City of Highland

Meines Street and Palm Avenue Warehouse Project

Initial Study/Mitigated Negative Declaration

May 2023

Prepared by:

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1.0 INTRODUCTION & PURPOSE

1.1 Purpose and Scope of the Initial Study/ Mitigated Negative Declaration

In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.) and its Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.) this Initial Study (IS) was prepared by Kimley-Horn and Associates for the City of Highland (City) to access the environmental effects associated with the development of the Meines Street and Palm Avenue Warehouse Project (Project). Pursuant to State CEQA Guidelines Section 15367, the City is the lead agency for the Project and has the principal responsibility for approving the Project.

Pursuant to State CEQA Guidelines Section 10570, an Initial Study leading to a Mitigated Negative Declaration (IS/MND) can be prepared when the Initial Study has identified potentially significant environmental impacts but revisions have been made to a project, prior to public review of the Initial Study, that would avoid or mitigate the impacts to a level considered less than significant, and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

1.2 Summary of Findings

Section 3.0, Initial Checklist contains the Environmental Checklist Form that was prepared for the Project pursuant to CEQA requirements. The Environmental Checklist Form indicates that the Project would not result in significant impacts with the implementation of mitigation measures, as identified where applicable throughout this document.

1.3 Mitigation Measures

State CEQA Guidelines Section 15041, Authority to Mitigate, gives the lead agency for a project the authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the “nexus” and “rough proportionality” standards. CEQA Guidelines Section 15364 defines “feasible” as capable of being accomplished in a successful manner within a reasonable period of time, considering economic, environmental, legal, social, and technological factors. Mitigation measures will be adopted to reduce the environmental impacts to less than significant levels.

- Several forms of mitigation under CEQA Section 15370 are summarized as follow:
- Avoiding the impact by not taking a certain action(s)
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the impact environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environment.

Avoiding impacts is the preferred form of mitigation, followed by minimizing or rectifying the impact to less than significant levels. Compensating for impacts would be pursued if no other form of mitigation is not feasible.

1.4 Environmental Resource Topics

This IS/MND evaluates the Project's impacts on the following resource topics:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazardous and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.5 Report Organization

This document has been organized into the following sections:

Section 1.0 – Introduction. This section provides an introduction and overview describing the conclusions of the Initial Study.

Section 2.0 – Project Description. This section identifies key project characteristics and includes a list of anticipated discretionary actions.

Section 3.0 – Initial Study Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.

Section 4.0 – Environmental Evaluation. This section contains an analysis of environmental impacts identified in the environmental checklist.

Section 5.0 – References. The section identifies resources used to prepare the Initial Study.

1.6 Initial Study Public Review Process

This IS and Notice of Intent to adopt the MND will be distributed to responsible and trustee agencies, other affected agencies, and other interested parties for a 30-day public review period.

Written comments regarding this MND should be addressed to:

Ash Syed, Associate Planner
City of Highland
Planning Department
27215 Base Line
Highland, CA 92346
909-864-6861 ext. 210
asyed@cityofhighland.org

After the 30-day review period, comments raised during the public review period will be considered and addressed prior to adoption of the MND by the City.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Location, Setting, and Existing Conditions of the Proposed Project

PROJECT LOCATION

The Project site is located northwest of the corner of Meines Street and Palm Avenue, in the City of Highland (City), within the County of San Bernardino (County), on Assessor Parcel Numbers (APNs) 1192-621-02 through -08, -20 through -23 and 1192-601-05, -09, -43. The Project site is generally located in the southern central portion of the City, approximately 2,933 feet (0.55-mile) to the west of Interstate (I) 210 and 972 feet (0.18-mile) north of the City of Redlands; refer to **Exhibit 1, Regional Location Map.**

Local access to the Project site is provided via Meines Street, which traverses the south of the site in a west-east direction, Palm Avenue that traverses east of the site in a north-south direction. Regional access to the Project site is via the W 5th Street off-ramp from I-210; refer to **Exhibit 2, Project Vicinity Map**.

PROJECT SETTING, LAND USE, AND ZONING DESIGNATION

The Project site is a 12.8-acre four-sided polygon-shaped site composed of 14 parcels. The Project site is currently developed with existing industrial uses and non-conforming single-family residential uses. The Project site is bound by commercial, vacant and undeveloped land, and non-conforming single-family homes to the south; non-conforming single-family homes, vacant land and a Santa Ana River stream to the east, industrial uses and non-conforming single-family residential uses; and vacant, undeveloped land, and industrial uses to the west.

Due to existing industrial and residential uses, the Project site is highly disturbed and contains non-native grassland limited to the single-family properties. Nonnative tree species and shrubs can be found scattered throughout the perimeter of the Project site.

Site elevations are relatively flat throughout the Project site, with a nominal slope increase towards the eastern portion of the site. The highest elevation at the eastern portion of the site is approximately 1191 feet (ft) above mean sea level (MSL). The lowest elevation is at the western portion of the site at approximately 1175 ft MSL. Runoff from the site drains southwesterly toward Meines Street.

The Project site's land use designation is Industrial, and the zoning designation is Industrial (I); refer to **Exhibit 3, Existing General Plan Land Use and Zoning Designations**. Furthermore, **Table 1, Existing Land Uses and Zoning Designations,** identifies the existing land uses and zoning designations of the Project site and surrounding area, congruent with the City of Highland General Plan (Highland GP).

Table 1: Existing Land Uses and Zoning Designations

Location	Existing Land Use Designation	Existing Zoning Designation	Existing Use
Project Site	Industrial	Industrial (I)	Industrial Uses, Single-Family Residential
North	Open Space; Public/Institutional Parks	Open Space (OS); Public/Quasi-Public (P/Q)	Santa Ana River; City of Highland Community Park;
South	Industrial; Business Park	Industrial (I); Business Park (BP)	Commercial Use; Vacant/Undeveloped land; Single-Family Residential
East	Industrial	Industrial (I)	Single-Family Residential; Vacant/Undeveloped Land; Santa Ana River
West	Industrial; Public/Institutional	Industrial; Public/Quasi-Public (P/Q)	Vacant/Undeveloped land; Industrial

Source: Google Maps.
City of Highland. 2012. City of Highland General Plan, *Land Use Element – Figure 2-2 General Plan Land Use.* Page 2-9. Available at: https://www.cityofhighland.org/DocumentCenter/View/2294/Land-Use-Element-PDF (accessed September 19, 2022).
City of Highland. 2012. *Zoning Map*. Available at: https://www.cityofhighland.org/DocumentCenter/View/191/Zoning-Map-PDF?bidId= (accessed September 19, 2022).

Furthermore, the Project site is located within the Airport Influence Area Zone "E" (Negligible Risk Level) for San Bernardino International Airport.

2.2 Proposed Project Characteristics

This development proposes a single new industrial concrete tilt-up dock high warehouse building totaling 284,917 square feet, including 5,000 square feet of office space and 3,000 feet of mezzanine space, on approximately 12.8 acres. The structure will be supported by a screened truck yard, vehicular parking areas, trailer storage stalls, drive aisles, and landscaped areas. On-site improvements will include storm drains, stormwater/water quality treatment facilities (including underground infiltration chambers), sewer (including a private lift station), water, sewer, and dry utility systems; refer to **Exhibit 4, Conceptual Site Plan**.

SITE ACCESS

Vehicular access to the Project site will be provided by two new driveways off Palm Avenue and one new driveway off Meines Street. The Project also proposes a internal driveway which would provide vehicular access throughout the Project site; refer to **Exhibit 4**.

PARKING

The Project proposes 159 (9' x 19') standard stalls and 34 (9' x 14') compact stalls for a total of 193 auto stalls. The Project will also provide 47 (10' x 53') trailer parking stalls.

LANDSCAPING

The proposed landscape area would cover approximately 64,146 SF (23.7 percent) of the total 12.8 acre site. As illustrated in **Exhibit 5, Conceptual Landscape Plan**, the proposed landscape includes a mix of

drought tolerant trees, shrubs, and accent plants along the perimeter of the Project site as well as along the building and in the parking lot islands.

GRADING

Grading and earthwork analysis indicate that the Project (with a level building floor) can balance with the use of minor onsite slopes and deepened building panels; refer to **Exhibit 6, Conceptual Grading Plan**. The preliminary earthwork numbers are 45,124 cubic yards of cut & 45,124 cubic yards of fill with approximately 52,762 cubic yards of over-excavation.

DRAINAGE

While the Project site generally drains to Meines Street under existing conditions, the downstream portions of the street are not fully improved (no curb and gutter) and there is no existing point of connection to the existing channel. Since the site is ultimately tabled to City Creek channel, a storm drain connection to the channel is proposed near the northwest corner of the Project site to handle flows.

Runoff from the north portion of the proposed building, the east parking area, and the north truck yard area will drain to catch basins located in the parking lot and truck dock area. A proposed storm drain will convey runoff west through the truck yard area. Flows from the south portion of the building and the west parking area will be collected in catch basins located in the west parking lot. A proposed storm drain will convey flows north and will connect to the previously mentioned storm drain system. The storm drain will continue north, connecting to City Creek channel.

The proposed connection to City Creek channel will be a 24" reinforced concrete pipe (RCP) extending approximately 55 feet into the channel's right-of-way. A proposed headwall (approximately 5' wide by 10' long and 3.3' tall will be installed to terminate the storm drain system. A rip rap pad (approximately 10' wide by 20' long) will then be constructed downstream of the headwall to dissipate the velocity. Additional channel grading to the channel slope will be required to all this connection to be completed. A jurisdictional delineation was conducted for this improvement and is further discussed in **Section 4.4, Biological Resources** of this IS/MND.

Onsite detention is also proposed to reduce runoff from the Project site to less than existing conditions. Detention is proposed in the truck yard for areas tributary to this location. The truck yard is higher than the elevations of the west parking lot, so these flows cannot be stored in the truck yard and will discharge without detention. Refer to **Exhibit 6** and **Exhibit 7, Conceptual Utility Plan**.

WATER AND SEWER

The Project site is within the jurisdictional boundaries of the East Valley Water District (EVWD). EVWD maintains an existing 12" main in Palm Avenue and an existing 6" main in Meines Street. Preliminary Project design anticipates removal of all existing facilities currently serving this site. The proposed building will be served by two new 2" water meters (1 domestic & 1 irrigation), and two new 10" fire service connections, all from the existing 12" water main in Palm Avenue.

The Project site is within the jurisdictional boundaries of the East Valley Water District (EVWD) for sanitary sewer services; however, EVWD does not maintain any site adjacent sewer mains. The site is currently

served by multiple septic systems. The nearest EVWD facility is an existing 24" sewer main about 250' south of the site in 5th Street (flows west). The proposed service to the Project will include a new onsite manhole and 6" sewer lateral connection to the proposed 8" sewer main extension in 5th Street. An onsite private lift station and force main will be required. The force main will discharge to a proposed onsite sewer manhole. Refer to **Exhibit 7**.

DRY UTILITIES

The Project site would be serviced by Southern California Gas Company (SCG) for natural gas services. The nearest SCG facility is a 2" main in Meines Street, approximately 80' west of the southwest corner of the Project site. Southern California Edison (SCE) maintains existing conduit facilities opposite the Project site in Palm Avenue and existing power poles with aerial distribution facilities in Meines Street along the Project frontage. The power poles and aerial facilities are proposed to be removed and undergrounded to the next existing power pole west of the Project site. AT&T maintains existing conduit facilities in Palm Avenue and existing aerial facilities in Meines Street along the Project frontage. The aerial facilities in Meines Street along the Project frontage are proposed to be undergrounded to the next existing pole west of the Project site.

OFF-SITE STREET IMPROVEMENTS

Palm Avenue is designated as a Major Highway by the city, having an ultimate ½ width right-of-way of 52' from street centerline, an ultimate curb location of 40' from street centerline, and a 12' parkway. The existing ½ width street right-of-way is mostly 52', however, a 12' street dedication along the northern +/- 100' of the site frontage is required. Existing improvements consist of ultimate pavement (fair condition), curb & gutter and partial parkway improvements. Required improvements besides removals and relocations include two new driveways, striping, and parkway improvements including streetlights, fire hydrants, landscaping (including trees), and signage.

Meines Street is designated as a Local Street by the city, having an ultimate ½ width right-of-way of 30' from street centerline, an ultimate curb location of 18' from street centerline, and a 12' parkway. The existing ½ width street right-of-way varies between 25' and 30'; therefore, an additional 5' street dedication is required along portions of the site frontage. Existing improvements consist of substandard edge of pavement (poor condition) to dirt and/or curb & gutter and lack required parkway improvements. Required improvements besides removals include pavement infill, curb & gutter, a right-turn pocket, a driveway, striping, and parkway improvements including streetlights, fire hydrants, a catch basin & local depression, sidewalks, landscaping (including trees), and signage.

