-bottom reaches. This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change).</p>		
<p><b>REC-4-CEQA Compliance</b></p>	<p>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 lead agency/project applicant for the project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, a project's 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. 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 or restoration; and/or protection and management of mitigation lands in perpetuity.</p>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Project Applicant</p>

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<p><b>REC-5- Biological Review</b></p>	<p>CDFW recommends modifying BIO-MM-1 to include <u>underlined</u> language and remove language with strikethrough:</p> <p>“Transportation improvements funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and not exempt from CEQA), and with the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, as determined by the City of Lancaster Development Services Department, Community Development Division, shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Division. The assessment shall include biological field survey(s) of the project site to characterize the extent and quality of habitat that would be impacted by development. <u>Surveys shall, include baseline surveys, protocol-level surveys, tree inventories to confirm the presence of any special status species within or immediately adjacent to proposed impact areas.</u> Surveys shall be conducted by qualified biologists and/or botanists in accordance with California Department of Fish and Wildlife and/or United States Fish and Wildlife Services survey protocols for target species. <u>Biological Resources Assessments should provide and include the following:</u></p> <ol style="list-style-type: none"> <li>1. <u>A complete, recent, assessment of rare, threatened, and endangered species, regionally and locally unique species, and sensitive habitats at the project site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish &amp; G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of land around the project site should also be addressed. A nine-quadrangle search of CDFW’s <a href="#">California Natural</a></u></li> </ol>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Project Applicant</p>	<p>2-9 cont'd</p>
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	<p><u>Diversity Database (CNDDDB) should be conducted to obtain current information on any previously reported sensitive species and habitat (CDFW 2022b);</u></p> <ol style="list-style-type: none"> <li>2. <u>A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's <a href="#">Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</a> (CDFW 2018). Adjoining habitat areas should be included where project construction and activities could lead to direct or indirect impacts off site;</u></li> <li>3. <u>Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the area of potential effect. The <a href="#">Manual of California Vegetation (MCV)</a>, should be used to inform this mapping and assessment;</u></li> <li>4. <u>A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) <a href="#">Online Inventory of Rare and Endangered Plants of California</a> (CNPS 2022) as well as the Calflora's <a href="#">Information on Wild California Plants</a> database (Calflora 2022);</u></li> <li>5. <u>A discussion regarding project-related indirect impacts on biological resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (Fish &amp; G. Code, § 2800 et. seq.)]; and</u></li> <li>6. <u>Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the project site.</u></li> </ol> <p>If no special status/sensitive species, sensitive habitats/natural communities, or Federally protected wetlands are observed during the field survey, then no further mitigation will be required. If biological resources are documented on the project site, the</p>		
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	<p>project proponent shall comply with the applicable requirements of the regulatory agencies and shall apply mitigation determined through the agency permitting process.</p>		
<p><b>REC-6-Nesting Birds</b></p>	<p>CDFW recommends modifying BIO-MM-2 to include <u>underlined</u> language and remove language with strikethrough:</p> <p><u>“To avoid disturbance of nesting birds, activities related to construction projects carried out under the Plan, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season, February 15 through September 15 (as early as January 1 for some raptors). A pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than <del>fourteen (14)</del> seven (7) days prior to the start of any vegetation removal or ground disturbing activities associated with a transportation improvement project. The survey shall be conducted by a qualified biologist and cover all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. The nesting bird pre-construction survey shall be conducted on foot inside the area of proposed development, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. Further, if an active bird nest is found, the qualified biologist should identify the specific bird species and establish a “no-disturbance” buffer around the active nest to avoid potential direct and indirect impacts. It is further recommended that the qualified biologist periodically monitor any active bird nests to</u></p>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Project Applicant</p>

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	<p>determine if project-related activities disturb the birds and if the “no disturbance” buffer should be increased. <u>All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.</u> 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.”</p> <p>It should be noted that the temporary halt of Project activities within nesting buffers during nesting season does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. Additional mitigation would be necessary to compensate for the permanent removal of nesting habitat within the Project site based on acreage of impact and vegetation composition. CDFW shall be consulted to determine proper mitigation for impacts to occupied habitat depending on the status of the bird species. Mitigation ratios would increase with the occurrence a California Species of Special Concern and would further increase with the occurrence of a CESA-listed species.</p>		
<p><b>REC-7-Data</b></p>	<p>CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which 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 <a href="#">CNDDB Field Survey Forms</a> (CDFW 2022d). This includes all documented occurrences of special status species. The City should ensure the data has been properly submitted, with all data fields applicable filled out,</p>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Project Applicant</p>

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	prior to Project ground-disturbing activities. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred. The City should provide CDFW with confirmation of data submittal.		
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## **RESPONSE TO COMMENT LETTER NO. 2**

Erinn Wilson-Olgin, Environmental Program Manager I  
California Department of Fish and Wildlife – South Coast Region  
September 22, 2022

- 2-1 This introductory comment identifies the California Department of Fish and Wildlife (CDFW) as a trustee agency and responsible agency under CEQA with jurisdiction over the conservation, protection, and management of biological resources. The comment also provides a brief description of the proposed project and project location. This comment is acknowledged, and no additional response is required.
- 2-2 The commenter is concerned that development facilitated by the proposed VMT Mitigation Program could impact western Joshua trees (*Yucca brevifolia*) and woodlands found throughout the Lancaster area. Specifically, the commenter states that the Draft PEIR does not prescribe, require, or impose specific actions that would substantially mitigate for impacts on a candidate species or natural community that CDFW considers to be a Sensitive Natural Community and that the Draft PEIR does not require any future development facilitated by the project to undertake measures to mitigate for impacts on western Joshua trees as a natural community. As a result, the project could result in unmitigated impacts. Additional mitigation measures and recommendations are provided to ensure potential impacts to western Joshua trees and woodlands are reduced to less than significant levels.

As stated under Impact Statement BIO-1 of Draft PEIR Section 5.3, *Biological Resources*, all future transportation improvements funded through the program would require environmental review under CEQA (e.g., preparation of a Categorical Exemption, Mitigated Negative Declaration, or Environmental Impact Report). Additionally, per Mitigation Measure BIO-1, a Biological Resources Assessment may be required, as determined by the City, to evaluate potential impacts to on-site biological resources, including sensitive or special-status species, including western Joshua trees and woodlands. As such, future VMT-reducing improvements would be evaluated on a project-specific level with site-specific analysis and mitigation measures would be identified, as needed. Potential measures may include requiring an Incidental Take Permit (ITP) from CDFW, which would entail requiring a full analysis of potential impacts to western Joshua trees and western Joshua tree seedbank as detailed in the commenter's recommended Mitigation Measure #1. Further, if a future VMT-reducing improvement results in impacts on western Joshua trees, the project would be required to provide compensatory mitigation as required in an ITP issued by CDFW and/or protect mitigation lands under a conservation easement as detailed in the commenter's recommended Mitigation Measures #2 and #3. However, as acknowledged throughout the Draft PEIR, no development or construction activities are proposed as part of the project. The project is a VMT Mitigation Program that establishes a mitigation impact fee for projects that exceed the City's VMT thresholds under CEQA. The identified VMT-reducing improvements and transportation demand management (TDM) measures are potential improvements/measures that can be funded by the fees collected from the program. Therefore, the anticipated improvements/measures are speculative as of now and will require separate environmental review under CEQA at a later date when project-specific details, locations, and characteristics



are known. Thus, the project itself, as a mitigation program, would not result in potentially significant impacts to western Joshua trees or woodlands.

- 2-3 The commenter is concerned that development of potential VMT-reducing sites facilitated by the project could impact streams and riparian habitat along streams, particularly along the Amargosa Channel and other ephemeral streams in the northern central portion of Lancaster. In addition, the commenter states that while the Draft PEIR recognizes the potential need for a Section 1602 Lake and Streambed Alteration (LSA) Agreement, it does not prescribe, require, or impose specific actions that would substantially mitigate for impacts on streams and associated natural communities. Specifically, the Draft PEIR does not require future development facilitated by the project to undertake any measures to mitigate for impacts on streams and associated natural communities and as a result, could result in unmitigated impacts. Additional mitigation measures and recommendations are provided to ensure potential impacts to streams are reduced to less than significant levels.

As stated under Impact Statement BIO-2 of Draft PEIR Section 5.3, *Biological Resources*, the majority of future transportation improvements funded by the proposed program would occur within existing disturbed rights-of-way and thus, avoid impacts to streams, riparian habitat or other sensitive natural communities within Lancaster. While future transportation improvement projects funded by the program would be largely focused within developed areas, the proposed improvements could still have the potential to adversely impact streams, riparian habitat or other sensitive natural communities. All future transportation improvements would be required to undergo environmental review under CEQA. Additionally, as stated, a Biological Resources Assessment may be required under Mitigation Measure BIO-1, as determined by the City, to evaluate potential impacts to on-site biological resources, including riparian habitat or other sensitive natural communities. Thus, future improvements funded by the proposed mitigation program would be evaluated on a project-specific level with site-specific analysis and implement mitigation measures, as needed. Potential additional studies and mitigation measures may include preparing a jurisdictional delineation, implementing appropriate vegetative buffers and/or setbacks adjoining streams or wetland features, or obtaining an LSA Agreement from CDFW as detailed in recommended Mitigation Measures #4 through #6. CDFW also provides additional recommendations for future projects that may result in water diversion (Recommendation #3) or require an LSA Agreement (Recommendation #4). As acknowledged throughout the Draft PEIR, no development or construction activities are proposed as part of the project. The identified VMT-reducing improvements and TDM measures are potential improvements/measures that can be funded by the fees collected from the program but are not specific projects that would occur upon adoption of the VMT Mitigation Program. Therefore, the anticipated improvements/measures are speculative as of now and will require separate environmental review under CEQA at a later date when project-specific details are known. Thus, the project itself, as a mitigation program, would not result in potentially significant impacts to streams and riparian habitat.

- 2-4 CDFW recommends modifying Mitigation Measures BIO-1 and BIO-2 with clarifying language to ensure the measures detail specific requirements related to the biological resources assessment (Mitigation Measure BIO-1) and pre-construction nesting bird clearance survey



(Mitigation Measure BIO-2). The recommended modifications are shown below and included in Section 3.0, *Errata*, of this Final PEIR.

**Section 5.3, Page 5.3-16, Mitigation Measure BIO-1**

BIO-1 Transportation improvements funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and not exempt from CEQA), and with the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, as determined by the City of Lancaster Development Services Department, Community Development Division, shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Division. The assessment shall include biological field survey(s) of the project site to characterize the extent and quality of habitat that would be impacted by development. Surveys shall include baseline surveys, protocol-surveys, and/or tree inventories to confirm the presence or any special-status species within or immediately adjacent to proposed impact areas. Surveys shall be conducted by qualified biologists and/or botanists in accordance with California Department of Fish and Wildlife and/or United States Fish and Wildlife Services survey protocols for target species. Biological resources assessments should include the following:

1. A complete, recent, assessment of rare, threatened, and endangered species, regionally and locally unique species, and sensitive habitats at the project site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (California Fish and Game Code Sections 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines Section 15380). Seasonal variations in use of land around the project site should also be addressed. A nine-quadrangle search of CDFW's California Natural Diversity Database (CNDDDB) should be conducted to obtain current information on any previously reported sensitive species and habitat;
2. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). Adjoining habitat areas should be included where project construction and activities could lead to direct or indirect impacts off site;
3. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the area of potential effect. The *Manual of California Vegetation* (MCV), second edition, should be used to inform this mapping and assessment;



4. A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California as well as the Calflora's Information on Wild California Plants database; and
5. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the project site.

If no special status/sensitive species, sensitive habitats/natural communities, or Federally protected wetlands are observed during the field survey, then no further mitigation will be required. If biological resources are documented on the project site, the project proponent shall comply with the applicable requirements of the regulatory agencies and shall apply mitigation determined through the agency permitting process.

### Section 5.3, Page 5.3-19, Mitigation Measure BIO-2

BIO-2 To avoid disturbance of nesting birds, activities related to construction projects funded by the VMT Mitigation Program, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition, shall occur outside of the bird breeding season from February 15 through September 15 (as early as January 1 for some raptors). If this is not feasible, a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than seven (7) fourteen (14) days prior to the start of any vegetation removal or ground disturbing activities associated with a transportation improvement project. The survey shall be conducted by a qualified biologist and cover all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. The nesting bird pre-construction survey shall be conducted on foot inside the area of proposed development, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. Further, if an active bird nest is found, the qualified biologist should identify the specific bird species and establish a “no-disturbance” buffer around the active nest to avoid potential direct and indirect impacts. It is further recommended that the qualified biologist periodically monitor any active bird nests to determine if project-related activities disturb the birds and if the “no disturbance” buffer should be increased. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist. 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.

These changes provide a minor update, correction, or clarification and do not represent “significant new information” as defined in CEQA Guidelines Section 15088.5.