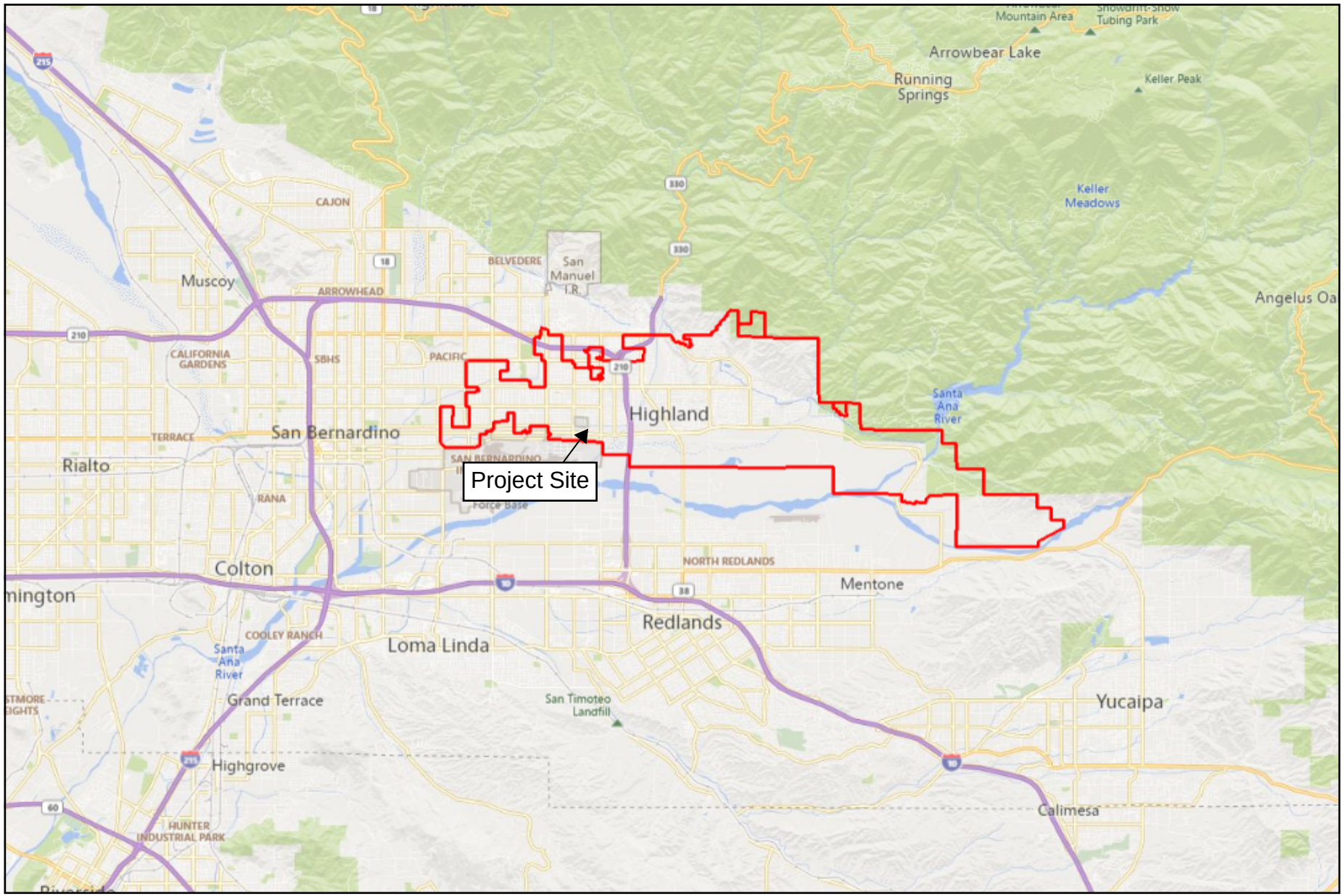
PROJECT APPROVALS

The actions and/or approvals that the City needs to consider for the Project include, but are not limited to, the following:

- Design Review Permit that includes the request for architectural review of the proposed warehouse building and associated infrastructure located on the northwest corner of Meines Street and Palm Avenue intersection (APNs: 1192-621-02 through -08, -20 through -23 and 1192-601-05, -09, -43).

- Tentative Parcel Map No. 20680 to combine 14 parcels into one parcel.

Other permits required for the Project may include, but are not limited to, the following: issuance of encroachment permits for driveways, and utilities; security and parking area lighting; permits; building permits; grading permits; tenant improvement permits; and permits for new utility connections.



Source: City of Highland CommunityView

Exhibit 1: Regional Location Map
City of Highland
Meines Street and Palm Avenue Warehouse Project

Not to Scale

Kimley»Horn

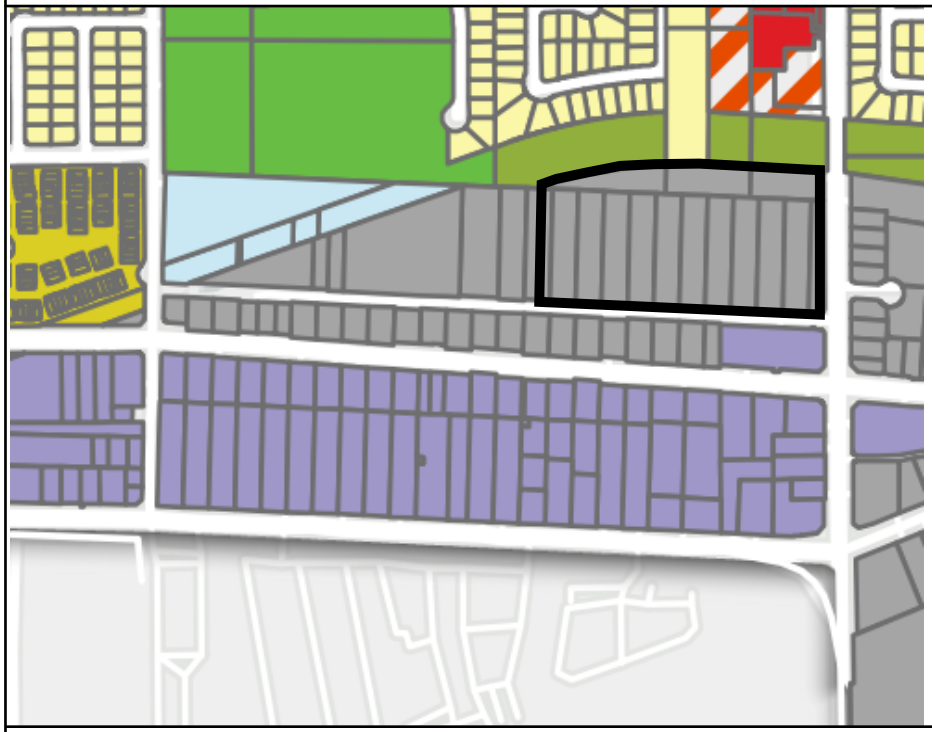
Source: Google Maps

Exhibit 2: Project Vicinity Map
City of Highland
Meines Street and Palm Avenue Warehouse Project

Not to Scale

Kimley»Horn

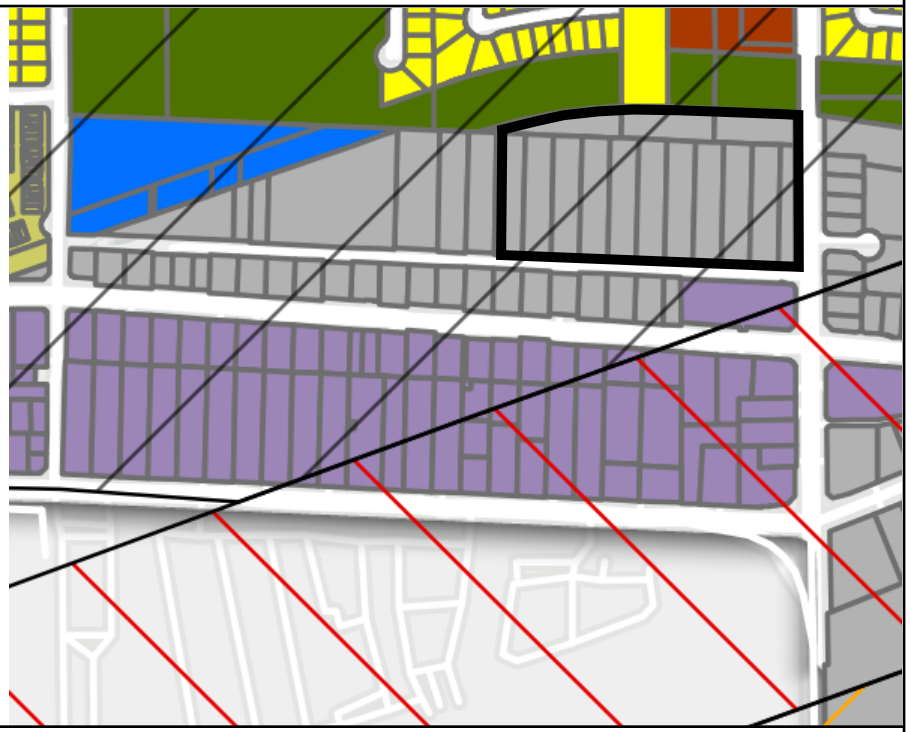
Existing General Plan/Land Use



Land Use

Industrial

Existing Zoning Districts



Employment Districts

I - Industrial

Airport Compatibility Zones

E - Airport Influence Zone - Negligible Risk

Source: City of Highland. (2022). Land Use Map; City of Highland. (2022). Zoning Map

Exhibit 3: Existing Land Use and Zoning Designations
City of Highland
Meines Street and Palm Avenue Warehouse Project

Not to Scale

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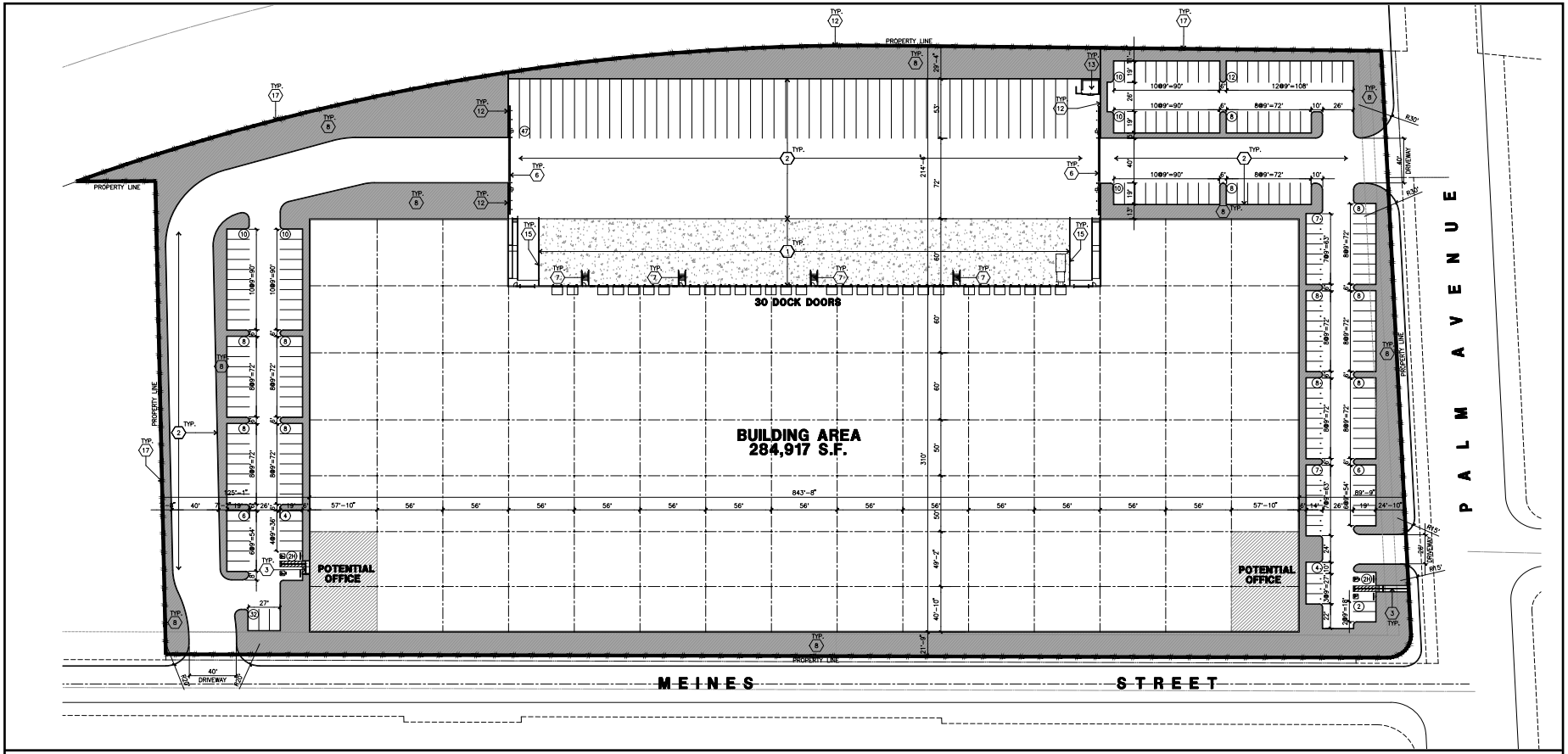

SITE AREA		**SITE COVERAGE**		**TRAILER PARKING PROVIDED**			
In s.f.	555,855 sf	Maximum Allowed	60%	Trailer (10' x 53')	47 stalls		
In acres	12.8 ac	Actual	51.3%	**ZONING ORDINANCE**			
BUILDING AREA		**AUTO PARKING REQUIRED**		Zoning - Industrial (I)			
Office	5,000 sf	Office: 1/250 s.f.	32 stalls	**MAXIMUM BUILDING HEIGHT ALLOWED**			
Mezzanine	3,000 sf	Whse: 1/1,100 s.f	277 stalls	Height - 50'			
Warehouse	276,917 sf	TOTAL	**309** stalls	**LANDSCAPE REQUIREMENT**			
TOTAL	**284,917** sf	**AUTO PARKING PROVIDED**		Percentage - 10% of total parking area			
SITE COVERAGE		Standard (9' x 19')	159 stalls	**LANDSCAPE PROVIDED**			
Maximum Allowed	60%	Compact (9' x 14')	34 stalls	In s.f.	64,146 sf		
Actual	51.3%	Total Auto	193 stalls	Percentage	23.7%		
				SETBACKS			
				Building	Landscape		
				Front - 20'	Min. - 10'		
				Side - 0', Street side - 20'			
				Rear - 0'			

Source: HPA Architecture. (2023). Conceptual Site Plan

Exhibit 4: Conceptual Site Plan

City of Highland

Meines Street and Palm Avenue Warehouse Project

Not to Scale

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PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	Cercidium 'Desert Museum' Blue Palo Verde	36" Box	14	L	Multi
	Chilopsis linearis Desert Willow	48" Box 36" Box	1 1	L	Multi
	Chitalpa tashkentensis Chitalpa	15 Gal	24	L	Standard
	Pinus eldarica Afghan Pine	15 Gal	4	L	Standard
	Pistacia chinensis Chinese Pistache	48" Box	9	L	Standard
	Platanus racemosa California Sycamore	15 Gal	8	M	Multi
	Prosopis chilensis Chilean Mesquite	24" Box 36" Box	8 2	M	Multi
	Quercus agrifolia Coast Live Oak	48" Box	7	M	Multi
	Rhus lancea African Sumac	15 Gal 24" Box	8 16	L	Standard
	Tristania conferta Brisbane Box	15 Gal	15	M	Standard

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	SPACING
	Acca sellowiana Pineapple Gauva	5 Gal	0	M	3' OC 2' from hardscape
	Callistemon 'Little John' Dwarf Bottle Brush	5 Gal	0	M	3' OC 2' from hardscape
	Cassia phyllodenia Dwarf Bottle Brush	5 Gal	0	L	4' OC 2.5' from hardscape
	Rhamnus californica Coffeeberry	5 Gal	0	L	4' OC 2.5' from hardscape
	Rosmarinus o. 'Tuscan Blue' Rosemary	5 Gal	0	L	3' OC 2' from hardscape
	Salvia c. 'Allen Chickering' Allen Chickering Sage	5 Gal	0	L	4' OC 2.5' from hardscape
	Salvia greggii Autumn Sage	5 Gal	0	L	3' OC 2' from hardscape
	Salvia leucantha Mexican Sage	5 Gal	0	L	3' OC 2' from hardscape
	Westringia fruticosa Coast Rosemary	5 Gal	0	L	5' OC 3' from hardscape
	Westringia f. 'Grey Box Dwarf Coast Rosemary	5 Gal	0	L	3' OC 2' from hardscape

ACCENTS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	Agave 'Blue Glow Blue Glow Agave	5 Gal	0	L	
	Agave victoria-reginae Agave	5 Gal	0	L	
	Agave villmoriniana Agave	5 Gal	0	L	
	Aloe maculata Soap Aloe	5 Gal	0	L	
	Aloe striata Coral Aloe	1 Gal	0	L	
	Hesperaloe parviflora Red Yucca	5 Gal	0	L	

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	WUCOLS	REMARKS
	Acacia redolens 'Low Boy' Dwarf Acacia	1 Gal	8' O.C.	L	
	Baccharis p. 'Pigeon Point' Dwarf Coyote Bush	1 Gal	6' O.C.	L	
	Lantana 'Gold Mound' Yellow Lantana	1 Gal	36" O.C.	L	
	Lonicera j. 'Halliana' Hall's Honeysuckle	1 Gal	48" O.C.	L	
	Rosmarinus o. 'Huntington Carpet' Prostrate Rosemary	1 Gal	48" O.C.	L	

Trees:

50% 15 gallon	Provided: 59
20% 24" box	Provided: 24
15% 36" box	Provided: 17
15% 48" box	Provided: 17

Source: Hunter Landscape. (2023). Conceptual Landscape Plan

Exhibit 5: Conceptual Landscape Plan

City of Highland

Meines Street and Palm Avenue Warehouse Project

Not to Scale

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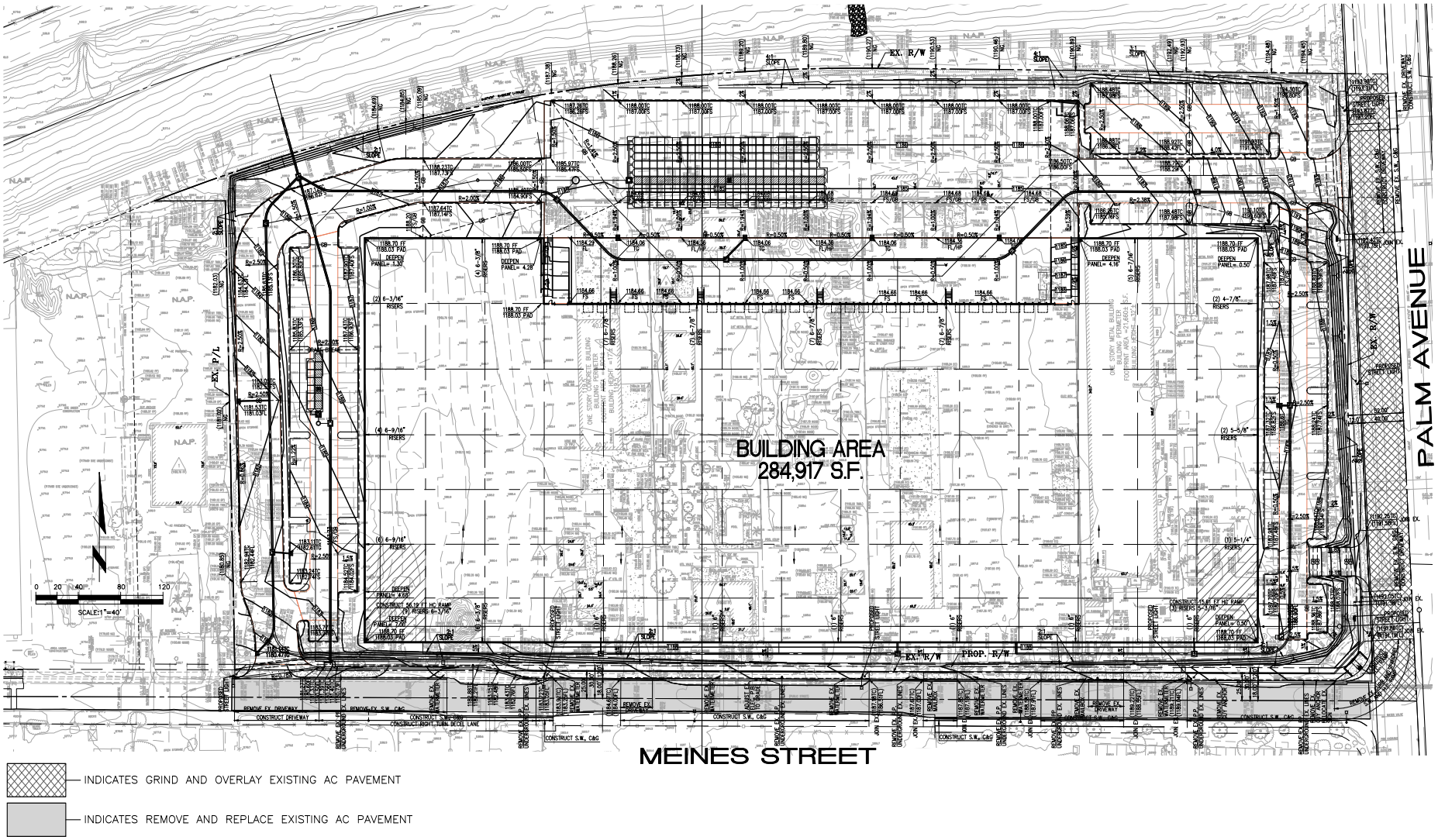
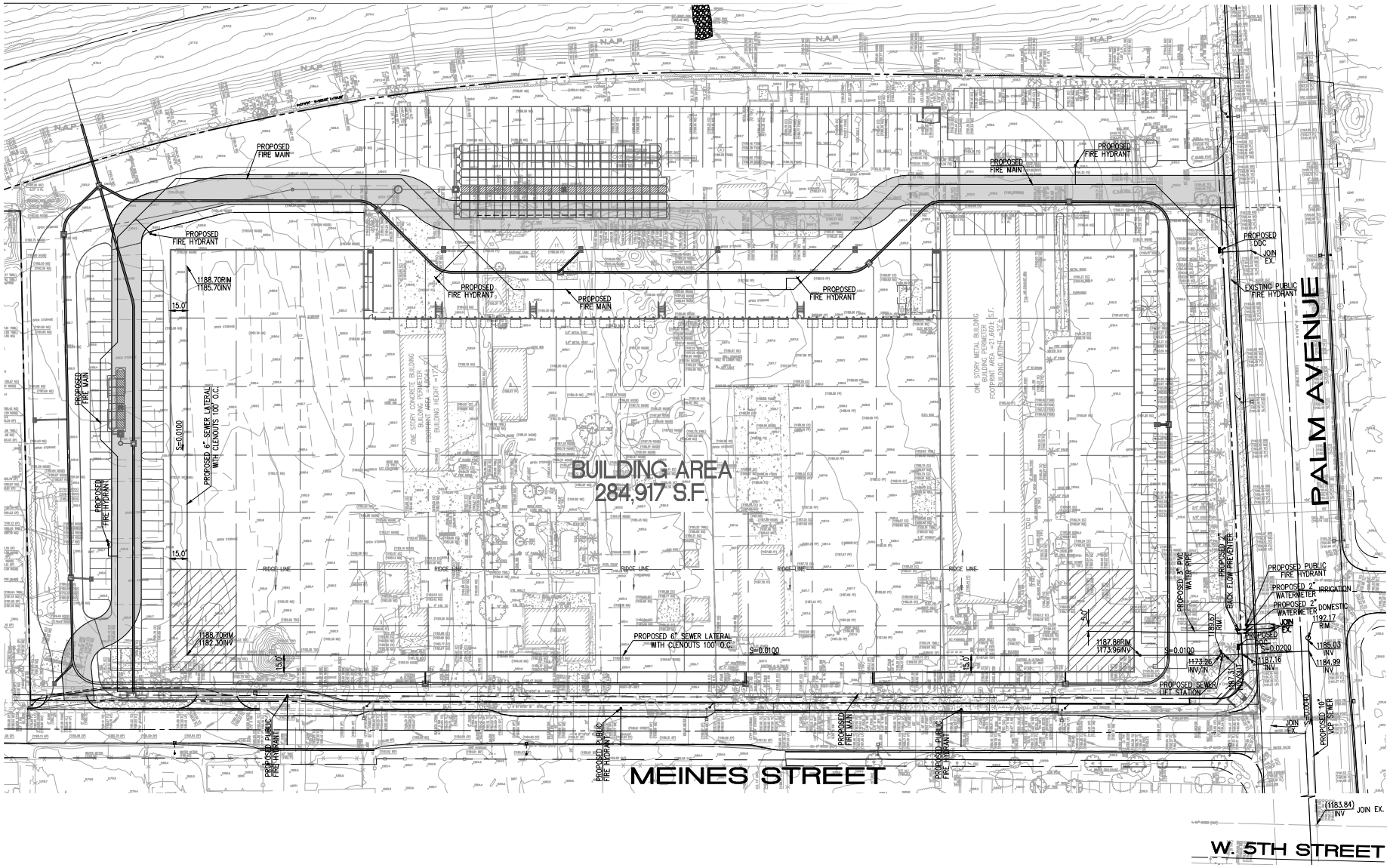


Source: Thienes Engineering. (2023). Conceptual Grading Plan

Exhibit 6: Conceptual Grading Plan
City of Highland
Meines Street and Palm Avenue Warehouse Project

Kimley»Horn



Source: Thienes Engineering. (2023). Conceptual Utility Plan

Exhibit 7: Conceptual Utility Plan
City of Highland
Meines Street and Palm Avenue Warehouse Project

Not to Scale

Kimley»Horn

3.0 INITIAL STUDY CHECKLIST

1. **Project title:**

   Meines Street and Palm Avenue Warehouse Project

2. **Lead agency name and address:**

   City of Highland
   Planning Department
   27215 Base Line
   Highland, CA 92346

3. **Contact person and phone number:**

   Ash Syed, Associate Planner
   909-864-6861 ext. 210
   asyed@cityofhighland.org

4. **Project location:**

   The Project site is located northwest of the corner of Meines Street and Palm Avenue, in the City of Highland, California, and County of San Bernardino.