The commenter also notes that the temporary halt of construction activities within nesting buffers during nesting season does not constitute effective mitigation for the purposes of offsetting potential impacts associated with habitat loss and that additional mitigation would be necessary to compensate for the permanent removal of nesting habitat within the project site.

- 2-5 The commenter requests that any special status species detected as part of the PEIR analysis be reported to the CDFW by submitting a CNDDDB Field Survey Form. Given the nature of the proposed VMT Mitigation Program, no site-specific field survey was conducted. Thus, no reporting in the regard is applicable.
- 2-6 The commenter provides a summary of suggested mitigation measures and recommendations in the form of Attachment A, *Draft Mitigation and Monitoring Reporting Plan*. A Mitigation Monitoring and Reporting Program (MMRP) is included in Section 4.0, *Mitigation Monitoring and Reporting Program*, of this Final PEIR. In compliance with Public Resources Code Section 21081.6, Table 1, *Mitigation Monitoring and Reporting Checklist*, has been prepared for the proposed project. The requested modifications to Mitigation Measures BIO-1 and BIO-2 (as described in Response 2-4, above) are included in Table 1. The Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable mitigation measures relative to significant environmental impacts identified in the Draft and Final PEIR are monitored and reported.
- 2-7 The commenter states that the project would require CDFW filing fees upon filing of the Notice of Determination (NOD). This comment is acknowledged, and the filing fee will be paid upon filing of the NOD with the County Clerk, as applicable.
- 2-8 The commenter thanks the City for the opportunity to comment on the project and also requests an opportunity to review and comment on any response that the City has to the comments and to receive notification of forthcoming hearing date(s) regarding the project. This comment is acknowledged and notifications regarding responses to comments and future hearing date(s) will be provided to CDFW.
- 2-9 Refer to response to Comment 2-6.



P: (626) 381-9248  
F: (626) 389-5414  
E: info@mitsailsaw.com

**Mitchell M. Tsai**  
Attorney At Law

139 South Hudson Avenue  
Suite 200  
Pasadena, California 91101

**VIA E-MAIL**

September 22, 2022

Jocelyn Swain  
City of Lancaster  
44933 Fern Avenue  
Lancaster, CA 93534  
Em: [jswain@cityoflancasterca.org](mailto:jswain@cityoflancasterca.org)

**RE: City of Lancaster’s Vehicle Miles Traveled (VMT) Mitigation Program (SCH#:2021090175).**

Dear Jocelyn Swain,

On behalf of the Southwest Regional Council of Carpenters (“**Southwest Carpenters**” or “**SWRCC**”), my Office is submitting these comments for the City of Lancaster’s (“**City**”) Draft Environmental Impact Report for the Vehicle Miles Traveled (VMT) Mitigation Program (SCH#:2021090175) (“**Project**”).

The Southwest Carpenters is a labor union representing 57,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project’s environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225

Cal.App.4th 173, 191 (finding that any party who has objected to the project’s environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law (“**Planning and Zoning Law**”) (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency’s governing body.

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

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[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.<sup>1</sup>

Furthermore, workforce policies have significant environmental benefits given that they improve an area’s jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the “[u]se of a local state-certified apprenticeship program” can result in air pollutant reductions.<sup>2</sup>

Cities are increasingly incorporating local workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward’s 2040 General Plan requires the city to “promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions.”<sup>3</sup>

The City of Hayward has even gone as far as incorporating a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its downtown area to require that the City “[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved joint labor-management training programs[.]”<sup>4</sup> The City of Hayward mandates the same measure on all projects that are 30,000 square feet or larger.<sup>5</sup>

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<sup>1</sup> California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>.

<sup>2</sup> South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

<sup>3</sup> City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* [https://www.hayward-ca.gov/sites/default/files/documents/General\\_Plan\\_FINAL.pdf](https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf).

<sup>4</sup> City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* <https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf>.

<sup>5</sup> City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.<sup>6</sup>

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.<sup>7</sup> Some municipalities have even tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Therefore, the City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

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<sup>6</sup> California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, available at <https://cprroundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>

<sup>7</sup> Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, available at <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

A. The City should Impose Training Requirements for the Project’s Construction Activities to Prevent Community Spread of COVID-19 and Other Infectious Diseases.

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupational Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.<sup>8</sup>

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project’s construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters’ experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

**Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening

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<sup>8</sup> Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, available at <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

area. Please reference the Apex temperature screening site map for additional details.

- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

**Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the

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individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

### **Planning**

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.<sup>9</sup>

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment (“**ICRA**”) training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>10</sup>

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<sup>9</sup> See also The Center for Construction Research and Training, North America’s Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at [https://www.cpwr.com/sites/default/files/NABTU\\_CPWR\\_Standards\\_COVID-19.pdf](https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf); Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at [https://dpw.lacounty.gov/building-and-safety/docs/pw\\_guidelines-construction-sites.pdf](https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf).

<sup>10</sup> For details concerning Southwest Carpenters’s ICRA training program, see <https://icrahealthcare.com/>.

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

Sincerely,



Mitchell M. Tsai  
Attorneys for Southwest Regional  
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

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**EXHIBIT A**



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

Paul E. Rosenfeld, PhD  
(310) 795-2335  
[prosenfeld@swape.com](mailto:prosenfeld@swape.com)

March 8, 2021

Mitchell M. Tsai  
155 South El Molino, Suite 104  
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

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Dear Mr. Tsai,

Soil Water Air Protection Enterprise (“SWAPE”) is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas (“GHG”) emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

### Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model (“CalEEMod”) is a “statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.”<sup>1</sup> CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.<sup>2</sup>

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>3</sup>

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<sup>1</sup> “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

<sup>2</sup> “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

<sup>3</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.<sup>4</sup>

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

$n$  = Number of land uses being modeled.”<sup>5</sup>

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$  = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$  = emission factor for running emissions.”<sup>6</sup>

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>7</sup> In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.<sup>8</sup> The default number of construction-related worker trips is calculated by multiplying the

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<sup>4</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 14-15.

<sup>5</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 23.

<sup>6</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 15.

<sup>7</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

<sup>8</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.<sup>9</sup> Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”<sup>10</sup> Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.<sup>11</sup> The operational home-to-work vehicle trip lengths are:

“[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).<sup>12</sup>

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).<sup>13</sup>

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
<b>Average</b>	<b>16.47</b>	<b>11.17</b>
<b>Minimum</b>	<b>10.80</b>	<b>10.80</b>
<b>Maximum</b>	<b>19.80</b>	<b>14.70</b>
<b>Range</b>	<b>9.00</b>	<b>3.90</b>

<sup>9</sup> “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/01\\_user-39-s-guide2016-3-2\\_15november2017.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

<sup>10</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 15.

<sup>11</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 14.

<sup>12</sup> “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 21.

<sup>13</sup> “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

**Practical Application of a Local Hire Requirement and Associated Impact**

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan (“Project”) located in the City of Claremont (“City”). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.<sup>14</sup> In an effort to evaluate the potential for a local hire provision to reduce the Project’s construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

<b>Local Hire Provision Net Change</b>	
<b>Without Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO <sub>2</sub> e)	3,623
Amortized Construction GHG Emissions (MT CO <sub>2</sub> e/year)	120.77
<b>With Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO <sub>2</sub> e)	3,024
Amortized Construction GHG Emissions (MT CO <sub>2</sub> e/year)	100.80
<b>% Decrease in Construction-related GHG Emissions</b>	<b>17%</b>

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project’s urbanization level and location.

<sup>14</sup> “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



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



Paul E. Rosenfeld, Ph.D.

## Attachment A

<b>Location Type</b>	<b>Location Name</b>	<b>Rural H-W (miles)</b>	<b>Urban H-W (miles)</b>
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

<b>Worker Trip Length by Air Basin</b>		
<b>Air Basin</b>	<b>Rural (miles)</b>	<b>Urban (miles)</b>
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
<b>Average</b>	<b>16.47</b>	<b>11.17</b>
<b>Minimum</b>	<b>10.80</b>	<b>10.80</b>
<b>Maximum</b>	<b>19.80</b>	<b>14.70</b>
<b>Range</b>	<b>9.00</b>	<b>3.90</b>

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

**2.0 Emissions Summary**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
<b>Maximum</b>	<b>4.1619</b>	<b>4.1142</b>	<b>6.1625</b>	<b>0.0189</b>	<b>1.3058</b>	<b>0.1201</b>	<b>1.4259</b>	<b>0.3460</b>	<b>0.1128</b>	<b>0.4588</b>	<b>0.0000</b>	<b>1,721.6826</b>	<b>1,721.6826</b>	<b>0.1294</b>	<b>0.0000</b>	<b>1,724.9187</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
<b>Maximum</b>	<b>4.1619</b>	<b>4.1142</b>	<b>6.1625</b>	<b>0.0189</b>	<b>1.3058</b>	<b>0.1201</b>	<b>1.4259</b>	<b>0.3460</b>	<b>0.1128</b>	<b>0.4588</b>	<b>0.0000</b>	<b>1,721.6823</b>	<b>1,721.6823</b>	<b>0.1294</b>	<b>0.0000</b>	<b>1,724.9183</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

**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	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**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	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
<b>Total</b>	<b>0.0475</b>	<b>0.4716</b>	<b>0.3235</b>	<b>5.8000e-004</b>	<b>0.0496</b>	<b>0.0233</b>	<b>0.0729</b>	<b>7.5100e-003</b>	<b>0.0216</b>	<b>0.0291</b>	<b>0.0000</b>	<b>51.0012</b>	<b>51.0012</b>	<b>0.0144</b>	<b>0.0000</b>	<b>51.3601</b>

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**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
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	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
<b>Total</b>	<b>2.9000e-003</b>	<b>0.0641</b>	<b>0.0233</b>	<b>2.0000e-004</b>	<b>6.4100e-003</b>	<b>2.1000e-004</b>	<b>6.6200e-003</b>	<b>1.7300e-003</b>	<b>2.0000e-004</b>	<b>1.9300e-003</b>	<b>0.0000</b>	<b>19.6816</b>	<b>19.6816</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>19.7136</b>

**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					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
<b>Total</b>	<b>0.0475</b>	<b>0.4716</b>	<b>0.3235</b>	<b>5.8000e-004</b>	<b>0.0496</b>	<b>0.0233</b>	<b>0.0729</b>	<b>7.5100e-003</b>	<b>0.0216</b>	<b>0.0291</b>	<b>0.0000</b>	<b>51.0011</b>	<b>51.0011</b>	<b>0.0144</b>	<b>0.0000</b>	<b>51.3600</b>

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**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
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	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
<b>Total</b>	<b>2.9000e-003</b>	<b>0.0641</b>	<b>0.0233</b>	<b>2.0000e-004</b>	<b>6.4100e-003</b>	<b>2.1000e-004</b>	<b>6.6200e-003</b>	<b>1.7300e-003</b>	<b>2.0000e-004</b>	<b>1.9300e-003</b>	<b>0.0000</b>	<b>19.6816</b>	<b>19.6816</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>19.7136</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
<b>Total</b>	<b>0.0389</b>	<b>0.4050</b>	<b>0.2115</b>	<b>3.8000e-004</b>	<b>0.1807</b>	<b>0.0204</b>	<b>0.2011</b>	<b>0.0993</b>	<b>0.0188</b>	<b>0.1181</b>	<b>0.0000</b>	<b>33.4357</b>	<b>33.4357</b>	<b>0.0108</b>	<b>0.0000</b>	<b>33.7061</b>

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**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
<b>Total</b>	<b>7.7000e-004</b>	<b>6.0000e-004</b>	<b>6.8100e-003</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>2.0000e-005</b>	<b>1.9900e-003</b>	<b>5.2000e-004</b>	<b>1.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.7801</b>	<b>1.7801</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.7814</b>

**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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
<b>Total</b>	<b>0.0389</b>	<b>0.4050</b>	<b>0.2115</b>	<b>3.8000e-004</b>	<b>0.1807</b>	<b>0.0204</b>	<b>0.2011</b>	<b>0.0993</b>	<b>0.0188</b>	<b>0.1181</b>	<b>0.0000</b>	<b>33.4357</b>	<b>33.4357</b>	<b>0.0108</b>	<b>0.0000</b>	<b>33.7060</b>

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**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
<b>Total</b>	<b>7.7000e-004</b>	<b>6.0000e-004</b>	<b>6.8100e-003</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>2.0000e-005</b>	<b>1.9900e-003</b>	<b>5.2000e-004</b>	<b>1.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.7801</b>	<b>1.7801</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.7814</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
<b>Total</b>	<b>0.0796</b>	<b>0.8816</b>	<b>0.5867</b>	<b>1.1800e-003</b>	<b>0.1741</b>	<b>0.0377</b>	<b>0.2118</b>	<b>0.0693</b>	<b>0.0347</b>	<b>0.1040</b>	<b>0.0000</b>	<b>103.5405</b>	<b>103.5405</b>	<b>0.0335</b>	<b>0.0000</b>	<b>104.3776</b>