5. **Project sponsor's name and address:**

   Lovett Industrial
   120 Newport Center Drive, Suite 217,
   Newport Beach, CA 92660

6. **General plan designation:**

   Industrial

7. **Zoning:**

   Industrial (I)

8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

   The Project site is a 12.8-acre four-sided polygon-shaped site composed of 14 parcels (APNs: 1192-621-02, -03, -04, -05, -06, -07, -08, -20, -21, -22, -23 and 1192-601-05, -09, -43). Aerial imagery shows that the Project site is currently used for industrial and non-conforming single-family residential uses. The Project site is zoned Industrial (I) and has an Industrial General Plan land use designation. The Project would include the development of single new industrial concrete tilt-up dock high warehouse building totaling 284,917 square feet, including 5,000 square feet of office space and 3,000 feet of mezzanine space. The structure will be supported by a screened truck yard,

vehicular parking areas, tractor-trailer storage stalls, drive aisles, and landscaped areas. On-site improvements will include storm drains, stormwater/water quality treatment facilities (including underground infiltration chambers), sewer (including a private lift station), water, and dry utility systems. Additionally, minor onsite slopes and deepened building panels will be utilized.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

North: Santa Ana River; City of Highland Community Park;

South: Commercial Use; Vacant/Undeveloped land; Single-Family Residential

East: Single-Family Residential; Vacant/Undeveloped Land; Santa Ana River

West: Vacant/Undeveloped land; Industrial Uses

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

None

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.?

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

The City completed the Assembly Bill (AB) 52 tribal consultation for the Project on December 2022. On December 1, 2022, the City initiated tribal consultation with interested California Native American tribes consistent with AB 52. Those tribes were the: Gabrieleño Band of Mission Indians – Kizh Nation, Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians), and Soboba Band of Luiseno Indians. At the conclusion of the consultation, the Yuhaaviatam of San Manuel Nation requested that Mitigation Measures (**MM**) **TCR-1** and **TCR-2** be implemented. Refer to Section 4.18, Tribal Cultural Resources of this document for additional information.

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION:

On the basis of this initial evaluation (check one):

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION:

Signature Date

4.0 ENVIRONMENTAL ANALYSIS

4.1 AESTHETICS

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	**AESTHETICS. 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 within a state scenic highway?			X	
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. Scenic vistas in the City consist of the San Bernardino Mountains and the San Bernardino National Forest, located at the eastern and northern boundaries of the City. Scenic views also consist of the City's natural setting and preserved open-space land. The Project proposes the development of an industrial building and associated infrastructure improvements. Although the Project would directly impact the non-conforming single-family homes located south of Meines Street views of the identified scenic vistas to the north-northeast, the proposed building's height would not exceed the City's Municipal Code (Highland MC) maximum building height of 50 feet, consistent with the Industrial (I) zoning designation (refer to **Exhibit 8, Conceptual Elevations**). Furthermore, as illustrated in **Exhibit 4, Conceptual Site Plan**, the proposed industrial building would have a 20-foot front building setback towards Meines Street, consistent with the Highland MC minimum front building setback area of 20 feet.[1] The proposed building would be also sited beyond the minimum rear building setback area of 20 feet. Lastly, the Project would integrate landscaping near the building on all sides to improve the visual quality of the area.

[1] City of Highland. (2022). *City of Highland Municipal Code – Section 16.24.040 Employment district development standards.* Retrieved from: https://www.codepublishing.com/CA/Highland/#!/Highland16/Highland1624.html#16.24 (accessed October 10, 2022).

Since the Project would be designed consistently with the Highland MC development standards for Industrial zoning districts, the Project would not significantly obstruct views of scenic vistas from surrounding views. Therefore, a less than significant impact would occur, and no mitigation is necessary.

Mitigation Measures: No mitigation is required.

b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant Impact. The California Department of Transportation (Caltrans) manages the State Scenic Highway Program. According to Caltrans' State Scenic Highway System Map, there are no officially designated scenic highways in the City. However, a portion of State Route (SR) 330, near Highland Avenue and at the northern border of the City, is currently considered eligible as a scenic highway. [2] This portion of SR 330 however is located approximately 2.15 miles northeast of the Project site, and therefore construction and operation of the Project would not damage scenic resources near SR 330. There are also no historically significant buildings, trees, and/or rock outcroppings on the site that could be affected by the proposed development.

According to the Highland GP Circulation Element, Palm Avenue is designated by the City as a scenic route. Highland GP Circulation Highland GP Policies 3.3.2 through 3.3.3 calls for the preservation special visual resource areas along appropriate routes, which includes Palm Avenue. Accordingly, the Project would comply with Highland GP Policies 3.3.2 through 3.3.3 by adhering to all applicable design guidelines and providing landscaping along Palm Avenue which would improve the visual quality of that area. Therefore, no adverse impacts on scenic resources, including resources within a State scenic highway, would result from the Project's implementation. A less than significant impact would occur, and no mitigation is required.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact. The existing Project site would change from non-conforming single-family residences with accessary structures, and industrial operations to one 284,917 square foot warehouse, and associated infrastructure. The Project would be located in an urbanized area and consistent with the current industrial land use and zoning designations. Since the Project's vicinity is urbanized, and the Project is compatible with the existing and surrounding industrial and business park land uses, the Project is not anticipated to damage the scenic quality. Lastly, as discussed in Threshold b) above, the Project would implement design standards and landscaping

[2] Caltrans. (2019). California State Scenic Highway Program System Map. Retrieved from: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed October 13, 2022).

that would improve the visual quality of the area. Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality.

Mitigation Measures: No mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Existing sources of light and glare include street lighting, lights from the surrounding residential, commercial, and industrial development, and roadways from vehicle headlights. The Project would implement onsite safety and security lighting in compliance with the Highland MC Lighting Design Standards. In addition, the Project's proposed lighting would be reviewed by the City to ensure conformance with the 2022 California Building Standards Code, (Part 2 of Title 24, CCR) and with the 2022 California Green Building Standards Code (Part 11 of Title 24, CCR) to ensure that the proposed lighting is designed to eliminate light spillage and glare. With compliance with State and local regulations, the Project is not anticipated to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The potential aesthetic impacts related to views, aesthetics, and light and glare are site-specific. As discussed above, Project-related impacts would be less than significant. Additionally, the type and intensity of development associated with the proposed Project site would be consistent with the area. The Project, in conjunction with cumulative development, would not significantly change the appearance of the site and surrounding area. All future development projects would be required to adhere to applicable local planning and design guidelines. Therefore, aesthetic impacts are not expected to be cumulatively considerable, and no adverse impacts would occur.

4.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.	**AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. 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:**				
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?				X
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

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

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code

section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

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

No Impact. According to the Department of Conservation's (DOC) Farmland Mapping & Monitoring Program (FMMP), the Project site is designated as "Urban and Built-Up Land" which is defined as land that occupied by structures with a building density of at least one unit to 1.5 acres or approximately six structures to a 10-acre parcel.[3] Therefore, the Project would not convert prime farmland, unique farmland, or farmland of statewide for non-agricultural use.

As noted in Section 3.0 above, the Project is zoned as industrial (I) and contains industrial and non-conforming residential uses on-site. Therefore, the Project would not conflict with existing agricultural or forest land zoning. Furthermore, the DOC does not designate the Project site under a Williamson Act Contract. Lastly, the Project site does not contain forest land. Therefore, the Project would not conflict with agricultural or forestry zoning, convert farmland or forest land for non-agricultural uses, or conflict with a Williamson Act Contract. No impact associated with agricultural and forestry resources would occur with the implementation of the Project.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The Project would not impact any agricultural and forestry resources within the City. The Project site is zoned for industrial uses which is consistent with the Project's proposed uses and surrounding industrial and business park uses.

[3] California DOC. (2022). *California Important Farmland Finder*. Retrieved at: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed May 2023).

4.3 AIR QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. 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	

Kimley-Horn and Associates prepared Air Quality Assessment and Health Risk Assessment (HRA) for the Project; refer to **Appendix A**.

Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Project is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. The SCAB is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.

The SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

Although the SCAB has a semiarid climate, the air closer to the Earth's surface is typically moist because of the presence of a shallow marine layer. Except for occasional periods when dry, continental air is brought into the SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog are frequent and low clouds known as high fog are characteristic climatic features, especially along the coast. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SCAB.

Wind patterns across the SCAB are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically higher during the dry summer months than during the rainy winter. Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality for the SCAB in the summer and generally good air quality in the winter.

Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by state and federal laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are primary criteria pollutants. ROG and NOX are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in Error! Reference source not found..

Error! Reference source not found.

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM_{10} and $PM_{2.5}$)	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC)[1] and nitrogen oxides (NO_X) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO_2)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to O_3. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.

Notes:
[1] Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

Source: Kimley-Horn. (2023). *Air Quality Assessment*. page 7 – Table 1.

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e., chronic, carcinogenic or cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting

operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. These stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Pollutants of concern in the SCAB include O_3, PM_{10}, and $PM_{2.5}$. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the San Bernardino-4th Street Monitoring Station (located approximately 3.5 miles to the west of the Project site). Local air quality data from 2019 to 2021 are provided in Error! Reference source not found., which lists the monitored maximum concentrations and number of exceedances of state or federal air quality standards for each year.

Error! Reference source not found.

Criteria Pollutant	2019	2020	2021
Ozone (O_3) [1]			
1-hour Maximum Concentration (ppm)	0.127	0.162	0.142
8-hour Maximum Concentration (ppm)	0.114	0.128	0.112
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	63	89	66
NAAQS 8-hour (>0.070 ppm)	96	130	98
Carbon Monoxide (CO) [1]			
1-hour Maximum Concentration (ppm)	3.818	1.934	4.331
Number of Days Standard Exceeded			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2) [1]			
1-hour Maximum Concentration (ppm)	0.059	0.054	0.056
Number of Days Standard Exceeded			

Criteria Pollutant	2019	2020	2021
NAAQS 1-hour (>0.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Particulate Matter Less Than 10 Microns (PM_{10}) [1]			
National 24-hour Maximum Concentration	112.7	174.8	182.4
State 24-hour Maximum Concentration	92.2	100.8	71.2
State Annual Average Concentration (CAAQS=20 µg/m^3)	—	—	—
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 µg/m^3)	0	1	1
CAAQS 24-hour (>50 µg/m^3)	4	8	4
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$) [1]			
National 24-hour Maximum Concentration	60.5	56.6	57.9
State 24-hour Maximum Concentration	60.5	56.6	57.9
Number of Days Standard Exceeded			
NAAQS 24-hour (>35 µg/m^3)	1	2	1
Notes: NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m3 = micrograms per cubic meter; – = not measured 1 Measurements taken at the San Bernardino-4th Street Monitoring Station at 24302 4th Street., San Bernardino, CA 92410. (CARB# 36203)			
Source: Ibid. Page 9 – Table 2.			

Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The Project site is primarily surrounded by trailer parking, industrial warehousing, business offices, logistics, and distribution related uses. The sensitive land uses nearest to the Project site consist of single-family residences located to the north, south, northeast, and west and a community part to the northwest. Sensitive land uses nearest to the Project are shown in Error! Reference source not found..