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**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
<b>Total</b>	<b>1.6400e-003</b>	<b>1.2700e-003</b>	<b>0.0144</b>	<b>4.0000e-005</b>	<b>4.1600e-003</b>	<b>3.0000e-005</b>	<b>4.2000e-003</b>	<b>1.1100e-003</b>	<b>3.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>3.7579</b>	<b>3.7579</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.7607</b>

**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					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
<b>Total</b>	<b>0.0796</b>	<b>0.8816</b>	<b>0.5867</b>	<b>1.1800e-003</b>	<b>0.1741</b>	<b>0.0377</b>	<b>0.2118</b>	<b>0.0693</b>	<b>0.0347</b>	<b>0.1040</b>	<b>0.0000</b>	<b>103.5403</b>	<b>103.5403</b>	<b>0.0335</b>	<b>0.0000</b>	<b>104.3775</b>

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**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
<b>Total</b>	<b>1.6400e-003</b>	<b>1.2700e-003</b>	<b>0.0144</b>	<b>4.0000e-005</b>	<b>4.1600e-003</b>	<b>3.0000e-005</b>	<b>4.2000e-003</b>	<b>1.1100e-003</b>	<b>3.0000e-005</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>3.7579</b>	<b>3.7579</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.7607</b>

**3.4 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					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
<b>Total</b>	<b>0.0127</b>	<b>0.1360</b>	<b>0.1017</b>	<b>2.2000e-004</b>	<b>0.0807</b>	<b>5.7200e-003</b>	<b>0.0865</b>	<b>0.0180</b>	<b>5.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>19.0871</b>	<b>19.0871</b>	<b>6.1700e-003</b>	<b>0.0000</b>	<b>19.2414</b>

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**3.4 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	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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
<b>Total</b>	<b>2.8000e-004</b>	<b>2.1000e-004</b>	<b>2.4400e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6679</b>	<b>0.6679</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6684</b>

**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					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
<b>Total</b>	<b>0.0127</b>	<b>0.1360</b>	<b>0.1017</b>	<b>2.2000e-004</b>	<b>0.0807</b>	<b>5.7200e-003</b>	<b>0.0865</b>	<b>0.0180</b>	<b>5.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>19.0871</b>	<b>19.0871</b>	<b>6.1700e-003</b>	<b>0.0000</b>	<b>19.2414</b>

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**3.4 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	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	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
<b>Total</b>	<b>2.8000e-004</b>	<b>2.1000e-004</b>	<b>2.4400e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6679</b>	<b>0.6679</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6684</b>

**3.5 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	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1324</b>	<b>293.1324</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8881</b>

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**3.5 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	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	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
<b>Total</b>	<b>0.4616</b>	<b>2.0027</b>	<b>3.9885</b>	<b>0.0152</b>	<b>1.2243</b>	<b>0.0121</b>	<b>1.2363</b>	<b>0.3278</b>	<b>0.0112</b>	<b>0.3390</b>	<b>0.0000</b>	<b>1,408.7952</b>	<b>1,408.7952</b>	<b>0.0530</b>	<b>0.0000</b>	<b>1,410.1208</b>

**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	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1321</b>	<b>293.1321</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8877</b>

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**3.5 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	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	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
<b>Total</b>	<b>0.4616</b>	<b>2.0027</b>	<b>3.9885</b>	<b>0.0152</b>	<b>1.2243</b>	<b>0.0121</b>	<b>1.2363</b>	<b>0.3278</b>	<b>0.0112</b>	<b>0.3390</b>	<b>0.0000</b>	<b>1,408.7952</b>	<b>1,408.7952</b>	<b>0.0530</b>	<b>0.0000</b>	<b>1,410.1208</b>

**3.5 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	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
<b>Total</b>	<b>0.1942</b>	<b>1.7765</b>	<b>2.0061</b>	<b>3.3300e-003</b>		<b>0.0864</b>	<b>0.0864</b>		<b>0.0813</b>	<b>0.0813</b>	<b>0.0000</b>	<b>286.2789</b>	<b>286.2789</b>	<b>0.0681</b>	<b>0.0000</b>	<b>287.9814</b>

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**3.5 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	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	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
<b>Total</b>	<b>0.4135</b>	<b>1.5218</b>	<b>3.5707</b>	<b>0.0144</b>	<b>1.1953</b>	<b>9.8700e-003</b>	<b>1.2051</b>	<b>0.3200</b>	<b>9.1400e-003</b>	<b>0.3292</b>	<b>0.0000</b>	<b>1,327.3369</b>	<b>1,327.3369</b>	<b>0.0462</b>	<b>0.0000</b>	<b>1,328.4916</b>

**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	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
<b>Total</b>	<b>0.1942</b>	<b>1.7765</b>	<b>2.0061</b>	<b>3.3300e-003</b>		<b>0.0864</b>	<b>0.0864</b>		<b>0.0813</b>	<b>0.0813</b>	<b>0.0000</b>	<b>286.2785</b>	<b>286.2785</b>	<b>0.0681</b>	<b>0.0000</b>	<b>287.9811</b>

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**3.5 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	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	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
<b>Total</b>	<b>0.4135</b>	<b>1.5218</b>	<b>3.5707</b>	<b>0.0144</b>	<b>1.1953</b>	<b>9.8700e-003</b>	<b>1.2051</b>	<b>0.3200</b>	<b>9.1400e-003</b>	<b>0.3292</b>	<b>0.0000</b>	<b>1,327.3369</b>	<b>1,327.3369</b>	<b>0.0462</b>	<b>0.0000</b>	<b>1,328.4916</b>

**3.6 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	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.7100e-003</b>	<b>0.0663</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>3.3200e-003</b>	<b>3.3200e-003</b>		<b>3.0500e-003</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>13.0175</b>	<b>13.0175</b>	<b>4.2100e-003</b>	<b>0.0000</b>	<b>13.1227</b>

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**3.6 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	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	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
<b>Total</b>	<b>3.7000e-004</b>	<b>2.7000e-004</b>	<b>3.1200e-003</b>	<b>1.0000e-005</b>	<b>1.0700e-003</b>	<b>1.0000e-005</b>	<b>1.0800e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.8963</b>	<b>0.8963</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8968</b>

**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	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.7100e-003</b>	<b>0.0663</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>3.3200e-003</b>	<b>3.3200e-003</b>		<b>3.0500e-003</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>13.0175</b>	<b>13.0175</b>	<b>4.2100e-003</b>	<b>0.0000</b>	<b>13.1227</b>

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**3.6 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	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	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
<b>Total</b>	<b>3.7000e-004</b>	<b>2.7000e-004</b>	<b>3.1200e-003</b>	<b>1.0000e-005</b>	<b>1.0700e-003</b>	<b>1.0000e-005</b>	<b>1.0800e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.8963</b>	<b>0.8963</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8968</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0109</b>	<b>0.1048</b>	<b>0.1609</b>	<b>2.5000e-004</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>4.7400e-003</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>22.0292</b>	<b>22.0292</b>	<b>7.1200e-003</b>	<b>0.0000</b>	<b>22.2073</b>

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**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
<b>Total</b>	<b>5.9000e-004</b>	<b>4.1000e-004</b>	<b>4.9200e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4697</b>	<b>1.4697</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4706</b>

**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	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0109</b>	<b>0.1048</b>	<b>0.1609</b>	<b>2.5000e-004</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>4.7400e-003</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>22.0292</b>	<b>22.0292</b>	<b>7.1200e-003</b>	<b>0.0000</b>	<b>22.2073</b>

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**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
<b>Total</b>	<b>5.9000e-004</b>	<b>4.1000e-004</b>	<b>4.9200e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4697</b>	<b>1.4697</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4706</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
<b>Total</b>	<b>0.0101</b>	<b>6.9900e-003</b>	<b>0.0835</b>	<b>2.8000e-004</b>	<b>0.0307</b>	<b>2.3000e-004</b>	<b>0.0309</b>	<b>8.1500e-003</b>	<b>2.2000e-004</b>	<b>8.3700e-003</b>	<b>0.0000</b>	<b>24.9407</b>	<b>24.9407</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>24.9558</b>

**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	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
<b>Total</b>	<b>0.0101</b>	<b>6.9900e-003</b>	<b>0.0835</b>	<b>2.8000e-004</b>	<b>0.0307</b>	<b>2.3000e-004</b>	<b>0.0309</b>	<b>8.1500e-003</b>	<b>2.2000e-004</b>	<b>8.3700e-003</b>	<b>0.0000</b>	<b>24.9407</b>	<b>24.9407</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>24.9558</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

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	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
<b>Total</b>	<b>5.1437</b>	<b>0.2950</b>	<b>10.3804</b>	<b>1.6600e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0714</b>	<b>0.0714</b>	<b>0.0000</b>	<b>220.9670</b>	<b>220.9670</b>	<b>0.0201</b>	<b>3.7400e-003</b>	<b>222.5835</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
<b>Total</b>	<b>5.1437</b>	<b>0.2950</b>	<b>10.3804</b>	<b>1.6600e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0714</b>	<b>0.0714</b>	<b>0.0000</b>	<b>220.9670</b>	<b>220.9670</b>	<b>0.0201</b>	<b>3.7400e-003</b>	<b>222.5835</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

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**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
<b>Maximum</b>	<b>237.1630</b>	<b>46.4588</b>	<b>49.5629</b>	<b>0.1517</b>	<b>18.2675</b>	<b>2.0461</b>	<b>20.3135</b>	<b>9.9840</b>	<b>1.8824</b>	<b>11.8664</b>	<b>0.0000</b>	<b>15,251.5674</b>	<b>15,251.5674</b>	<b>1.9503</b>	<b>0.0000</b>	<b>15,278.5288</b>



Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
<b>Total</b>	<b>41.1168</b>	<b>67.2262</b>	<b>207.5497</b>	<b>0.6278</b>	<b>45.9592</b>	<b>2.4626</b>	<b>48.4217</b>	<b>12.2950</b>	<b>2.4385</b>	<b>14.7336</b>	<b>0.0000</b>	<b>76,811.18 16</b>	<b>76,811.18 16</b>	<b>2.8282</b>	<b>0.4832</b>	<b>77,025.87 86</b>

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
<b>Total</b>	<b>41.1168</b>	<b>67.2262</b>	<b>207.5497</b>	<b>0.6278</b>	<b>45.9592</b>	<b>2.4626</b>	<b>48.4217</b>	<b>12.2950</b>	<b>2.4385</b>	<b>14.7336</b>	<b>0.0000</b>	<b>76,811.18 16</b>	<b>76,811.18 16</b>	<b>2.8282</b>	<b>0.4832</b>	<b>77,025.87 86</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
<b>Total</b>	<b>0.1916</b>	<b>4.1394</b>	<b>1.5644</b>	<b>0.0136</b>	<b>0.4346</b>	<b>0.0139</b>	<b>0.4485</b>	<b>0.1176</b>	<b>0.0133</b>	<b>0.1309</b>		<b>1,463.0568</b>	<b>1,463.0568</b>	<b>0.0927</b>		<b>1,465.3750</b>

**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					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
<b>Total</b>	<b>0.1916</b>	<b>4.1394</b>	<b>1.5644</b>	<b>0.0136</b>	<b>0.4346</b>	<b>0.0139</b>	<b>0.4485</b>	<b>0.1176</b>	<b>0.0133</b>	<b>0.1309</b>		<b>1,463.0568</b>	<b>1,463.0568</b>	<b>0.0927</b>		<b>1,465.3750</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
<b>Total</b>	<b>0.0772</b>	<b>0.0530</b>	<b>0.7250</b>	<b>2.0600e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>204.9786</b>	<b>204.9786</b>	<b>6.0400e-003</b>		<b>205.1296</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
<b>Total</b>	<b>0.0772</b>	<b>0.0530</b>	<b>0.7250</b>	<b>2.0600e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>204.9786</b>	<b>204.9786</b>	<b>6.0400e-003</b>		<b>205.1296</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
<b>Total</b>	<b>0.0857</b>	<b>0.0589</b>	<b>0.8056</b>	<b>2.2900e-003</b>	<b>0.2236</b>	<b>1.8100e-003</b>	<b>0.2254</b>	<b>0.0593</b>	<b>1.6600e-003</b>	<b>0.0610</b>		<b>227.7540</b>	<b>227.7540</b>	<b>6.7100e-003</b>		<b>227.9217</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
<b>Total</b>	<b>0.0857</b>	<b>0.0589</b>	<b>0.8056</b>	<b>2.2900e-003</b>	<b>0.2236</b>	<b>1.8100e-003</b>	<b>0.2254</b>	<b>0.0593</b>	<b>1.6600e-003</b>	<b>0.0610</b>		<b>227.7540</b>	<b>227.7540</b>	<b>6.7100e-003</b>		<b>227.9217</b>