Error! Reference source not found.

Receptor Description	Distance and Direction from the Project
Single-Family Residences	97 feet to the south
Single-Family Residences	240 feet to the north
Single-Family Residences	290 feet to the northeast
Single-Family Residences	310 feet to the southwest
Highland Community Park	370 feet to the northwest
Single-Family Residences	818 feet to the west
Cypress Elementary School	1,960 feet to the northwest
Source: Ibid. page 10 – Table 3.	

Air Quality Thresholds

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a Project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable State or federal ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in Error! Reference source not found..

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Criteria Air Pollutants and Precursors	Pounds per Day	
	Construction-Related	Operational-Related
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO_X)	100	55
Sulfur Oxides (SO_X)	150	150
Coarse Particulates (PM_{10})	150	150
Fine Particulates ($PM_{2.5}$)	55	55
Source: Ibid. page 19 – Table 6		

Localized Carbon Monoxide

In addition to the daily thresholds listed above, the Project would also be subject to the CAAQS and NAAQS. These are addressed though an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project site are above the CAAQS and NAAQS (the more stringent California CO CAAQS are 20 ppm for 1-hour and 9 ppm for 8-hour). The SCAB has been designated as attainment under the 1-hour and 8-hour CAAQS.

Localized Significance Thresholds (LSTs)

In addition to the CO hotspot analysis, the SCAQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project without expecting to cause or substantially contribute to an exceedance of the most stringent state or federal ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres or less on a single day. The City of Highland is located within SCAQMD SRA 34. Error! Reference source not found., shows the LSTs for a 1-acre, 2-acre, and 5-acre project in SRA 34 within 25 meters of the Project. The nearest sensitive receptor is a residential property located at approximately 30 meters to the south. Therefore,

the lowest thresholds distance of 30 meters were interpolated and used for the analysis based on the SCAQMD LST methodology guidance. LSTs associated with all acreage categories are provided in **Table 6** for informational purposes. **Table 6** shows that the LSTs increase as acreage increases. It should be noted that LSTs are screening thresholds and are therefore conservative. The construction LST acreage is determined based on daily acreage disturbed. The operational LST acreage is based on the total area of the Project site. Although the Project site is greater than five acres, the 5-acre operational LSTs are conservatively used to evaluate the Project.

Table 6: Local Significance Thresholds for Construction/Operations

Project Size	Pounds per Day			
	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
1 Acre	118/118	667/667	4/1	3/1
2 Acres	170/170	972/972	7/2	4/1
5 Acres	270/270	1,746/1,746	14/4	8/2
Source: Ibid. page 19 – Table 7				

Methodology

This air quality impact analysis considers the Project's construction and operational impacts. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a Statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

Project operations would result in emissions of area sources (consumer products, architectural coating, and landscape equipment), energy sources (natural gas usage), mobile sources (motor vehicles from Project generated vehicle trips), and off-road equipment. Project-generated increases in operational emissions would be predominantly associated with motor vehicle use. The traffic trip generation attributed to the Project was obtained from the Project's Traffic Study prepared by Kimley-Horn and Associates, Inc. (**Appendix J**). Other operational emissions from area, energy, and stationary sources were quantified in CalEEMod based on land use activity data.

As discussed above, the SCAQMD provides significance thresholds for emissions associated with Project construction and operations. The Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of a Project's impact on regional air quality.

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's Localized Significance Threshold Methodology, which uses on-site mass emissions rate look-

up tables and project-specific modeling. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS) and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. As part of its enforcement responsibilities, the Environmental Protection Agency (EPA) requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the state and federal ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2016 and 2022 AQMPs (AQMPs). The AQMPs establish a program of rules and regulations directed at reducing air pollutant emissions and achieving CAAQS and NAAQS. The AQMPs are a regional and multi-agency effort including the SCAQMD, the CARB, the Southern California Association of Governments (SCAG), and the EPA.

The pollutant control strategies in the AQMPs are based on the latest scientific and technical information and planning assumptions, including SCAG's 2020-2045 Regional Transportation Plan/ Sustainable Communities Strategies (RTP/SCS) herein referred as the Connect SoCal, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the AQMPs.

Criteria for determining consistency with the AQMPs are defined by the following indicators:

- Consistency Criterion No. 1: The Project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMPs.
- Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMPs or increments based on the years of the Project build-out phase.

According to the SCAQMD's CEQA Air Quality Handbook, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air

quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in **Table 7**, **Table 8**, **Table 10**, and **Table 11** below, the Project would not exceed the construction standards, operational standards, or localized significance thresholds. Therefore, the Project would not contribute to an existing air quality violation. Thus, the Project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMPs contain air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project site's Highland GP land use designation is Industrial, and the zoning designation is Industrial (I). The Project is consistent with the Highland GP land use designation and the zoning. As such, the Project would not result in substantial unplanned growth or unaccounted for growth in the Highland GP used by the SCAQMD to develop the AQMPs. Thus, a less than significant impact would occur no impact would occur, as the Project is also consistent with the second criterion.

In addition, in accordance with South Coast AQMD Rule 2305 (refer to South Coast Air Quality Management District under Section 3.4 Regulatory Setting) the Project operator would be required to pay a mitigation fee if the Project does not generate enough WAIRE Points. The Project operator may be required to implement additional emission reduction strategies. Conservatively, this analysis does not take credit for these potential reductions. Compliance with proposed Rule 2305 would reduce emissions below what is currently analyzed.

Overall, the Project would conflict with or obstruct implementation of the applicable air quality plan and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact.

Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O_3-precursor pollutants (i.e., ROG and NO_X) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne

particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

Construction of the Project is anticipated to begin in October 2023 and is estimated to be completed within approximately 11 months. Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Predicted maximum daily construction-generated emissions for the Project are summarized in **Table 7, Construction-Related Emissions**.

Table 7: Construction-Related Emissions

Construction Year	Pollutant (Maximum Pounds per Day)					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO_2)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
2023	4.04	40.4	36.7	0.10	16.0	5.65
2024	25.3	13.6	24.1	0.03	2.47	0.95
SCAQMD Threshold	*75*	*100*	*550*	*150*	*55*	*150*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Notes: SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces two times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.						
Source: Ibid. page 24 – Table 8						

Table 7 shows that all criteria pollutant emissions would remain below their respective thresholds. While impacts would be considered less than significant, the Project would be subject to SCAQMD Rules 402, 403, and 1113.

Fugitive dust emissions may have a temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. SCAQMD Rules 402 and 403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. While impacts would be considered less than significant, the Project would be subject to SCAQMD Rules for reducing fugitive dust. Therefore, the Project's construction-related activities would 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.

Operational Emissions

The Project's operational emissions would be associated with area sources (e.g., landscape maintenance equipment, architectural coatings, off-road equipment, etc.), energy sources, mobile sources (i.e., motor vehicle use), and off-road equipment. Primary sources of operational criteria pollutants are from motor vehicle use and area sources. Long-term operational emissions

attributable to the Project are summarized in **Table 8, Operational Emissions**. The operational emissions sources are described below.

- **Area Source Emissions.** Area source emissions would be generated due to on-site equipment, architectural coating, and landscaping that were previously not present on the site.
- **Energy Source Emissions.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be for miscellaneous warehouse equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.
- **Mobile Source.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern. NO_X and ROG react with sunlight to form O_3, known as photochemical smog. Additionally, wind currents readily transport PM_{10} and $PM_{2.5}$. However, CO tends to be a localized pollutant, dispersing rapidly at the source.
- Project-generated vehicle emissions are based on the trip generation within the Project's Traffic Study (**Appendix J**) and incorporated into CalEEMod as recommended by the SCAQMD. Per the Project's Traffic Study, the Project would generate a total of 487 daily trips.
- **Off-Road Equipment Emissions.** Because the Project is a speculative warehouse development and the final end user is not known, to be conservative it was assumed that the Project would operate six forklifts and one yard truck for twelve hours per day.

Table 8: Operational Emissions

Source	Maximum Pounds Per Day					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Emissions						
Area Source Emissions	1.40	0.07	5.01	0.01	0.65	0.63
Energy Emissions	0.00	0.03	0.02	0.00	0.00	0.00
Mobile Emissions	0.09	0.09	0.78	0.00	0.06	0.01
Existing Total Emissions	**1.49**	**0.19**	**5.81**	**0.01**	**0.71**	**0.64**
Proposed Project Emissions						
Area Source Emissions	6.49	0.00	0.00	0.00	0.00	0.00
Energy Emissions	0.08	1.47	1.24	0.01	0.11	0.11
Mobile Emissions	1.54	15.2	20.4	0.14	3.23	0.85
Off-Road Emissions - Forklift	0.76	7.21	9.47	0.01	0.41	0.38
Off-Road Emissions – Yard Truck	0.40	3.54	3.95	0.01	0.17	0.15
Project Total Emissions	**9.27**	**27.42**	**35.06**	**0.17**	**3.92**	**1.49**
Net Emissions (Project Minus Existing)	**7.78**	**27.23**	**29.25**	**0.16**	**3.21**	**0.85**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source	Maximum Pounds Per Day					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less						
Source: Ibid. page 25 – Table 9						

It should be noted that existing uses consist of a steel industrial facility and a single-family residence, which will be removed as part of the Project. Emissions associated with existing uses have been estimated based on CalEEMod default data and have been subtracted from the Project's emissions for the net new emissions total.

As shown in **Table 8,** the Project's net operational emissions would not exceed SCAQMD thresholds for any criteria air pollutants. Therefore, long-term operational emissions would result in a less than significant impact.

In addition, Rule 2305 requires the Project operator to directly reduce NO_X and particulate matter emissions or otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. Alternatively, warehouse operators can choose to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby.

Warehouse owners and operators are required to earn Warehouse Actions and Investments to Reduce Emissions (WAIRE) Points each year. WAIRE points are a menu-based system earned by emission reduction measures. Warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. WAIRE points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero-Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. Therefore, the Project operator would be required to implement additional emission reduction strategies. Conservatively, this analysis does not take credit for these potential reductions. Compliance with Rule 2305 would reduce emissions below what is currently analyzed. Therefore, the Project's operational-related activities would 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.

Laws, Ordinances, and Regulations:

Laws, Ordinances, and Regulations (LOR) are existing requirements that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

LOR AQ-1 Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules

402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

LOR AQ-2 Pursuant to SCAQMD Rule 1113, the Project Applicant shall require by contract specifications that the interior and exterior architectural coatings products used would have a volatile organic compound rating of 50 grams per liter or less.

LOR AQ-3 Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

LOR AQ-4 Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Highland MC Chapter 16.40.390).

LOR AQ-5 The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10(b)1) require all buildings to be designed to have a total area of at least 15 percent (after subtracting any skylights) "solar ready" zone on the roof top that will structurally accommodate later installation of rooftop solar panels. The installation of the solar panels is specific to the end use and will be determined at the time the specific projects are developed. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR AQ-6 The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 4.303 (residential) and Section 5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 4.408.1 (residential) and Section 5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 4.410 (residential) and Section 5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance with Section 5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with Section 4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

Mitigation Measures: No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

Localized Construction Significance Analysis

The nearest sensitive receptor is the single-family residences located 97 feet (30 meters) to the south of the Project site. To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 9, Equipment-Specific Grading Rates**, is used to determine the maximum daily disturbed acreage for comparison to LSTs. The appropriate SRA for the localized significance thresholds is the Central San Bernardino Valley (SRA 34) since this area includes the Project. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5

acres in size. Project construction is anticipated to disturb a maximum of 4 acres in a single day during the grading phase. As the LST guidance provides thresholds for projects disturbing 1-, 2-, and 5-acres in size and the thresholds increase with size of the site, the LSTs for a 4-acre threshold were interpolated and utilized for this analysis.

Table 9: Equipment-Specific Grading Rates

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractors	2	1	8	1
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	2	2	8	2
				Total Acres Graded per Day	**4**

Source: Ibid. page 29 – Table 10.

The SCAQMD's methodology states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest sensitive receptors are single-family residences located 97 feet (30 meters) south of the Project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for 30 meters were interpolated and utilized in this analysis. **Table 10: Localized Significance of Construction Emissions**, shows the results of localized emissions during construction. This table represents the worst-case scenario and are based on peak earthwork volumes anticipated. As shown, localized Project construction emissions would not exceed SCAQMD thresholds. Impacts would be less than significant in this regard.