**3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
<b>Total</b>	<b>0.0803</b>	<b>0.0532</b>	<b>0.7432</b>	<b>2.2100e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>219.7425</b>	<b>219.7425</b>	<b>6.0600e-003</b>		<b>219.8941</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
<b>Total</b>	<b>0.0803</b>	<b>0.0532</b>	<b>0.7432</b>	<b>2.2100e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>219.7425</b>	<b>219.7425</b>	<b>6.0600e-003</b>		<b>219.8941</b>

**3.5 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
<b>Total</b>	<b>3.6242</b>	<b>15.3350</b>	<b>33.1995</b>	<b>0.1247</b>	<b>9.8688</b>	<b>0.0949</b>	<b>9.9637</b>	<b>2.6381</b>	<b>0.0883</b>	<b>2.7263</b>		<b>12,697.23 39</b>	<b>12,697.23 39</b>	<b>0.4665</b>		<b>12,708.89 66</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
<b>Total</b>	<b>3.6242</b>	<b>15.3350</b>	<b>33.1995</b>	<b>0.1247</b>	<b>9.8688</b>	<b>0.0949</b>	<b>9.9637</b>	<b>2.6381</b>	<b>0.0883</b>	<b>2.7263</b>		<b>12,697.23 39</b>	<b>12,697.23 39</b>	<b>0.4665</b>		<b>12,708.89 66</b>

**3.5 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
<b>Total</b>	<b>3.3229</b>	<b>11.9468</b>	<b>30.5127</b>	<b>0.1203</b>	<b>9.8688</b>	<b>0.0797</b>	<b>9.9485</b>	<b>2.6381</b>	<b>0.0738</b>	<b>2.7118</b>		<b>12,252.31 70</b>	<b>12,252.31 70</b>	<b>0.4172</b>		<b>12,262.74 60</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
<b>Total</b>	<b>3.3229</b>	<b>11.9468</b>	<b>30.5127</b>	<b>0.1203</b>	<b>9.8688</b>	<b>0.0797</b>	<b>9.9485</b>	<b>2.6381</b>	<b>0.0738</b>	<b>2.7118</b>		<b>12,252.31 70</b>	<b>12,252.31 70</b>	<b>0.4172</b>		<b>12,262.74 60</b>

**3.6 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.584 1</b>	<b>2,207.584 1</b>	<b>0.7140</b>		<b>2,225.433 6</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 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
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
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
<b>Total</b>	<b>0.0566</b>	<b>0.0361</b>	<b>0.5133</b>	<b>1.5900e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>158.7723</b>	<b>158.7723</b>	<b>4.1000e-003</b>		<b>158.8748</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 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
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
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
<b>Total</b>	<b>0.0566</b>	<b>0.0361</b>	<b>0.5133</b>	<b>1.5900e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>158.7723</b>	<b>158.7723</b>	<b>4.1000e-003</b>		<b>158.8748</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0535</b>	<b>0.0329</b>	<b>0.4785</b>	<b>1.5400e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>153.8517</b>	<b>153.8517</b>	<b>3.7600e-003</b>		<b>153.9458</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0535</b>	<b>0.0329</b>	<b>0.4785</b>	<b>1.5400e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>153.8517</b>	<b>153.8517</b>	<b>3.7600e-003</b>		<b>153.9458</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
<b>Total</b>	<b>0.5707</b>	<b>0.3513</b>	<b>5.1044</b>	<b>0.0165</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,641.085 2</b>	<b>1,641.085 2</b>	<b>0.0401</b>		<b>1,642.088 6</b>

**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	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
<b>Total</b>	<b>0.5707</b>	<b>0.3513</b>	<b>5.1044</b>	<b>0.0165</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,641.085 2</b>	<b>1,641.085 2</b>	<b>0.0401</b>		<b>1,642.088 6</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
<b>Maximum</b>	<b>237.2328</b>	<b>46.4651</b>	<b>47.3319</b>	<b>0.1455</b>	<b>18.2675</b>	<b>2.0461</b>	<b>20.3135</b>	<b>9.9840</b>	<b>1.8824</b>	<b>11.8664</b>	<b>0.0000</b>	<b>14,630.3099</b>	<b>14,630.3099</b>	<b>1.9499</b>	<b>0.0000</b>	<b>14,657.2663</b>



Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
<b>Total</b>	<b>0.2019</b>	<b>4.1943</b>	<b>1.5706</b>	<b>0.0133</b>	<b>0.4346</b>	<b>0.0141</b>	<b>0.4487</b>	<b>0.1176</b>	<b>0.0135</b>	<b>0.1311</b>		<b>1,430.6932</b>	<b>1,430.6932</b>	<b>0.0955</b>		<b>1,433.0812</b>

**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					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
<b>Total</b>	<b>0.2019</b>	<b>4.1943</b>	<b>1.5706</b>	<b>0.0133</b>	<b>0.4346</b>	<b>0.0141</b>	<b>0.4487</b>	<b>0.1176</b>	<b>0.0135</b>	<b>0.1311</b>		<b>1,430.6932</b>	<b>1,430.6932</b>	<b>0.0955</b>		<b>1,433.0812</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
<b>Total</b>	<b>0.0858</b>	<b>0.0587</b>	<b>0.6629</b>	<b>1.9400e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>193.0052</b>	<b>193.0052</b>	<b>5.6800e-003</b>		<b>193.1472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
<b>Total</b>	<b>0.0858</b>	<b>0.0587</b>	<b>0.6629</b>	<b>1.9400e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>193.0052</b>	<b>193.0052</b>	<b>5.6800e-003</b>		<b>193.1472</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
<b>Total</b>	<b>0.0954</b>	<b>0.0652</b>	<b>0.7365</b>	<b>2.1500e-003</b>	<b>0.2236</b>	<b>1.8100e-003</b>	<b>0.2254</b>	<b>0.0593</b>	<b>1.6600e-003</b>	<b>0.0610</b>		<b>214.4502</b>	<b>214.4502</b>	<b>6.3100e-003</b>		<b>214.6080</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
<b>Total</b>	<b>0.0954</b>	<b>0.0652</b>	<b>0.7365</b>	<b>2.1500e-003</b>	<b>0.2236</b>	<b>1.8100e-003</b>	<b>0.2254</b>	<b>0.0593</b>	<b>1.6600e-003</b>	<b>0.0610</b>		<b>214.4502</b>	<b>214.4502</b>	<b>6.3100e-003</b>		<b>214.6080</b>

**3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
<b>Total</b>	<b>0.0896</b>	<b>0.0589</b>	<b>0.6784</b>	<b>2.0800e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>206.9139</b>	<b>206.9139</b>	<b>5.7000e-003</b>		<b>207.0563</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
<b>Total</b>	<b>0.0896</b>	<b>0.0589</b>	<b>0.6784</b>	<b>2.0800e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>206.9139</b>	<b>206.9139</b>	<b>5.7000e-003</b>		<b>207.0563</b>

**3.5 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
<b>Total</b>	<b>4.0156</b>	<b>15.5266</b>	<b>30.9685</b>	<b>0.1186</b>	<b>9.8688</b>	<b>0.0957</b>	<b>9.9645</b>	<b>2.6381</b>	<b>0.0891</b>	<b>2.7271</b>		<b>12,075.9763</b>	<b>12,075.9763</b>	<b>0.4663</b>		<b>12,087.6341</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
<b>Total</b>	<b>4.0156</b>	<b>15.5266</b>	<b>30.9685</b>	<b>0.1186</b>	<b>9.8688</b>	<b>0.0957</b>	<b>9.9645</b>	<b>2.6381</b>	<b>0.0891</b>	<b>2.7271</b>		<b>12,075.9763</b>	<b>12,075.9763</b>	<b>0.4663</b>		<b>12,087.6341</b>

**3.5 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
<b>Total</b>	<b>3.6978</b>	<b>12.1065</b>	<b>28.3496</b>	<b>0.1144</b>	<b>9.8688</b>	<b>0.0803</b>	<b>9.9491</b>	<b>2.6381</b>	<b>0.0743</b>	<b>2.7124</b>		<b>11,655.1325</b>	<b>11,655.1325</b>	<b>0.4151</b>		<b>11,665.5099</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
<b>Total</b>	<b>3.6978</b>	<b>12.1065</b>	<b>28.3496</b>	<b>0.1144</b>	<b>9.8688</b>	<b>0.0803</b>	<b>9.9491</b>	<b>2.6381</b>	<b>0.0743</b>	<b>2.7124</b>		<b>11,655.1325</b>	<b>11,655.1325</b>	<b>0.4151</b>		<b>11,665.5099</b>

**3.6 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 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
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
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
<b>Total</b>	<b>0.0633</b>	<b>0.0400</b>	<b>0.4677</b>	<b>1.5000e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>149.5081</b>	<b>149.5081</b>	<b>3.8500e-003</b>		<b>149.6043</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 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
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
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
<b>Total</b>	<b>0.0633</b>	<b>0.0400</b>	<b>0.4677</b>	<b>1.5000e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>149.5081</b>	<b>149.5081</b>	<b>3.8500e-003</b>		<b>149.6043</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
<b>Total</b>	<b>0.0601</b>	<b>0.0364</b>	<b>0.4354</b>	<b>1.4500e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>144.8706</b>	<b>144.8706</b>	<b>3.5300e-003</b>		<b>144.9587</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
<b>Total</b>	<b>0.0601</b>	<b>0.0364</b>	<b>0.4354</b>	<b>1.4500e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>144.8706</b>	<b>144.8706</b>	<b>3.5300e-003</b>		<b>144.9587</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
<b>Total</b>	<b>0.6406</b>	<b>0.3886</b>	<b>4.6439</b>	<b>0.0155</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,545.2860</b>	<b>1,545.2860</b>	<b>0.0376</b>		<b>1,546.2262</b>

**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	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
<b>Total</b>	<b>0.6406</b>	<b>0.3886</b>	<b>4.6439</b>	<b>0.0155</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,545.2860</b>	<b>1,545.2860</b>	<b>0.0376</b>		<b>1,546.2262</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

**2.0 Emissions Summary**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
<b>Maximum</b>	<b>4.1592</b>	<b>4.0240</b>	<b>5.1546</b>	<b>0.0155</b>	<b>0.9509</b>	<b>0.1175</b>	<b>1.0683</b>	<b>0.2518</b>	<b>0.1103</b>	<b>0.3621</b>	<b>0.0000</b>	<b>1,418.6554</b>	<b>1,418.6554</b>	<b>0.1215</b>	<b>0.0000</b>	<b>1,421.6925</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
<b>Maximum</b>	<b>4.1592</b>	<b>4.0240</b>	<b>5.1546</b>	<b>0.0155</b>	<b>0.9509</b>	<b>0.1175</b>	<b>1.0683</b>	<b>0.2518</b>	<b>0.1103</b>	<b>0.3621</b>	<b>0.0000</b>	<b>1,418.6550</b>	<b>1,418.6550</b>	<b>0.1215</b>	<b>0.0000</b>	<b>1,421.6921</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

**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	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
<b>Total</b>	<b>0.0475</b>	<b>0.4716</b>	<b>0.3235</b>	<b>5.8000e-004</b>	<b>0.0496</b>	<b>0.0233</b>	<b>0.0729</b>	<b>7.5100e-003</b>	<b>0.0216</b>	<b>0.0291</b>	<b>0.0000</b>	<b>51.0012</b>	<b>51.0012</b>	<b>0.0144</b>	<b>0.0000</b>	<b>51.3601</b>

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**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
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	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
<b>Total</b>	<b>2.6500e-003</b>	<b>0.0639</b>	<b>0.0209</b>	<b>2.0000e-004</b>	<b>5.6200e-003</b>	<b>2.0000e-004</b>	<b>5.8200e-003</b>	<b>1.5300e-003</b>	<b>1.9000e-004</b>	<b>1.7200e-003</b>	<b>0.0000</b>	<b>18.9847</b>	<b>18.9847</b>	<b>1.2600e-003</b>	<b>0.0000</b>	<b>19.0161</b>

**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					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
<b>Total</b>	<b>0.0475</b>	<b>0.4716</b>	<b>0.3235</b>	<b>5.8000e-004</b>	<b>0.0496</b>	<b>0.0233</b>	<b>0.0729</b>	<b>7.5100e-003</b>	<b>0.0216</b>	<b>0.0291</b>	<b>0.0000</b>	<b>51.0011</b>	<b>51.0011</b>	<b>0.0144</b>	<b>0.0000</b>	<b>51.3600</b>