Table 10: Localized Significance of Construction Emissions

Construction Activity	Pollutant (Maximum Pounds per Day)[1]			
	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulate Matter(PM_{10})	Fine Particulate Matter($PM_{2.5}$)
Demolition (2023)	27.3	23.5	13.1	2.91
Site Preparation (2023)	39.7	35.5	9.48	5.60
Grading (2023)	37.3	31.4	5.18	2.90
Building Construction (2023)	11.8	13.2	0.55	0.51
Building Construction (2024)	11.2	13.1	0.54	0.46
Paving (2024)	7.81	10.00	0.39	0.36
Architectural Coating (2024)	0.91	1.15	0.03	0.03
Maximum Emissions	*39.7*	*35.5*	*13.1*	*5.60*
SCAQMD Localized Screening Threshold (adjusted for 4 acres at 30 meters)	*243*	*1,607*	*17*	*7*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

Source: Ibid. page 30 – Table 11.

Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to the operational phase of a project only if it includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). Since the Project is a warehouse, the operational phase LST protocol is conservatively applied to both the area source and mobile source emissions. As the nearest receptor is located approximately 97 feet (30 meters) from the Project site, LSTs for 30 meters for SRA 34 were interpolated and used in this analysis. Although the Project site is 12.8 acres, the 5-acre LST threshold was conservatively assumed for the Project, as the LSTs increase with the size of the site. Therefore, the 5-acre LSTs are conservative for evaluation of a 12.8-acre site.

The LST analysis only includes on-site sources. However, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in **Table 11, Localized Significance of Operational Emissions**, conservatively include all on-site Project-related stationary sources and 10 percent of the Project-related new mobile sources, since a portion of mobile sources could include trucks idling on-site. **Table 11** shows that the maximum daily emissions of these pollutants during operations would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during operational activities.

Table 11: Localized Significance of Operational Emissions

Activity	Pollutant (Maximum Pounds per Day)			
	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
On-Site and Mobile Source Emissions[1]	13.74	16.70	1.01	0.73
SCAQMD Localized Screening Threshold (5 acres at 30 meters)	*276*	*1,876*	*5*	*2*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**
1. Conservatively assumes 10 percent of mobile emissions are on-site. Source: Ibid. page 31 – Table 12.				

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] Cal.5th, Case No. S219783). The SCAQMD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the SCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program[4] was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based NAAQS.

[4] Ibid. page 31.

The NAAQS establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's LSTs and mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur. NO_X and ROG are precursor emissions that form ozone in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. Breathing ground-level ozone can result in health effects that include: reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

According the SCAQMD's 2022 AQMP, ozone, NO_X, and ROG have been decreasing in the SCAB since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled in the SCAB continue to increase, NO_X and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_X emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2022 AQMP demonstrates how the SCAQMD's control strategy to meet the 8-hour O_3 standard in 2037. In addition, since NO_X emissions also lead to the formation of $PM_{2.5}$, the NO_X reductions needed to meet the O_3 standards will likewise lead to improvement of $PM_{2.5}$ levels and attainment of $PM_{2.5}$ standards. The SCAQMD's air quality modeling demonstrates that NO_X reductions prove to be much more effective in reducing ozone levels and will also lead to significant improvement in $PM_{2.5}$ concentrations. NO_X-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane. The 2016 AQMP identifies robust NO_X reductions from new regulations on RECLAIM facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NO_X emissions levels achievable but there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and backup power equipment. The AQMD plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies.

As previously discussed, Project emissions would be less than significant and would not exceed SCAQMD thresholds (refer to **Table 7** and **Table 8**). Localized effects of on-site Project emissions on nearby sensitive receptors were also found to be less than significant (refer to **Table 10** and **Table 11**). The LSTs represent the maximum emissions from a project that are not expected to

cause or contribute to an exceedance of the most stringent applicable CAAQS or NAAQS. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The CAAQS and NAAQS establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. As shown above, Project-related emissions would not exceed the regional thresholds or the LSTs, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore, the Project would not expose sensitive receptors to criteria pollutant levels in excess of the health-based ambient air quality standards.

Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The SCAB was re-designated as attainment for CO in 2007 and is no longer addressed in the SCAQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD CO Hotspot Analysis, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm NAAQS. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's CO Hotspot Analysis. As CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even though it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any Project area intersections resulting from 487 additional vehicle trips attributable to the Project. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less than Significant Impact.

Construction

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

Construction equipment emissions, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities, may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people and would disperse rapidly. Therefore, Project construction activities would not result in objectionable odors that would adversely affect a substantial number of people and impacts would be less than significant.

Operations

The SCAQMD CEQA Air Quality Handbook identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, Project operations would not result in odors that would adversely affect people.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Cumulative Short-Term Emissions

The SCAB is designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for the CAAQS and nonattainment for O_3 and $PM_{2.5}$ for the NAAQS. Appendix D of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution notes that projects that result in emissions that do not exceed the project specific SCAQMD regional thresholds of significance should result in a less than significant impact on a cumulative basis unless there is other pertinent information to the contrary. The mass-based regional significance thresholds published by the SCAQMD are designed to ensure compliance with both NAAQS and CAAQS and are based on an inventory of projected emissions in the SCAB. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative air quality impact in the SCAB would not be cumulatively considerable. As shown in **Table 7** above, Project construction-related emissions by themselves would not exceed the SCAQMD significance thresholds for criteria pollutants. Therefore, the Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMPs pursuant to the FCAA mandates. The analysis assumed fugitive dust controls would be utilized during construction, including frequent water applications. SCAQMD rules, mandates, and compliance with adopted emissions control measures would also be imposed on construction projects throughout the SCAB, which would include related projects. Compliance with SCAQMD rules and regulations would

further reduce Project construction-related emissions. Therefore, Project-related construction emissions, combined with those from other projects in the area, would not substantially deteriorate local air quality. The Project's construction-related emissions would not result in a cumulatively considerable contribution to significant cumulative air quality.

Cumulative Long-Term Impacts

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in **Table 8**, the Project's net operational emissions would not exceed SCAQMD thresholds. As a result, operational emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

4.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. 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 US 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			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 Biological Resources Assessment (BRA; **Appendix B1**) and a Jurisdictional Delineation (**Appendix B2**) were prepared for the Project in December 2022 and May 2023, respectively, by ELMT Consulting (ELMT). These reports are summarized below and are included as part of this IS/MND.

Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the Project site. In addition to the literature review, a general habitat assessment or field investigation of the Project site was conducted

to document existing conditions and assess the potential for special-status biological resources to occur within the Project site.

Additionally, ELMT conducted a field delineation to determine the jurisdictional limits of "waters of the State" and jurisdictional streambed (including potential wetlands), located within the boundaries of the Project site.

Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the Project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the Project site was determined through a query of the California Department of Fish and Wildlife's (CDFW) QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the Project site was reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1985-2021);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the Project site.

Additionally, ELMT conducted a thorough review of relevant literature and materials to preliminarily identify areas that may fall under the jurisdiction of the regulatory agencies.

Field Investigation

Following the literature review, ELMT inventoried and evaluated the condition of the habitat within the project site on September 20, 2022. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens, delineated on an aerial photograph, and then digitized into GIS ArcView. The ArcView application was used to compute the area of each plant community and/or land cover type in acres.[5]

Results

Plants

Common plant species observed during the field investigation were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides.

Vegetation

The Project site supports two land cover types that would be classified as developed and disturbed. Additionally, the Project site does not support any natural plant communities.

Disturbed

Disturbed areas on-site include unpaved areas that are unvegetated or minimally vegetated and do not otherwise support a recognizable plant community. Most of the disturbed areas on site occur in the form of graded or compressed soil. Due to anthropogenic disturbance, portions of the site have weathered and support weedy/early successional species that are adapted to growing in such conditions. Common plant species observed in the disturbed areas of the project site include telegraph weed (*Heterotheca grandiflora*), and Bermuda grass (*Cynodon dactylon*).

Developed

Developed areas generally refer to paved or otherwise impervious surfaces, ornamental landscaping, and all buildings/structures. Onsite development includes the paved and gravel driveways and access areas for the existing commercial, residential, and institutional developments on site, as well as the structures which support these operations. These areas are generally unvegetated or support minimal non-native weedy species. The parcel which contains residential development also supports ornamental landscaping. Common ornamental plant species observed here include Mexican fan palm (*Washingtonia robusta*), boxwood (*Buxus* sp.), Mediterranean cypress (*Cupressus sempervirens*), pine (*Pinus* sp.), wintercreeper (*Euonymus fortunei*), juniper (*Juniperus* sp.), and Douglas iris (*Iris douglasiana*).

Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America, A Field Guide to Western Reptiles and Amphibians, and A Field Guide to Mammals of North America.[6]

[5] ELMT. (2022). *Biological Resources Assessment*. p. 3. Refer to **Appendix B1**.

[6] Ibid. p. 3

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. The project site provides some suitable habitat for wildlife species, especially those adapted to a high degree of anthropogenic disturbances and development.

Fish

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of fish were observed on or within the vicinity of the Project site. Therefore, no fish are expected to occur and are presumed absent from the Project site.

Amphibians

No amphibians or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of amphibians were observed on or within the vicinity of the Project site. Therefore, no amphibians are expected to occur and are presumed absent from the Project site.

Reptiles

The Project site provides foraging and cover habitat for a limited variety of reptile species adapted to a high degree of routine anthropogenic disturbance. No reptile species were observed on the Project site at the time of the investigation. Common reptile species expected to occur onsite include western fence lizard (*Sceloporus occidentalis*) and southern alligator lizard (*Elgaria multicarinata*).

Birds/Nesting Birds

The Project site and surrounding area provide limited foraging and nesting habitat for year-round and seasonal avian residents adapted to a high degree of anthropogenic disturbance, as well as migrating songbirds that could occur in the area. Bird species detected during the field investigation include rock pigeon (*Columba livia*), common raven (*Corvus corax*), and house finch (*haemorhous mexicanus*). However, tall power lines, buildings, and trees within and surrounding the Project site do allow for perching and nesting opportunities for raptor species. No active nests or birds displaying nesting behavior were observed on the Project site.

Mammals

The Project site provides limited foraging and cover habitat for a mammalian species adapted to a high degree of anthropogenic disturbance. Non mammalian species were observed during the field investigation Common mammalian species that could potentially occur include coyote (*Canis latrans*), feral cat (*felis catus*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the

dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The Project site is isolated from any nearby wildlife corridors or linkages. City Creek lies immediately north of the project site. This drainage does provides local movement opportunities for wildlife adapted to urban environments. However, the Project would be confined to existing disturbed and developed areas and is surrounded by development, which has removed most natural plant communities from the surrounding area.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Redlands USGS 7.5-minute quadrangle. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty-one (21) special-status plant species, fifty-nine (59) special-status wildlife species, and three (3) special-status plant communities as having the potential to occur within the Redlands 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions

Special-Status Plants

No special-status plant species were observed on-site during the field investigation. The Project site has been subject to anthropogenic disturbances from previous land uses and grading activities, and surrounding development. These disturbances have reduced the suitability of the habitat to support special-status plant species known to occur in the general vicinity of the project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does not provide suitable habitat for any listed species. Any special-status plant species known to occur in the area are presumed to be absent from the Project site. No focused surveys were recommended.

Special-Status Wildlife

No special-status wildlife species were observed on-site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the Project site has a low potential to support Cooper's hawk (*Accipiter cooperii*). All remaining special-status wildlife species are presumed to be absent from the Project site due to a lack of quality habitat.

Cooper's hawk is not federally or state listed as endangered or threatened. To ensure impacts to Cooper's hawk do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of mitigation

through the pre-construction nesting bird clearance survey, impacts to these species will be less than significant.

Based on regional significance, the suitability of the Project site to support burrowing owl and San Bernardino kangaroo rat within the Project site is described in further detail below:

- **Burrowing Owl**. The burrowing owl is currently listed as a California Species of Special Concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground.[7] Burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels) whose burrows are used for roosting and nesting.[8] The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators.

  No burrowing owls or recent signs (i.e., pellets, feathers, castings, or whitewash) were observed during the field investigation. The majority of the Project site is highly disturbed, and no suitable burrows were observed on-site or within in the buffer areas immediately surrounding the site. Additionally, the site is surrounded by power poles, overhead power lines, ornamental trees, and buildings, which decrease the likelihood that burrowing owls would occur on the Project site as these features provide perching opportunities for larger raptor species (i.e., red-tailed hawk [*Buteo jamaicensis*]) that prey on burrowing owls.

  Based on the results of the field investigation, it was determined that the Project site does not have potential to support burrowing owls and focused surveys were not recommended.