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**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
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	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
<b>Total</b>	<b>2.6500e-003</b>	<b>0.0639</b>	<b>0.0209</b>	<b>2.0000e-004</b>	<b>5.6200e-003</b>	<b>2.0000e-004</b>	<b>5.8200e-003</b>	<b>1.5300e-003</b>	<b>1.9000e-004</b>	<b>1.7200e-003</b>	<b>0.0000</b>	<b>18.9847</b>	<b>18.9847</b>	<b>1.2600e-003</b>	<b>0.0000</b>	<b>19.0161</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
<b>Total</b>	<b>0.0389</b>	<b>0.4050</b>	<b>0.2115</b>	<b>3.8000e-004</b>	<b>0.1807</b>	<b>0.0204</b>	<b>0.2011</b>	<b>0.0993</b>	<b>0.0188</b>	<b>0.1181</b>	<b>0.0000</b>	<b>33.4357</b>	<b>33.4357</b>	<b>0.0108</b>	<b>0.0000</b>	<b>33.7061</b>

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**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
<b>Total</b>	<b>5.8000e-004</b>	<b>4.3000e-004</b>	<b>4.8700e-003</b>	<b>1.0000e-005</b>	<b>1.3400e-003</b>	<b>1.0000e-005</b>	<b>1.3500e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2225</b>	<b>1.2225</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2234</b>

**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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
<b>Total</b>	<b>0.0389</b>	<b>0.4050</b>	<b>0.2115</b>	<b>3.8000e-004</b>	<b>0.1807</b>	<b>0.0204</b>	<b>0.2011</b>	<b>0.0993</b>	<b>0.0188</b>	<b>0.1181</b>	<b>0.0000</b>	<b>33.4357</b>	<b>33.4357</b>	<b>0.0108</b>	<b>0.0000</b>	<b>33.7060</b>

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**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
<b>Total</b>	<b>5.8000e-004</b>	<b>4.3000e-004</b>	<b>4.8700e-003</b>	<b>1.0000e-005</b>	<b>1.3400e-003</b>	<b>1.0000e-005</b>	<b>1.3500e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2225</b>	<b>1.2225</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.2234</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
<b>Total</b>	<b>0.0796</b>	<b>0.8816</b>	<b>0.5867</b>	<b>1.1800e-003</b>	<b>0.1741</b>	<b>0.0377</b>	<b>0.2118</b>	<b>0.0693</b>	<b>0.0347</b>	<b>0.1040</b>	<b>0.0000</b>	<b>103.5405</b>	<b>103.5405</b>	<b>0.0335</b>	<b>0.0000</b>	<b>104.3776</b>

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**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
<b>Total</b>	<b>1.2200e-003</b>	<b>9.0000e-004</b>	<b>0.0103</b>	<b>3.0000e-005</b>	<b>2.8300e-003</b>	<b>2.0000e-005</b>	<b>2.8600e-003</b>	<b>7.5000e-004</b>	<b>2.0000e-005</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>2.5808</b>	<b>2.5808</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.5828</b>

**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					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
<b>Total</b>	<b>0.0796</b>	<b>0.8816</b>	<b>0.5867</b>	<b>1.1800e-003</b>	<b>0.1741</b>	<b>0.0377</b>	<b>0.2118</b>	<b>0.0693</b>	<b>0.0347</b>	<b>0.1040</b>	<b>0.0000</b>	<b>103.5403</b>	<b>103.5403</b>	<b>0.0335</b>	<b>0.0000</b>	<b>104.3775</b>

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**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
<b>Total</b>	<b>1.2200e-003</b>	<b>9.0000e-004</b>	<b>0.0103</b>	<b>3.0000e-005</b>	<b>2.8300e-003</b>	<b>2.0000e-005</b>	<b>2.8600e-003</b>	<b>7.5000e-004</b>	<b>2.0000e-005</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>2.5808</b>	<b>2.5808</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.5828</b>

**3.4 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					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
<b>Total</b>	<b>0.0127</b>	<b>0.1360</b>	<b>0.1017</b>	<b>2.2000e-004</b>	<b>0.0807</b>	<b>5.7200e-003</b>	<b>0.0865</b>	<b>0.0180</b>	<b>5.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>19.0871</b>	<b>19.0871</b>	<b>6.1700e-003</b>	<b>0.0000</b>	<b>19.2414</b>

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**3.4 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	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	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
<b>Total</b>	<b>2.1000e-004</b>	<b>1.5000e-004</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4587</b>	<b>0.4587</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4590</b>

**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					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
<b>Total</b>	<b>0.0127</b>	<b>0.1360</b>	<b>0.1017</b>	<b>2.2000e-004</b>	<b>0.0807</b>	<b>5.7200e-003</b>	<b>0.0865</b>	<b>0.0180</b>	<b>5.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>19.0871</b>	<b>19.0871</b>	<b>6.1700e-003</b>	<b>0.0000</b>	<b>19.2414</b>

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**3.4 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	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	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
<b>Total</b>	<b>2.1000e-004</b>	<b>1.5000e-004</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4587</b>	<b>0.4587</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4590</b>

**3.5 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	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1324</b>	<b>293.1324</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8881</b>

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**3.5 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	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	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
<b>Total</b>	<b>0.3578</b>	<b>1.9125</b>	<b>2.9812</b>	<b>0.0119</b>	<b>0.8696</b>	<b>9.4100e-003</b>	<b>0.8790</b>	<b>0.2336</b>	<b>8.7800e-003</b>	<b>0.2424</b>	<b>0.0000</b>	<b>1,105.9771</b>	<b>1,105.9771</b>	<b>0.0451</b>	<b>0.0000</b>	<b>1,107.1039</b>

**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	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1321</b>	<b>293.1321</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8877</b>

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**3.5 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	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	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
<b>Total</b>	<b>0.3578</b>	<b>1.9125</b>	<b>2.9812</b>	<b>0.0119</b>	<b>0.8696</b>	<b>9.4100e-003</b>	<b>0.8790</b>	<b>0.2336</b>	<b>8.7800e-003</b>	<b>0.2424</b>	<b>0.0000</b>	<b>1,105.9771</b>	<b>1,105.9771</b>	<b>0.0451</b>	<b>0.0000</b>	<b>1,107.1039</b>

**3.5 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	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
<b>Total</b>	<b>0.1942</b>	<b>1.7765</b>	<b>2.0061</b>	<b>3.3300e-003</b>		<b>0.0864</b>	<b>0.0864</b>		<b>0.0813</b>	<b>0.0813</b>	<b>0.0000</b>	<b>286.2789</b>	<b>286.2789</b>	<b>0.0681</b>	<b>0.0000</b>	<b>287.9814</b>

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**3.5 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	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	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
<b>Total</b>	<b>0.3177</b>	<b>1.4420</b>	<b>2.6646</b>	<b>0.0112</b>	<b>0.8490</b>	<b>7.3700e-003</b>	<b>0.8564</b>	<b>0.2281</b>	<b>6.8500e-003</b>	<b>0.2349</b>	<b>0.0000</b>	<b>1,042.5294</b>	<b>1,042.5294</b>	<b>0.0392</b>	<b>0.0000</b>	<b>1,043.5090</b>

**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	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
<b>Total</b>	<b>0.1942</b>	<b>1.7765</b>	<b>2.0061</b>	<b>3.3300e-003</b>		<b>0.0864</b>	<b>0.0864</b>		<b>0.0813</b>	<b>0.0813</b>	<b>0.0000</b>	<b>286.2785</b>	<b>286.2785</b>	<b>0.0681</b>	<b>0.0000</b>	<b>287.9811</b>

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**3.5 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	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	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
<b>Total</b>	<b>0.3177</b>	<b>1.4420</b>	<b>2.6646</b>	<b>0.0112</b>	<b>0.8490</b>	<b>7.3700e-003</b>	<b>0.8564</b>	<b>0.2281</b>	<b>6.8500e-003</b>	<b>0.2349</b>	<b>0.0000</b>	<b>1,042.5294</b>	<b>1,042.5294</b>	<b>0.0392</b>	<b>0.0000</b>	<b>1,043.5090</b>

**3.6 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	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.7100e-003</b>	<b>0.0663</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>3.3200e-003</b>	<b>3.3200e-003</b>		<b>3.0500e-003</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>13.0175</b>	<b>13.0175</b>	<b>4.2100e-003</b>	<b>0.0000</b>	<b>13.1227</b>

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**3.6 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	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	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6156</b>	<b>0.6156</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6160</b>

**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	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.7100e-003</b>	<b>0.0663</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>3.3200e-003</b>	<b>3.3200e-003</b>		<b>3.0500e-003</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>13.0175</b>	<b>13.0175</b>	<b>4.2100e-003</b>	<b>0.0000</b>	<b>13.1227</b>

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**3.6 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	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	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6156</b>	<b>0.6156</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6160</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0109</b>	<b>0.1048</b>	<b>0.1609</b>	<b>2.5000e-004</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>4.7400e-003</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>22.0292</b>	<b>22.0292</b>	<b>7.1200e-003</b>	<b>0.0000</b>	<b>22.2073</b>

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**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
<b>Total</b>	<b>4.4000e-004</b>	<b>2.9000e-004</b>	<b>3.5100e-003</b>	<b>1.0000e-005</b>	<b>1.2300e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0094</b>	<b>1.0094</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.0100</b>

**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	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0109</b>	<b>0.1048</b>	<b>0.1609</b>	<b>2.5000e-004</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>4.7400e-003</b>	<b>4.7400e-003</b>	<b>0.0000</b>	<b>22.0292</b>	<b>22.0292</b>	<b>7.1200e-003</b>	<b>0.0000</b>	<b>22.2073</b>

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**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
<b>Total</b>	<b>4.4000e-004</b>	<b>2.9000e-004</b>	<b>3.5100e-003</b>	<b>1.0000e-005</b>	<b>1.2300e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0094</b>	<b>1.0094</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.0100</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
<b>Total</b>	<b>7.4800e-003</b>	<b>4.9300e-003</b>	<b>0.0596</b>	<b>1.9000e-004</b>	<b>0.0209</b>	<b>1.6000e-004</b>	<b>0.0211</b>	<b>5.5500e-003</b>	<b>1.5000e-004</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>17.1287</b>	<b>17.1287</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>17.1394</b>

**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	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
<b>Total</b>	<b>7.4800e-003</b>	<b>4.9300e-003</b>	<b>0.0596</b>	<b>1.9000e-004</b>	<b>0.0209</b>	<b>1.6000e-004</b>	<b>0.0211</b>	<b>5.5500e-003</b>	<b>1.5000e-004</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>17.1287</b>	<b>17.1287</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>17.1394</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

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	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
<b>Total</b>	<b>5.1437</b>	<b>0.2950</b>	<b>10.3804</b>	<b>1.6600e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0714</b>	<b>0.0714</b>	<b>0.0000</b>	<b>220.9670</b>	<b>220.9670</b>	<b>0.0201</b>	<b>3.7400e-003</b>	<b>222.5835</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
<b>Total</b>	<b>5.1437</b>	<b>0.2950</b>	<b>10.3804</b>	<b>1.6600e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0714</b>	<b>0.0714</b>	<b>0.0000</b>	<b>220.9670</b>	<b>220.9670</b>	<b>0.0201</b>	<b>3.7400e-003</b>	<b>222.5835</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
<b>Maximum</b>	<b>237.0219</b>	<b>46.4415</b>	<b>40.8776</b>	<b>0.1240</b>	<b>18.2032</b>	<b>2.0456</b>	<b>20.2488</b>	<b>9.9670</b>	<b>1.8820</b>	<b>11.8490</b>	<b>0.0000</b>	<b>12,493.4403</b>	<b>12,493.4403</b>	<b>1.9485</b>	<b>0.0000</b>	<b>12,518.5707</b>



Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
<b>Total</b>	<b>41.1168</b>	<b>67.2262</b>	<b>207.5497</b>	<b>0.6278</b>	<b>45.9592</b>	<b>2.4626</b>	<b>48.4217</b>	<b>12.2950</b>	<b>2.4385</b>	<b>14.7336</b>	<b>0.0000</b>	<b>76,811.18 16</b>	<b>76,811.18 16</b>	<b>2.8282</b>	<b>0.4832</b>	<b>77,025.87 86</b>

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
<b>Total</b>	<b>41.1168</b>	<b>67.2262</b>	<b>207.5497</b>	<b>0.6278</b>	<b>45.9592</b>	<b>2.4626</b>	<b>48.4217</b>	<b>12.2950</b>	<b>2.4385</b>	<b>14.7336</b>	<b>0.0000</b>	<b>76,811.18 16</b>	<b>76,811.18 16</b>	<b>2.8282</b>	<b>0.4832</b>	<b>77,025.87 86</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
<b>Total</b>	<b>0.1760</b>	<b>4.1265</b>	<b>1.3884</b>	<b>0.0131</b>	<b>0.3810</b>	<b>0.0135</b>	<b>0.3946</b>	<b>0.1034</b>	<b>0.0129</b>	<b>0.1163</b>		<b>1,409.5212</b>	<b>1,409.5212</b>	<b>0.0912</b>		<b>1,411.8015</b>

**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					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
<b>Total</b>	<b>0.1760</b>	<b>4.1265</b>	<b>1.3884</b>	<b>0.0131</b>	<b>0.3810</b>	<b>0.0135</b>	<b>0.3946</b>	<b>0.1034</b>	<b>0.0129</b>	<b>0.1163</b>		<b>1,409.5212</b>	<b>1,409.5212</b>	<b>0.0912</b>		<b>1,411.8015</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
<b>Total</b>	<b>0.0584</b>	<b>0.0375</b>	<b>0.5139</b>	<b>1.4100e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>140.7359</b>	<b>140.7359</b>	<b>4.2200e-003</b>		<b>140.8414</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
<b>Total</b>	<b>0.0584</b>	<b>0.0375</b>	<b>0.5139</b>	<b>1.4100e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>140.7359</b>	<b>140.7359</b>	<b>4.2200e-003</b>		<b>140.8414</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
<b>Total</b>	<b>0.0649</b>	<b>0.0417</b>	<b>0.5710</b>	<b>1.5700e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>156.3732</b>	<b>156.3732</b>	<b>4.6900e-003</b>		<b>156.4904</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
<b>Total</b>	<b>0.0649</b>	<b>0.0417</b>	<b>0.5710</b>	<b>1.5700e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>156.3732</b>	<b>156.3732</b>	<b>4.6900e-003</b>		<b>156.4904</b>

**3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
<b>Total</b>	<b>0.0607</b>	<b>0.0376</b>	<b>0.5263</b>	<b>1.5100e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>150.8754</b>	<b>150.8754</b>	<b>4.2400e-003</b>		<b>150.9813</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
<b>Total</b>	<b>0.0607</b>	<b>0.0376</b>	<b>0.5263</b>	<b>1.5100e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>150.8754</b>	<b>150.8754</b>	<b>4.2400e-003</b>		<b>150.9813</b>

**3.5 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
<b>Total</b>	<b>2.8378</b>	<b>14.7106</b>	<b>24.5142</b>	<b>0.0971</b>	<b>7.0087</b>	<b>0.0741</b>	<b>7.0828</b>	<b>1.8799</b>	<b>0.0691</b>	<b>1.9490</b>		<b>9,939.106 7</b>	<b>9,939.106 7</b>	<b>0.3933</b>		<b>9,948.938 4</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
<b>Total</b>	<b>2.8378</b>	<b>14.7106</b>	<b>24.5142</b>	<b>0.0971</b>	<b>7.0087</b>	<b>0.0741</b>	<b>7.0828</b>	<b>1.8799</b>	<b>0.0691</b>	<b>1.9490</b>		<b>9,939.106 7</b>	<b>9,939.106 7</b>	<b>0.3933</b>		<b>9,948.938 4</b>

**3.5 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
<b>Total</b>	<b>2.5807</b>	<b>11.3809</b>	<b>22.5017</b>	<b>0.0936</b>	<b>7.0088</b>	<b>0.0595</b>	<b>7.0682</b>	<b>1.8799</b>	<b>0.0552</b>	<b>1.9350</b>		<b>9,595.279 0</b>	<b>9,595.279 0</b>	<b>0.3511</b>		<b>9,604.055 4</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.5 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
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
<b>Total</b>	<b>2.5807</b>	<b>11.3809</b>	<b>22.5017</b>	<b>0.0936</b>	<b>7.0088</b>	<b>0.0595</b>	<b>7.0682</b>	<b>1.8799</b>	<b>0.0552</b>	<b>1.9350</b>		<b>9,595.279 0</b>	<b>9,595.279 0</b>	<b>0.3511</b>		<b>9,604.055 4</b>

**3.6 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.584 1</b>	<b>2,207.584 1</b>	<b>0.7140</b>		<b>2,225.433 6</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 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
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
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
<b>Total</b>	<b>0.0427</b>	<b>0.0255</b>	<b>0.3633</b>	<b>1.0900e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>109.0150</b>	<b>109.0150</b>	<b>2.8600e-003</b>		<b>109.0866</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 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
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
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
<b>Total</b>	<b>0.0427</b>	<b>0.0255</b>	<b>0.3633</b>	<b>1.0900e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>109.0150</b>	<b>109.0150</b>	<b>2.8600e-003</b>		<b>109.0866</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
<b>Total</b>	<b>0.0403</b>	<b>0.0233</b>	<b>0.3384</b>	<b>1.0600e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>105.6336</b>	<b>105.6336</b>	<b>2.6300e-003</b>		<b>105.6992</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
<b>Total</b>	<b>0.0403</b>	<b>0.0233</b>	<b>0.3384</b>	<b>1.0600e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>105.6336</b>	<b>105.6336</b>	<b>2.6300e-003</b>		<b>105.6992</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
<b>Total</b>	<b>0.4296</b>	<b>0.2481</b>	<b>3.6098</b>	<b>0.0113</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,126.7583</b>	<b>1,126.7583</b>	<b>0.0280</b>		<b>1,127.4583</b>

**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	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
<b>Total</b>	<b>0.4296</b>	<b>0.2481</b>	<b>3.6098</b>	<b>0.0113</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,126.7583</b>	<b>1,126.7583</b>	<b>0.0280</b>		<b>1,127.4583</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**Village South Specific Plan (Proposed)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
<b>Maximum</b>	<b>237.0656</b>	<b>46.4460</b>	<b>39.6338</b>	<b>0.1195</b>	<b>18.2032</b>	<b>2.0456</b>	<b>20.2488</b>	<b>9.9670</b>	<b>1.8820</b>	<b>11.8490</b>	<b>0.0000</b>	<b>12,035.3440</b>	<b>12,035.3440</b>	<b>1.9482</b>	<b>0.0000</b>	<b>12,060.6013</b>



Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

**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	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
<b>Total</b>	<b>0.1835</b>	<b>4.1800</b>	<b>1.4144</b>	<b>0.0128</b>	<b>0.3810</b>	<b>0.0137</b>	<b>0.3948</b>	<b>0.1034</b>	<b>0.0131</b>	<b>0.1165</b>		<b>1,380.3262</b>	<b>1,380.3262</b>	<b>0.0941</b>		<b>1,382.6791</b>

**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					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
<b>Total</b>	<b>0.1835</b>	<b>4.1800</b>	<b>1.4144</b>	<b>0.0128</b>	<b>0.3810</b>	<b>0.0137</b>	<b>0.3948</b>	<b>0.1034</b>	<b>0.0131</b>	<b>0.1165</b>		<b>1,380.3262</b>	<b>1,380.3262</b>	<b>0.0941</b>		<b>1,382.6791</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
<b>Total</b>	<b>0.0638</b>	<b>0.0415</b>	<b>0.4755</b>	<b>1.3300e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>132.5649</b>	<b>132.5649</b>	<b>3.9900e-003</b>		<b>132.6646</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
<b>Total</b>	<b>0.0638</b>	<b>0.0415</b>	<b>0.4755</b>	<b>1.3300e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>132.5649</b>	<b>132.5649</b>	<b>3.9900e-003</b>		<b>132.6646</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
<b>Total</b>	<b>0.0709</b>	<b>0.0462</b>	<b>0.5284</b>	<b>1.4800e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>147.2943</b>	<b>147.2943</b>	<b>4.4300e-003</b>		<b>147.4051</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
<b>Total</b>	<b>0.0709</b>	<b>0.0462</b>	<b>0.5284</b>	<b>1.4800e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>147.2943</b>	<b>147.2943</b>	<b>4.4300e-003</b>		<b>147.4051</b>

**3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
<b>Total</b>	<b>0.0665</b>	<b>0.0416</b>	<b>0.4861</b>	<b>1.4300e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>142.1207</b>	<b>142.1207</b>	<b>4.0000e-003</b>		<b>142.2207</b>

**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.4 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	0.0000	0.0000	0.0000	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
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
<b>Total</b>	<b>0.0665</b>	<b>0.0416</b>	<b>0.4861</b>	<b>1.4300e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>142.1207</b>	<b>142.1207</b>	<b>4.0000e-003</b>		<b>142.2207</b>

**3.5 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
<b>Total</b>	<b>3.0904</b>	<b>14.8350</b>	<b>23.2704</b>	<b>0.0926</b>	<b>7.0087</b>	<b>0.0749</b>	<b>7.0836</b>	<b>1.8799</b>	<b>0.0699</b>	<b>1.9498</b>		<b>9,481.0104</b>	<b>9,481.0104</b>	<b>0.3984</b>		<b>9,490.9691</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
<b>Total</b>	<b>3.0904</b>	<b>14.8350</b>	<b>23.2704</b>	<b>0.0926</b>	<b>7.0087</b>	<b>0.0749</b>	<b>7.0836</b>	<b>1.8799</b>	<b>0.0699</b>	<b>1.9498</b>		<b>9,481.0104</b>	<b>9,481.0104</b>	<b>0.3984</b>		<b>9,490.9691</b>

**3.5 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
<b>Total</b>	<b>2.8211</b>	<b>11.4799</b>	<b>21.2591</b>	<b>0.0893</b>	<b>7.0088</b>	<b>0.0601</b>	<b>7.0688</b>	<b>1.8799</b>	<b>0.0557</b>	<b>1.9356</b>		<b>9,155.1981</b>	<b>9,155.1981</b>	<b>0.3538</b>		<b>9,164.0437</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.5 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
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
<b>Total</b>	<b>2.8211</b>	<b>11.4799</b>	<b>21.2591</b>	<b>0.0893</b>	<b>7.0088</b>	<b>0.0601</b>	<b>7.0688</b>	<b>1.8799</b>	<b>0.0557</b>	<b>1.9356</b>		<b>9,155.1981</b>	<b>9,155.1981</b>	<b>0.3538</b>		<b>9,164.0437</b>

**3.6 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 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
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
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
<b>Total</b>	<b>0.0469</b>	<b>0.0282</b>	<b>0.3349</b>	<b>1.0300e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>102.6928</b>	<b>102.6928</b>	<b>2.7000e-003</b>		<b>102.7603</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 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
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
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
<b>Total</b>	<b>0.0469</b>	<b>0.0282</b>	<b>0.3349</b>	<b>1.0300e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>102.6928</b>	<b>102.6928</b>	<b>2.7000e-003</b>		<b>102.7603</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
<b>Total</b>	<b>0.0444</b>	<b>0.0257</b>	<b>0.3114</b>	<b>1.0000e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>99.5045</b>	<b>99.5045</b>	<b>2.4700e-003</b>		<b>99.5663</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
<b>Total</b>	<b>0.0444</b>	<b>0.0257</b>	<b>0.3114</b>	<b>1.0000e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>99.5045</b>	<b>99.5045</b>	<b>2.4700e-003</b>		<b>99.5663</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
<b>Total</b>	<b>0.4734</b>	<b>0.2743</b>	<b>3.3220</b>	<b>0.0107</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,061.3818</b>	<b>1,061.3818</b>	<b>0.0264</b>		<b>1,062.0410</b>

**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	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
<b>Total</b>	<b>0.4734</b>	<b>0.2743</b>	<b>3.3220</b>	<b>0.0107</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,061.3818</b>	<b>1,061.3818</b>	<b>0.0264</b>		<b>1,062.0410</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**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	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Attachment C

<b>Local Hire Provision Net Change</b>	
<b>Without Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
<b>With Local Hire Provision</b>	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
<b><i>% Decrease in Construction-related GHG Emissions</i></b>	<b>17%</b>

**EXHIBIT B**



## ***Paul Rosenfeld, Ph.D.***

*Principal Environmental Chemist*

**Chemical Fate and Transport & Air Dispersion Modeling**

**Risk Assessment & Remediation Specialist**

### **Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

### **Professional Experience**

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## **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<sub>2</sub>O 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 Aermol and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E.** & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

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Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.**, J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.**, M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.**, J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.**, and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

**Rosenfeld, P. E.**, Grey, M. A., Sellev, 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.**, Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

**Rosenfeld, P.E.** (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane 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 23<sup>rd</sup> 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 23<sup>rd</sup> 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 *23<sup>rd</sup> 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 Florida, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D.** (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E.,** Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E.** and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld, P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

**Rosenfeld, P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.,** C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## **Deposition and/or Trial Testimony:**

In the United States District Court For The District of New Jersey

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 2:17-cv-01624-ES-SCM

Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”  
*Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112<sup>th</sup> Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*

Case Number: 4:16-cv-52-DMB-JVM

Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish  
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants  
Case No.: No. 13-2-03987-5  
Rosenfeld Deposition, February 2017  
Trial, March 2017