- **San Bernardino Kangaroo Rat.** The San Bernardino kangaroo rat, federally listed as endangered, is one of several kangaroo rat species in its range. The Dulzura, the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the San Bernardino kangaroo rat, but these other species have a wider habitat range. The habitat of the San Bernardino kangaroo rat is described as being confined to pioneer and intermediate Riversidean Alluvial Fan Sage Scrub (RAFSS) habitats, with sandy soils deposited by fluvial (water) rather than Aeolian (wind) processes. Burrows are dug in loose soil, usually near or beneath shrubs.

  The San Bernardino kangaroo rat is one of three subspecies of the Merriam's kangaroo rat. The Merriam's kangaroo rat is a widespread species that can be found from the inland valleys to the deserts. The subspecies known as the San Bernardino kangaroo, however, is confined to inland

[7] Ibid. pp. 7 – 8

[8] Ibid. p. 8

valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainages. Most of the drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle use and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the San Bernardino kangaroo rat. The past habitat losses and potential future losses prompted the emergency listing of the San Bernardino kangaroo rat as an endangered species.[9] PCE's are physical or biological features essential to the conservation of a species for which its designated critical habitat is based on. Examples of PCE's include food, water, space for individual and population growth, cover or shelter, etc. The PCEs essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for San Bernardino kangaroo rat are:

1. River, creek, stream, and wash channels; alluvial fans, flood plains, flood benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes;
2. Alluvial sage scrub and associated vegetation such as coastal sage scrub and chamise chaparral with a moderately open canopy;
3. Soil series consisting of sand, sandy loam, or loam within its geographical range; and
4. Upland areas proximal to flood plains containing suitable habitat (land adjacent to alluvial fan that provides Refugia).

San Bernardino kangaroo rat is known to occur within Lytle Creek. The Project site consists of vacant, heavily disturbed land with compacted soils that have been disturbed from previous land uses. Field sign for kangaroo rat, including San Bernardino kangaroo rat, is distinctive and readily noted in the field. No sign (e.g., San Bernardino kangaroo rat characteristic burrows, dusting baths, and/or tail drags) were observed on the project site. Additionally, the Project site no longer is subject to the hydrologic influence of Cajon Wash.

As noted above, the Project site and surrounding areas have not been exposed to fluvial processes associated with the streams in the area since development in the area occurred. The Project site is not subject to dynamic geomorphological and hydrological processes needed to scour and reset the onsite habitats back to pioneer or intermediate RAFSS habitats. Furthermore, the Project site no longer receives sand or sandy loam soils from scouring events needed by San Bernardino kangaroo rat for burrowing. Instead, the site supports highly graded and compacted rocky soils.

Based on these conditions, it was determined that the Project site does not provide the requisite habitat elements needed by San Bernardino kangaroo rat to be present. Therefore, it was determined that San Bernardino kangaroo rat is presumed absent from the Project site. No focused surveys are recommended.

[9] Ibid. p. 8

Special-Status Plant Communities

According to the CNDDB, three (3) special-status plant communities have been reported in the Redlands USGS 7.5-minute quadrangle: Riversidian Alluvial Fan Sage Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Mixed Riparian Forest (refer to Attachment C), none of which were observed on-site during the field investigation. Therefore, no special-status plant communities will be impacted by implementation of the Project.

Critical Habitats

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act Permit from the United States Army Corps of Engineers [USACE]). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project site is not located within federally designated Critical Habitat for any species. The nearest critical habitats occur 0.3 mile to the southeast for Santa Ana sucker (*Catostomas santaanae*) and 0.17 mile to the south for San Bernadino Merriam's kangaroo rat (*Dipodomys merriami*). The entire Project site and most adjacent areas have been converted from natural habitat into commercial, residential, and institutional development. The Project site supports no natural plant communities, and it was determined that the Project site does not support suitable habitat for any listed species. Furthermore, since the Project does not have a federal nexus, a Section 7 consultation with the USFWS would not be required for loss or adverse modifications to Critical Habitat.

Jurisdictional Features

Drainage Features

One drainage feature (City Creek), a channelized potion of City Creek, was observed along the northern boundary of the Project site, outside of the Project footprint, during the field delineation. City Creek generally flows in an east to west direction, bordering the northern boundary of the project site. City Creek originates in the San Bernardino Mountains to the north of the site and flows roughly south and southeastward before aligning with the northern boundary of the site at Palm Avenue and leaving site adjacency at the northeast corner of the site.

Surface water was present within City Creek near the culverts at Palm Avenue. Evidence of an ordinary high water mark (OHWM) within on-site and adjacent portions of City Creek was observed via scour,

changes in substrate, shelving, and lack of vegetation. The OHWM within City Creek ranged from approximately 10-20 feet in width throughout the length. In general, the channelized portion of City Creek conveys surface flows during storm event and from urban runoff. City Creek flows westward past San Bernardino International Airport before converging with East Twin Creek, which is ultimately tributary to the Santa Ana River.

In-channel vegetation consisted of non-native weedy plant species such as oats (*Avena barbata*), red brome (*Bromus rubens*), hairy sunflower (*Helianthus annuus*), tropical horseweed (*Erigeron sumatrensis*), and Crete weed (*Hedypnois rhagadioloides*). No riparian vegetation is present within portions of City Creek that occur within or adjacent to the proposed storm drain outlet.

Wetland Features

In order to qualify as a wetland, a feature must exhibit all three wetland parameters (i.e., vegetation, soils, and hydrology) described in the Corps Arid West Regional Supplement. Drainage 1 at its origin outside of site boundaries at Palm Avenue primarily consisted of loose, silty/sandy substrate with dense vegetation, including seep monkey flower (*Erythranthe guttata*, OBL), common knotweed (*Persicaria lapathifolia*, FACW), rabbitfoot grass (*Polypogon monspeliensis*, FACW), water beard grass (*Polypogon viridis*, FACW), flax-leaved horseweed (*Erigeron bonariensis*, FACU), spiny sow thistle (*Sonchus asper*, FAC), brass buttons (*Cotula australis*, FAC), Mexican fan palm (*Washingtonia robusta*, FACW), and broadleaf cattail (*Typha latifolia*, OBL). The periphery of the off-site wetland feature, outside of available surface water, supported primarily weedy/early-successional species such as Italian rye grass (*Festuca perennis*), sweet alyssum (*Lobularia maritimum*), hairy vetch (*Vicia villosa*), red boerhaavia (*Boerhavia coccinea*), mustard (*Hirschfeldia incana*), Mediterranean grass (*Schismus barbatus*), and red brome.

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

Less than Significant Impact with Mitigation Incorporated. As concluded above, there is no evidence of candidate, sensitive, or special status species on the Project site due to lack of suitable habitat. Therefore, implementation of the Project would not have a substantial adverse effect, either directly or through habitat modifications on any special-status species.

Nevertheless, the Project site and surrounding area provided limited foraging and nesting habitat for year-round and seasonal birds, as well as migrating songbirds, such as the Cooper's hawk. Although the Cooper's hawk is not federally or state listed as endangered or threatened, nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted prior to the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds would be disturbed during construction, pursuant to MM BIO-1. Implementation of MM BIO-1 would ensure that impacts to nesting birds are reduce to a less than significant level.

Mitigation Measures:

MM BIO-1: If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

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 US Fish and Wildlife Service?

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?

Less than Significant Impact. ELMT prepared a Jurisdictional Delienation (**Appendix B2**) for the Project which identified one drainage feature, a channelized potion of City Creek, along the northern boundary of the Project site (outside of the Project footprint). As discussed above, City Creek is tributary to the Santa Ana River (Relatively Permanent Water) and ultimately the Pacific Ocean (Traditional Navigable Water). Therefore, the City Creek qualifies as waters of the United States (WoUS) and falls under the regulatory authority of the USACE. No isolated or Rapanos conditions were observed within the boundaries of the Project site. Therefore, the Regional Water Quality Control Board (Regional Board) jurisdictional limit follows that of the USACE. Furthermore, the Jurisdictional Delineation also determined that City Creek would be considered CDFW streambed.

USACE regulates discharges of dredged or fill materials into WoUS, including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Therefore, any impacts to any jurisdictional areas would require a CWA Section 404 permit prior to Project implementation. Based on the proposed limits of disturbance, the proposed storm drain outlet would be installed above the OHWM and

would not result in any impacts to Corps jurisdictional waters and a CWA Section 404 permit would not be required.

The Regional Board regulates discharges to surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. Based on the proposed limits of disturbance the storm drain outlet would be installed outside of Regional Board jurisdictional waters, and therefore, would not result in any impacts to Regional Board jurisdictional waters. A Regional Board CWA Section 401 Water Quality Certification would not be required.

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates any activity that will divert or obstruct the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream. Therefore, any impacts to the on-site jurisdictional areas would require a Section 1602 Streambed Alteration Agreement from the CDFW prior to project implementation. The notification would require a processing fee which is based on the term and cost of the Project. Additionally CDFW requires that the payment of the process fee be paid and CEQA compliance be obtained prior to the issuance of the final Section 1602 Streambed Alteration Agreement. As concluded in the Jurisdictional Delineation, the proposed storm drain outlet would be installed outside of the jurisdictional boundary of the CDFW. Furthermore, the storm drain outlet is not expected to result in any appreciable increase in discharge into City Creek, and Project activities are isolated to downstream portions of City Creek, away from the wetland feature. Therefore, no impacts to downstream habitats would occur and a Section 1602 Streambed Alteration Agreement would not be required. Nevertheless, the Project Applicant would pay a processing fee to CDFW in compliance with CCR § 753.5.

Overall, implementation to the Project substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS; and would not have a substantial adverse effect on state or federally protected wetlands. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact with Mitigation Incorporated. As discussed in response a) above, the Project site provides suitable foraging and nesting habitat for a variety of bird species adapted to a high degree of anthropogenic disturbance, as well as migrating songbirds that could occur in the area. Although the BRA concluded that no active nests or birds displaying nesting behavior were observed on the Project site, it was determined that the Project site has a low potential to support Cooper's hawk. Therefore, in compliance with the MBTA, the Project would implement **MM BIO-1** which would require a pre-construction nesting bird clearance survey to be conducted prior to ground disturbance.

Furthermore, the Project site is isolated from any nearby wildlife corridors or linkages and is confined to existing disturbed and developed areas and is surrounded by development, which has

removed most natural plant communities from the surrounding area. As a result, implementation of the Project would not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

As such, implementation of the Project would not impact wildlife movement opportunities. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

Mitigation Measures:

Refer to **MM BIO-1** in response a) above.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. No native or natural plant communities or communities of special concern were observed within the Project site. As noted above, the Project site consists of a mixture of disturbed and developed areas. Additionally, the site does not support any natural plant communities. The BRA concluded that the Project site is partially surrounded by ornamental trees. The Highland MC Chapter 8.36 outlines provisions and guidelines for heritage trees. However, the trees surrounding the Project site are not considered heritage trees. Since the Project would not conflict with any local policy or ordinances protecting biological resources, such as a tree preservation policy or ordinance, no impact would occur.

Mitigation Measures: No mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project site is not located with an adopted Habitat Conservation Plan or other approved local, regional, or State habitat conservation plan, and does not contain any special-status plant or animal species. Therefore, no impact would occur.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The Project would not result in any significant impact concerning biological resources with the implementation of **MM BIO-1**. Similar to the Project, cumulative projects in the region would be subject to project-specific environmental review, adhere to any applicable federal, State, and local regulation and implement mitigation measures to reduce impacts to any potentially occurring special-status species occurring onsite. Since there would be no significant Project-specific impacts with compliance with applicable regulation, and implementation of mitigation, the Project's impact to biological resources would not be cumulatively considerable.

4.5 CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

BCR Consulting, Inc. prepared a Cultural Resources Assessment (CRA), prepared on December 2022; refer to **Appendix C**. The report and research were completed pursuant to CEQA, the PRC Chapter 2.6, Section 21083.2, and CCR Title 14, Chapter 3, Article 5, §15064.5.

Methodology[10]

Records Search

The archaeological records search, completed at the SCCIC at California State University, Fullerton, reviewed all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects completed within one half-mile of the project site. In addition, a review was conducted of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Field Survey

An archaeological pedestrian field survey of the project site was conducted on November 10, 2022. The survey was conducted by walking parallel transects approximately 15 meters apart across 100 percent of the project site. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources.

Results[11]

Records Search

The records search was completed at the SCCIC at California State University, Fullerton. This research revealed that 21 cultural resource studies have taken place within one-half mile of the project site. One of the previous studies assessed a small portion at the eastern edge of the Project site for cultural

[10] BCR Consulting LLC. (2021). *Cultural Resources Assessment*. p. 8. Refer to **Appendix C**
[11] Ibid. pp. 9 - 10

resources and one cultural resource (designated P-36-13750) was identified within the Project boundaries.