In The Superior Court of the State of California, County of Alameda  
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants  
Case No.: RG14711115  
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County  
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants  
Case No.: LALA002187  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County  
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants  
Law No.: LALA105144 - Division A  
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia  
Robert Andrews, et al. v. Antero, et al.  
Civil Action NO. 14-C-30000  
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico  
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward  
DeRuyter, Defendants  
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County  
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant  
Case No 4980  
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17<sup>th</sup> Judicial Circuit, in and For Broward County, Florida  
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.  
Case Number CACE07030358 (26)  
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma  
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City  
Landfill, et al. Defendants.  
Case No. 5:12-cv-01152-C  
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas  
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.  
Case Number cc-11-01650-E  
Rosenfeld Deposition: March and September 2013  
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio  
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*  
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)  
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division  
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.  
Case 3:10-cv-00622  
Rosenfeld Deposition: February 2012  
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland  
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants  
Case Number: 03-C-12-012487 OT  
Rosenfeld Deposition: September 2013

**EXHIBIT C**



1640 5<sup>th</sup> St., Suite 204 Santa  
Santa Monica, California 90401  
Tel: (949) 887-9013  
Email: [mhagemann@swape.com](mailto:mhagemann@swape.com)

**Matthew F. Hagemann, P.G., C.Hg., QSD, QSP**

**Geologic and Hydrogeologic Characterization  
Industrial Stormwater Compliance  
Investigation and Remediation Strategies  
Litigation Support and Testifying Expert  
CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.**, 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**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 representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



### **RESPONSE TO COMMENT LETTER NO. 3**

Mitchell M. Tsai, Attorney  
Southwest Regional Council of Carpenters  
September 22, 2022

- 3-1 This initial comment introduces the Southwest Regional Council of Carpenters (Southwest Carpenters). The commenter states that the Southwest Carpenters reserves the right to supplement these comments at or before hearings on the project, incorporates by reference all comments raising issues regarding the Draft PEIR, and requests notification of all future notices issued under CEQA regarding the project. This comment is acknowledged, and the City will send all future CEQA notices regarding the proposed project to the Southwest Carpenters.
- 3-2 The commenter requests the City to provide additional community benefits, such as local hire and use of a skilled and trained workforce to build future transportation improvements funded by the VMT Mitigation Program. The commenter states that local hire and skilled and trained workforce can help reduce environmental impacts associated with worker/vendor trips and vehicular emissions, and provide local economic benefits (i.e., short-term construction jobs for local workers). The commenter also provides examples of other jurisdictions that have adopted local skilled and trained workforce policies and requirements into their general plans and municipal codes (e.g., City of Hayward). Lastly, the commenter states that requiring a skilled and trained workforce would generally help the City mitigate greenhouse gas, air quality, and transportation impacts. This comment does not raise any concerns regarding the information addressed or contained in the Draft PEIR. Additionally, the City conducted greenhouse gas (GHG) emissions, air quality, and transportation analysis that is included in the Draft PEIR and supporting appendices. The Draft PEIR did not identify any significant GHG emissions, air quality, or transportation environmental impacts that need to be mitigated. As discussed in CEQA Guidelines Section 15126.4(a)(3), CEQA does not require mitigation measures for effects determined to be less than significant. Given that no significant impacts were identified for these topics, no further mitigation measures are warranted.

Additionally, as stated throughout the Draft PEIR, the proposed VMT Mitigation Program does not propose any construction or development. The mitigation program is the project, which would establish a mitigation impact fee for development projects that trigger a potentially significant VMT impact under CEQA. Thus, no construction activities that could utilize local hire or a skilled and trained workforce would occur. All future transportation improvements funded by the proposed program would undergo separate environmental review under CEQA at a later date.

In an attempt to address the Southwest Carpenters' concerns regarding the requested use of local hire, which was also raised in a comment letter dated October 11, 2021 and submitted by the Southwest Carpenters during the project's Notice of Preparation review period, the Draft PEIR also evaluated a Construction Trip VMT Reduction Alternative in Draft PEIR Chapter 7.0, *Alternatives to the Proposed Project*. Specifically, this alternative assumes the VMT Mitigation Program is not adopted and instead, the City adopts an ordinance requiring developers to hire a certain percentage of construction workers within 10 miles or less of a



project site. The intent of this alternative is to reduce construction-related VMT to reduce Citywide VMT. While some development projects may require multi-year construction activities with construction workers traveling far distances, construction-related VMT is temporary and would cease upon project completion. Further, project-generated VMT analyzed under CEQA pursuant to Senate Bill 743 is tied to proposed land use(s) (e.g., residential, commercial, mixed-use, industrial) and the VMT generated during long-term operations of the land use(s) (i.e., the lifetime of the development). Neither the *Lancaster Local Transportation Assessment Guidelines* nor the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* recommend analyzing short-term construction VMT, nor do they cite or suggest any means of reducing construction-related VMT as it is a temporary condition. As such, the Construction Trip VMT Reduction Alternative would not eliminate or reduce the severity of any significant impact under CEQA and the alternative was considered but rejected from additional analysis in the Draft PEIR.

- 3-3 The commenter raises concerns regarding the COVID-19 crisis and the potential for project-related construction activities to create a public health risk for construction workers. The commenter recommends the City incorporate additional mitigation measures to mitigate the project's public health risk pursuant to CEQA Guidelines Section 15065(a)(4). The commenter provides potential mitigation, including safe construction site design, testing procedures, response plans, and worker safety training to reduce COVID-19 risk.

Effects of the environment on a project are not subject to CEQA review (Public Resources Code Sections 21065 and 21068). CEQA is generally not concerned with the effect the existing environment might have on proposed projects, and such effects are not treated as changes in the physical environment (*California Bldg. Indus. Assn. v. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369, 378 (2015)). (CEQA does not require analysis of impact that existing environmental conditions might have on project, its residents, or its users, except when required by specific statutory exception). Therefore, the City does not have to analyze the impact of COVID-19, an existing condition, on the proposed project. Moreover, in the absence of any applicable methodology, such an analysis would be speculative. Therefore, none of the proposed measures are warranted.

Nonetheless, the City recognizes the unprecedented nature of COVID-19 and the potential public health impacts associated with it. Any projects being constructed during this time would be required to adhere to the Center for Disease Control and Prevention's (CDC) workplace guidelines for construction workers, including the Construction COVID-19 Checklist for Employers and Employees. Adherence to these measures would ensure that potential health impacts are minimized during construction. Furthermore, any projects being developed are required to adhere to the City and County of Los Angeles Department of Public Health workplace guidelines at the time of groundbreaking.



## 3.0 Errata

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## 3.0 ERRATA

Changes to the Draft PEIR are noted below. A double underline indicates additions to the text; ~~strikethrough~~ indicates deletions to the text. The following modifications are made to the Draft PEIR text for consistency and clarifications. The changes to the Draft PEIR do not affect the overall conclusions of the environmental document and would not result in any new or substantially greater significant impacts as compared to those identified in the Draft PEIR. Changes are listed by section and page.

Any changes referenced to mitigation measures contained in the Draft PEIR text also apply to Section 1.0, *Executive Summary*, and Section 5.0, *Environmental Analysis*, of the Draft PEIR. All mitigation measure modifications have been reflected in Section 4.0, *Mitigation Monitoring and Reporting Program*, of this Final PEIR.

### **SECTION 5.3, BIOLOGICAL RESOURCES, PAGE 5.3-16**

BIO-1      Transportation improvements funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and not exempt from CEQA), and with the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, as determined by the City of Lancaster Development Services Department, Community Development Division, shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Division. The assessment shall include biological field survey(s) of the project site to characterize the extent and quality of habitat that would be impacted by development. Surveys shall include baseline surveys, protocol-surveys, and/or tree inventories to confirm the presence or any special-status species within or immediately adjacent to proposed impact areas. Surveys shall be conducted by qualified biologists and/or botanists in accordance with California Department of Fish and Wildlife and/or United States Fish and Wildlife Services survey protocols for target species. Biological resources assessments should provide and include the following:

1. A complete, recent, assessment of rare, threatened, and endangered species, regionally and locally unique species, and sensitive habitats at the project site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (California Fish and Game Code Sections 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines Section 15380). Seasonal variations in use of land around the project site should also be addressed. A nine-quadrangle search of CDFW's California Natural Diversity Database (CNDDB) should be conducted to obtain current information on any previously reported sensitive species and habitat;



2. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). Adjoining habitat areas should be included where project construction and activities could lead to direct or indirect impacts off site;
3. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the area of potential effect. The *Manual of California Vegetation* (MCV), second edition, should be used to inform this mapping and assessment;
4. A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California as well as the Calflora's Information on Wild California Plants database; and
5. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the project site.

If no special status/sensitive species, sensitive habitats/natural communities, or Federally protected wetlands are observed during the field survey, then no further mitigation will be required. If biological resources are documented on the project site, the project proponent shall comply with the applicable requirements of the regulatory agencies and shall apply mitigation determined through the agency permitting process.

## SECTION 5.3, BIOLOGICAL RESOURCES, PAGE 5.3-19

BIO-2

To avoid disturbance of nesting birds, activities related to construction projects funded by the VMT Mitigation Program, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition, shall occur outside of the bird breeding season from February 15 through September 15 (as early as January 1 for some raptors). If this is not feasible, a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than seven (7) ~~fourteen~~ (14) days prior to the start of any vegetation removal or ground disturbing activities associated with a transportation improvement project. The survey shall be conducted by a qualified biologist and cover all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. The nesting bird pre-construction survey shall be conducted on foot inside the area of proposed development, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. Further, if an active bird nest is found, the qualified biologist should identify the specific bird species and establish a “no-disturbance” buffer around the active nest to avoid potential direct and indirect impacts. It is further recommended that the qualified biologist periodically monitor any active bird nests to determine if



project-related activities disturb the birds and if the “no disturbance” buffer should be increased. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist. 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.



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## 4.0 Mitigation Monitoring and Reporting Program

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## 4.0 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 program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 1, *Mitigation Monitoring and Reporting Program*, has been prepared for the Vehicle Miles Traveled Mitigation Program (project). This Mitigation Monitoring and Reporting Program is intended to provide verification that all applicable mitigation measures relative to significant environmental impacts 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 Vehicle Miles Traveled Mitigation Program project files.

This Mitigation Monitoring and Reporting Program (MMRP) delineates responsibilities for monitoring the project, but also allows the City flexibility 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. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Program (Table 1). If an adopted mitigation measure is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

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 EIR, 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 MMRP, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. No change will be permitted unless the MMRP continues to satisfy the requirements of Public Resources Code Section 21081.6.

The following subsections of the Draft PEIR contain a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures, and significant unavoidable impacts, if any.

No significant impacts would occur in regard to the following environmental issue areas, which are addressed in Draft PEIR Section 8, *Effects Found Not To Be Significant*:

- Agriculture and Forestry Resources;
- Mineral Resources;
- Population and Housing;
- Public Services;
- Recreation; and
- Wildfire.

In accordance with Appendix G of the CEQA Guidelines, the environmental issue areas listed below were determined in the Draft PEIR to have a potentially significant impact, and have been included within Draft PEIR Section 5, *Environmental Analysis*, for further analysis:

- Land Use and Planning;
- Aesthetics/Light and Glare;
- Biological Resources;
- Tribal and Cultural Resources;
- Geology and Soils;
- Hydrology and Water Quality;
- Hazards and Hazardous Materials;
- Transportation;
- Air Quality;
- Greenhouse Gas Emissions;
- Energy;
- Noise; and
- Utilities and Service Systems.

For the purposes of the environmental analysis in the Draft PEIR, impacts were analyzed in each environmental issue area for the proposed project. If necessary, mitigation measures were



incorporated to reduce any potentially significant impacts. Specifically, mitigation measures were included for Biological Resources, Tribal and Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Air Quality and Noise.



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**Table 1**  
**Mitigation Monitoring and Reporting Checklist**

Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
<b>BIOLOGICAL RESOURCES</b>								
BIO-1	Transportation improvements funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and not exempt from CEQA), and with the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, as determined by the City of Lancaster Development Services Department, Community Development Division, shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Division. The assessment shall include biological field survey(s) of the project site to characterize the extent and quality of habitat that would be impacted by development. Surveys shall include baseline surveys, protocol-surveys, and/or tree inventories to confirm the presence or any special-status species within or immediately adjacent to proposed impact areas. Surveys shall be conducted by qualified biologists and/or botanists in accordance with California Department of Fish and Wildlife and/or United States Fish and Wildlife Services survey protocols for target species. Biological resources	Project Applicant; Qualified Biologist	Prior to Issuance of Grading Permit	City of Lancaster Development Services Department, Community Development Division (Planning)	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<p>assessments should provide and include the following:</p> <ol style="list-style-type: none"> <li>1. A complete, recent, assessment of rare, threatened, and endangered species, regionally and locally unique species, and sensitive habitats at the project site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (California Fish and Game Code Sections 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines Section 15380). Seasonal variations in use of land around the project site should also be addressed. A nine-quadrangle search of CDFW's California Natural Diversity Database (CNDDDB) should be conducted to obtain current information on any previously reported sensitive species and habitat;</li> <li>2. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</i> (CDFW 2018). Adjoining habitat areas should be included where</li> </ol>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<p>project construction and activities could lead to direct or indirect impacts off site;</p> <p>3. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the area of potential effect. The Manual of California Vegetation (MCV), second edition, should be used to inform this mapping and assessment;</p> <p>4. A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California as well as the Calflora's Information on Wild California Plants database; and</p> <p>5. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the project site.</p> <p>If no special status/sensitive species, sensitive habitats/natural communities, or Federally protected wetlands are observed during the field survey, then no further mitigation will be required. If biological resources are documented on the project site, the project proponent shall comply with the applicable requirements of the regulatory agencies and shall apply mitigation determined through the agency permitting process.</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
BIO-2	To avoid disturbance of nesting birds, activities related to construction projects funded by the VMT Mitigation Program, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition, shall occur outside of the bird breeding season from February 15 through September 15 (as early as January 1 for some raptors). If this is not feasible, a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than seven (7) days prior to the start of any vegetation removal or ground disturbing activities associated with a transportation improvement project. The survey shall be conducted by a qualified biologist and cover all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. The nesting bird pre-construction survey shall be conducted on foot inside the area of proposed development, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. Further, if an active bird nest is found, the qualified biologist should identify the specific bird species and establish a “no-disturbance” buffer around the active nest to avoid potential direct and indirect impacts. It is	Project Applicant; Qualified Biologist	No More Than 14 Days Prior to Start of Any Vegetation Removal or Ground Disturbing Activities	City of Lancaster Development Services Department, Community Development Division (Planning)	Prior to Start of Vegetation Removal or Ground Disturbing Activities			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>further recommended that the qualified biologist periodically monitor any active bird nests to determine if project-related activities disturb the birds and if the “no disturbance” buffer should be increased. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist. 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.</p>							
<b>TRIBAL AND CULTURAL RESOURCES</b>								
CUL-1	<p>To ensure identification and preservation of potentially historic resources (as defined by CEQA Guidelines Section 15064.5 as a resource listed in, eligible for listing in, or listing in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or local register), each transportation improvement funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to</p>	<p>Project Applicant; Qualified Architectural Historian</p>	<p>Prior to Issuance of Any Demolition, Building, or Grading Permits</p>	<p>City of Lancaster Development Services Department, Community Development Division (Planning)</p>	<p>During Project Plan Review</p>			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>discretionary action and non-exempt from CEQA) shall be conditioned as follows: prior to any construction activities that could impact potential or previously identified historical resources, the project proponent shall provide a historical resources assessment performed by an architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for architectural history or history (as defined in 48 Code of Federal Regulations 44716) to the City of Lancaster Planning Department for review and approval. The historical resources assessment shall include a records search at the South Central Coastal Information Center (SCCIC) and a survey in accordance with the California Office of Historic Preservation (OHP) guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. If a historical resource is identified on-site, the resource shall be avoided to the extent feasible.</p> <p>If relocation, rehabilitation, or alteration of a historical resource is required, the project proponent shall utilize the Secretary of the Interior's Standards for the Treatment of Historic Properties to the maximum extent feasible to ensure the historical significance of the resource is not impaired.</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	If demolition or significant alteration of a historical resource is required, the resource shall be evaluated, and/or designated in the NRHP, CRHR, or local register, and recordation shall take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation, and shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards. Recordation shall meet the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering, which defines the products acceptable for inclusion in the HABS/HAER/HALS collection at the Library of Congress. The specific scope and details of documentation shall be developed at the project level in coordination with the City of Lancaster Planning Department and performed prior to the first issuance of any demolition, building, or grading permits.							
CUL-2	To ensure identification and preservation of archaeological resources within the City of Lancaster, each transportation improvement funded by the proposed Vehicle Miles Traveled Mitigation Program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt from CEQA) shall be screened by the City of Lancaster Planning Department to determine whether a Cultural Resources	Project Applicant; Qualified Archaeologist	Prior to Issuance of Any Demolition, Building, or Grading Permits	City of Lancaster Development Services Department, Community Development Division (Planning)	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>Assessment is required. Screening shall consider the type of project and whether ground disturbances will occur. Ground disturbances include activities such as grading, excavation, trenching, boring, or demolition that extend below the current grade. If there will be no ground disturbance, then a Cultural Resources Assessment shall not be required. If there will be ground disturbances, prior to issuance of any permits required to conduct ground disturbing activities, the City may require a Cultural Resources Assessment be conducted under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards in either prehistoric or historic archaeology.</p> <p>The Cultural Resources Assessment shall include a California Historical Resources Information System (CHRIS) records search conducted through the South Central Coastal Information Center (SCCIC) and Sacred Land Files (SLF) search through the Native American Heritage Commission (NAHC), review of historical maps, and a Phase I (intensive) pedestrian survey to assess the likelihood for buried archaeological resources to occur. The Cultural Resources Assessment shall meet or exceed standards in the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR): Recommended</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	Contents and Format (1990) and Guidelines for Archaeological Research Designs (1991).							
CUL-3	In the event that cultural resources are unearthed during excavation and grading activities of any future transportation improvement project funded by the proposed program, the construction contractor shall cease all earth-disturbing activities within a 100-meter radius of the find and the project proponent shall retain a qualified archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards in either prehistoric or historic archaeology to evaluate the significance of the finding and appropriate course of action. Salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed. After the find has been appropriately mitigated, work in the area may resume.	Construction Contractor; Project Applicant; Qualified Archaeologist	During Excavation and Grading Activities	City of Lancaster Development Services Department, Community Development Division (Planning)	During Excavation and Grading Activities			
<b>GEOLOGY AND SOILS</b>								
GEO-1	To ensure identification and preservation of paleontological resources within the City of Lancaster, each transportation improvement funded by the proposed program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt from CEQA) shall be screened by the City of Lancaster Development Services Department, Community Development Division to determine whether a Paleontological	Project Applicant; Qualified Paleontologist	Prior to Issuance of Grading Permit	City of Lancaster Development Services Department, Community Development Division (Planning)	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>Resources Assessment is required. Screening shall consider the type of project and whether ground disturbances will occur. Ground disturbances include activities such as grading, excavation, trenching, boring, or demolition that extend below the current grade. If there will be no ground disturbance, then a Paleontological Resources Assessment shall not be required. If there will be ground disturbances, prior to issuance of any permits required to conduct ground disturbing activities, the City may require a Paleontological Resources Assessment be prepared by a qualified paleontologist, defined as a paleontologist who meets the Society of Society of Vertebrate Paleontology (SVP) standards for a Principal Investigator or Project Paleontologist.</p> <p>The Paleontological Resources Assessment shall include and take into account project-specific and local geologic mapping, geotechnical data, and paleontological records search. The Paleontological Resources Assessment shall adhere to and incorporate the performance standards and practices from the current SVP Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. The qualified paleontologist shall submit the Paleontological Resources Assessment to the City of Lancaster Development Services Department, Community</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	Development Division for review and approval before issuance of a grading permit.							
<b>HAZARDS AND HAZARDOUS MATERIALS</b>								
HAZ-1	<p>If unknown wastes or suspect materials are discovered during construction activities associated with improvements funded by the VMT Mitigation Program that are believed to involve hazardous waste or materials, the construction contractor shall implement the following:</p> <ul style="list-style-type: none"> <li>• Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area;</li> <li>• Notify the City of Lancaster Development Services Director/City Engineer;</li> <li>• Secure the area as directed by the Development Services Director/City Engineer; and</li> <li>• Notify the implementing agency's Hazardous Waste/Materials Coordinator (e.g., Los Angeles County Fire Department, Lahontan Regional Water Quality Control Board, and/or Department of Toxic Substances Control, as applicable). The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.</li> </ul>	Project Applicant; Construction Contractor	During Construction Activities	City of Lancaster Development Services Director; City Engineer	During Construction Activities			
<b>AIR QUALITY</b>								
AQ-1	Prior to issuance of any grading permit for a transportation improvement funded by the	Project Applicant	Prior to Issuance of Grading Permit	City of Lancaster Development	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	proposed program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt under CEQA), the City of Lancaster Development Services Department, Community Development Division shall confirm that the Grading Plan, Construction Plans, and specifications require that ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications.			Services Department, Community Development Division (Planning) and Building & Safety	and Field Inspections			
AQ-2	Each transportation improvement funded by the proposed program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt under CEQA) shall submit a Construction Management Plan to the City Engineer prior to the issuance of a grading permit. To reduce traffic congestion during temporary construction activities, a Traffic Control Plan shall include the following, as deemed necessary by the City Traffic Engineer: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors,	Project Applicant	Prior to Issuance of Grading Permit	City of Lancaster Development Services Department, Community Development Division (Traffic)	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	and/or signal synchronization to improve traffic flow. Traffic control devices included in the traffic control plan shall be developed in compliance with the requirements of the most current standards. The Construction Management Plan shall also include construction phasing, personnel parking, and material storage areas to reduce traffic congestion.							
AQ-3	<p>Prior to ground disturbance activities associated with the VMT-reducing improvements funded by the proposed program, the project operator shall provide evidence to the Director of Community Development that the project operator and/or construction manager has developed a "Valley Fever Training Handout" training and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Director of Community Development within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Director of Community Development regarding the "Valley Fever Training Handout" and session(s) shall include the following:</p> <ul style="list-style-type: none"> <li>• A sign-in sheet (to include the printed employee names, signature, and date) for</li> </ul>	Project Applicant; Construction Contractor	Prior to Ground Disturbing Activities; Within 24 Hours of First Training Session	City of Lancaster Community Development Director; Los Angeles County Public Health	During Project Plan Review; Prior to Ground Disturbing Activities			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<p>all employees who attended the training session.</p> <ul style="list-style-type: none"> <li>• Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.</li> <li>• Training on methods that may help prevent Valley Fever infection.</li> <li>• A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the Director of Community Development. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.</li> </ul> <p>The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan (Plan) that addresses the potential presence of the Coccidioides spore and mitigates for the potential for Coccidioidomycosis (Valley Fever). Prior to issuance of permits, the project operator</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>shall submit the Plan to the Los Angeles County Public Health for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Coccidioides spores. Measures in the Plan shall include the following:</p> <ul style="list-style-type: none"> <li>• Provide High Efficiency Particulate (HEP)-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs (e.g., turning on the air conditioning prior to using the equipment).</li> <li>• Provide communication methods, such as two-way radios, for use in enclosed cabs.</li> <li>• Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.</li> <li>• Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<p>program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).</p> <ul style="list-style-type: none"> <li>• Provide separate, clean eating areas with hand-washing facilities.</li> <li>• Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.</li> <li>• Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.</li> <li>• Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.</li> <li>• Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site and include the following information on Valley Fever: what are the potential sources/causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<p>construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Director of Community Development. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within three miles of the project boundaries.</p> <ul style="list-style-type: none"> <li>• When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.</li> <li>• Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas shall be equipped with handwashing facilities.</li> <li>• Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.</li> <li>• Audit and enforce compliance with relevant Cal/OSHA health and safety standards on the job site.</li> </ul>							
<b>NOISE</b>								
NOI-1	Each transportation improvement funded by the proposed program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt from CEQA) shall ensure through contract specifications that construction best management practices (BMPs) are implemented by construction contractors to reduce	Project Applicant; Construction Contractor	Prior to Issuance of Grading/Building Permits	City of Lancaster Development Services Director; Building and Safety	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>construction noise levels. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City of Lancaster Development Services Director prior to issuance of a grading or building permit (whichever is issued first). BMPs to reduce construction noise levels may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Ensure that construction equipment is properly muffled according to industry standards and is in good working condition.</li> <li>• Place noise-generating construction equipment and construction staging areas away from sensitive uses.</li> <li>• Construction activities shall occur between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, pursuant to Section 8.24.040, <i>Loud, unnecessary and unusual noises prohibited-Construction and building</i>, of the Lancaster Municipal Code.</li> <li>• Implement noise attenuation measures, as needed, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.</li> <li>• Use electric air compressors and similar power tools rather than diesel equipment, where feasible.</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	<ul style="list-style-type: none"> <li>Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.</li> <li>The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday). The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.</li> <li>Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party and the Development Services Director.</li> </ul>							
NOI-2	Prior to issuance of a grading permit, each transportation improvement funded by the proposed program subject to California Environmental Quality Act (CEQA) review (meaning, subject to discretionary action and non-exempt from CEQA) with construction	Project Applicant	Prior to Issuance of Grading Permit	City Engineer; Development Services Department, Building & Safety Division	During Project Plan Review			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Implementation Timing	Monitoring Responsibility	Monitoring Timing	VERIFICATION OF COMPLIANCE		
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	activities requiring operation of groundborne vibration generating equipment (i.e., vibratory compactor/roller, large bulldozer, caisson drilling, loaded trucks, and jackhammer) within 25 feet of an existing structure shall be required to prepare a project-specific vibration impact analysis to evaluate potential construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project's construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer.							