Additional Research

The entire Project site was part of a larger 83.57-acre property patented to Salas Cox as a homestead grant by the state of California on August 20, 1881. Research did not indicate any development within the project site connected with this era. Additional land-use history research was performed to provide context for individual parcels within the Project site that contained historic-period buildings. Refer to the following information:

- **27184 Meines Street.** The residence was built 1950 but no permit records were available to date the modifications. The property contained a garage prior to 1938 that remains in place. The earliest known residents of the subject residence were Aron (1893-1986) and Susie Pruett (1904-1988) who lived there between 1950 and 1976. Aron was a railroad laborer and occasionally rented out a trailer at the property to other residents. In 1976, Robert Forshay acquired the subject property. Mr. Forshay, an American citizen born in the Philippines, graduated from Pacific High School in San Bernardino. Ownership passed to QR LI Highland CA Commerce Center, the current owner, in 2022.
- **27220 Meines Street.** The buildings were both constructed between 1938 and 1959 according to aerial photos, but assessor information did not indicate an exact build date and no permit records were available. The first recorded owner of 27220 Meines Street was Mrs. Gertha Evans. Mrs. Evans was born in Texas in 1890 and moved to California where she had lived for 40 years. Mrs. Evans lived in Highland for 25 years and acquired the subject property at an unknown date prior to 1963. Mrs. Evans was a member of the St. Paul's AME church in San Bernardino and died in 1963. In 1976, Robert Forshay acquired the subject property. Mr. Forshay an American citizen born in the Philippines, graduated from Pacific High School in San Bernardino. Ownership passed to QR LI Highland CA Commerce Center, the current owner, in 2022.
- **P-36-13750.** Previous identification efforts indicated that the site comprised an early 20th Century residential site. This interpretation is presumably based on domestic debris that was identified there in 2007. However, no residential structures have been identified within this parcel, and the domestic debris has been removed. Current research did not reveal any residents for this property. Aerial photos show the garage in 1938 (still present), and by 1959 two small ancillary structures had been built to the northwest (no longer present). Disturbances connected with offroad vehicle activity were consistently visible surrounding these features throughout this era, but no evidence of residential use or cultivation were apparent.

Field Survey

During the field survey, BCR Consulting staff carefully inspected the project site, and identified three properties that contained historic-period buildings. Refer to the following:

- **27184 Meines Street.** The subject property is occupied by a 480 square foot single-family residence that is historic in age (i.e., over 45 years old). The post-war Minimal-Style residence features a wood frame construction, single-story floor plan, and was built in 1950. It features a

side-gabled roof with moderate pitch and topped with new composition shingles. The outer walls have been re-surfaced with light-colored stucco and stone accents on the lower portion of the home. The original windows have been replaced with vinyl windows. The subject property shares a dirt lot with an adjacent trucking company. A large wood-framed corrugated structure is visible behind the residence. This building was constructed after 1980 and is not historic in age. As such it does not merit further consideration.

- **27220 Meines Street.** The subject property is a one-acre lot that contains a single-family residence and an ancillary structure that is historic in age (i.e., over 45 years old). The residence is a post-war, minimal-style residence which features wood frame construction, a single-story floor plan, and was built circa 1950. It is fronted by a small concrete pad. A second, historic-period structure is located on the same lot directly north of the residential unit. This structure is made from a stone and concrete matrix and features a wooden gable roof. Both the residence and the stone structure have been neglected and fallen into a state of disrepair. A small concrete foundation from an unknown structure is located northwest of the two buildings.
- **P-36-13750.** This resource was originally recorded in February 2007 by Archaeological Consulting Services as a historic-period residential site which included one garage, a shed, and refuse scatter. BCR Consulting archaeologists relocated the site on November 10, 2022. The shed has been demolished and the area containing the former refuse scatter has been subject to excavation and grading for the construction of an industrial building. The pre-1938 garage is in place as recorded (see historicaerials.com). It is a wood-framed building with corrugated aluminum siding and roofing. The south-facing (main) façade has no door and is covered with temporary steel fencing. It is a utilitarian building that lacks architectural style and ornamentation. The graded lot was not accessible.

  No other cultural resources were identified within the project site boundaries. Surface visibility was approximately 60 percent within the project site. Sediments consisted of sandy silt with poorly sorted gravels. The property has been subject to severe disturbances related building construction, landscaping, and weed abatement.

Significance Evaluations[12]

During the field survey, 12 properties containing historic-period buildings were identified. CEQA calls for the evaluation and recordation of historic and archaeological resources. The criteria for determining the significance of impacts to cultural resources are based on Section 15064.5 of the CEQA Guidelines and Guidelines for the Nomination of Properties to the California Register. Properties eligible for listing in the California Register and subject to review under CEQA are those meeting the criteria for listing in the California Register, or designation under a local ordinance.

[12] Ibid. pp. 11 - 12

Significance Criteria

California Register of Historical Resources. The California Register criteria are based on National Register criteria. For a property to be eligible for inclusion on the California Register, one or more of the following criteria must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.
2. It is associated with the lives of persons important to local, California, or U.S. history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of a master, possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact

Refer to the following information:

CRHR Evaluations

27184 Meines Street. Criterion 1: Substantial research has not indicated a close association between the subject property and any important events. It is therefore not eligible for the California Register under Criterion 1. Criterion 2: Substantial research has failed to connect the subject property with the lives of persons important in California's past. It is therefore not eligible for the California Register under Criterion 2. Criterion 3: The residence lacks architectural distinction and does not display significant elements of the era during which it was constructed. The building does not significantly represent the work of an important creative individual or possess high artistic values. Therefore, the subject property is not eligible under Criterion 3. Criterion 4: The subject property has not and is not likely to yield information important in prehistory or history and is therefore not eligible for listing under Criterion 4. The subject property and its historic-age building are therefore recommended not eligible under any of the four criteria for listing on the California Register, and as such are not recommended historical resources under CEQA.

27220 Meines Street. Criterion 1: Substantial research has not indicated a close association between the subject property and any important events. It is therefore not eligible for the California Register under Criterion 1. Criterion 2: Substantial research has failed to connect the subject property with the lives of persons important in California's past. It is therefore not eligible for the California Register under Criterion 2. Criterion 3: The residence and stone building lack architectural distinction and do not display significant elements of the era during which it was constructed. The buildings do not significantly represent the work of an important creative individual or possess high artistic values. Therefore, the subject property is not eligible under Criterion 3. Criterion 4: The subject property has not and is not likely to yield information important in prehistory or history and is therefore not eligible for listing under Criterion 4. The subject property and its historic-age building are therefore recommended not eligible under any of the four criteria for listing on the California Register, and as such are not recommended historical resources under CEQA.

P-36-13750. Criterion 1: Substantial research has not indicated a close association between the subject property and any important events. It is therefore not eligible for the California Register under Criterion 1. Criterion 2: Substantial research has failed to connect the subject property with the lives of persons important in California's past. It is therefore not eligible for the California Register under Criterion 2. Criterion 3: The residence and stone building lack architectural distinction and does not display significant elements of the era during which it was constructed. The building does not significantly represent the work of an important creative individual or possess high artistic values. Therefore, the subject property is not eligible under Criterion 3. Criterion 4: The subject property has not and is not likely to yield information important in prehistory or history and is therefore not eligible for listing under Criterion 4. The subject property and its historic-age building is therefore recommended not eligible under any of the four criteria for listing on the California Register, and as such are not recommended historical resources under CEQA.

The three subject sites do not contain information relevant to important scientific research questions and lacks special or qualities. As such they are not a unique archaeological resource and is also not recommended a "historical resource" under CEQA and does not warrant further consideration. Based on these results BCR Consulting recommends that no additional cultural resource work or monitoring is necessary for any earthmoving proposed within the Project site. However, if previously undocumented historical or archeological resources are identified during earthmoving activities, **MM CUL-1** would be implemented which would require the Project applicant qualified archaeologist would be contacted to assess the nature and significance of the find, diverting construction excavation if necessary. Therefore, with implementation of **MM CUL-1**, impacts would be less than significant.

Mitigation Measures:

MM CUL-1 Historical and Archaeological Resources

a) If archaeological resources are unearthed by project construction activities, these shall be evaluated by a qualified archaeologist and tribal

monitor/consultant. If the resources discovery of any tribal cultural or archaeological resources, construction activities in the immediate vicinity of the find shall cease until the find can be assessed. If all finds are Native American in origin, interested Tribes (as a result of correspondence with area Tribes) shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request preservation in place or recovery for educational purposes. Work may continue on other parts of the project while evaluation takes place.

b) Preservation in place shall be the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavation to remove the resource along the subsequent laboratory processing and analysis. All Tribal Cultural Resources shall be returned to the Tribe. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to the Tribe or a local school or historical society in the area for educational purposes.

c) Archaeological and Native American monitoring and excavation during construction projects shall be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel shall meet the Secretary of the Interior standards for archaeology and have a minimum of 10 years' experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact. The Project site is not located within or adjacent to a dedicated cemetery and the field survey did not identify human remains within the Project site.

The CRA concluded that the geologic units underlaying the Project site are mapped entirely as alluvial sand, gravel, and clay deposits dating to the Holocene era. While Holocene alluvial units are considered to be of high preservation value, material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching older Holocene or Late Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a one mile radius. While the presence of any fossil material is unlikely, if development of the Project disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive,

but caution during development should be observed. The following SC CUL-1 would be implemented to reduce impacts to any potentially unearthed human remains. Note that standard conditions do not constitute as mitigation measures. Therefore, impacts would be less than significant without mitigation incorporated.

Standard Conditions of Approval:

SC CUL-1 If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

Per California Code, Health and Safety Code - HSC § 7050.5:

(b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code , that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

As concluded above, the Project would not create a significant cumulative impact to any known historical or archaeological resources with implementation of **MM CUL-1**, or to any unknown human remains with adherence to SC CUL-1. Similar to the Project, all cumulative projects in the surrounding area would be subject to project-level environmental review to determine impacts pertaining to cultural resources. Since the Project would not significantly impact any cultural resources, the potential incremental effects would not be cumulative considerable.

4.6 ENERGY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6. ENERGY. 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 efficiency?			X	

Kimley-Horn and Associates prepared an Energy Assessment on May 2023; refer to **Appendix D** of this IS/MND.

Energy Consumption

Electrical Service

Southern California Edison (SCE) provides electrical services to the City of Highland (City) through State-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources; including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, electricity generation is not usually tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

Natural Gas Services

Southern California Gas Company (SoCalGas) provides natural gas services to the City of Highland (City) and San Bernardino County (County). Natural gas is a hydrocarbon fuel found in reservoirs beneath the Earth's surface and is composed primarily of methane (CH_4). It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels (e.g., oil and coal). In California and throughout the western United States, many new electrical generation plants fired by natural gas are being brought online. Thus, there is great interest in importing liquefied

natural gas from other parts of the world. California's natural gas-fired electric generation increased by 2 percent in 2021, accounting for 50 percent of in-state generation.[13]

Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 6,922.8 trillion BTUs in 2020 (the most recent year for which this specific data is available).[14] Of California's total energy usage, the breakdown by sector is 34.0 percent transportation, 24.6 percent industrial, 19.6 percent commercial, and 21.8 percent residential.[15] Electricity and natural gas in California are generally consumed by stationary users such as residences, commercial, and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2022, taxable gasoline sales (including aviation gasoline) in California accounted for 13,919,678,835 gallons of gasoline.[16]

The electricity consumption attributable to the County from 2011 to 2021 is shown in **Table 12, Electricity Consumption in San Bernardino County 2011-2021.** As indicated in **Table 12**, energy consumption in the County steadily increased between 2011 to 2021 with the exception of 2019 in which energy decreased slightly from previous years.

Table 12: Electricity Consumption in San Bernardino County 2011-2021

Year	Electricity Consumption (in millions of kilowatt hours)
2011	13,730
2012	14.348
2013	14,374
2014	14,731
2015	14,731
2016	14,946
2017	15,282
2018	15,376
2019	15,316
2020	15,969
2021	16,181
Source: Kimley-Horn and Associates. (2023). *Energy Assessment.* page 5 – Table 1	

The natural gas consumption attributable to the County from 2011 to 2021 is shown in **Table 13, Natural Gas Consumption in San Bernardino County 2011-2021**. Natural gas consumption in the County fluctuated with increases and decreases occurring annually.

[13] Ibid. page 5.
[14] Ibid. page 5.
[15] Ibid. page 5.
[16] Ibid. page 5.

Table 13: Natural Gas Consumption in San Bernardino County 2011-2021

Year	Natural Gas Consumption (in millions of therms)
2011	504
2012	489
2013	511
2014	469
2015	485
2016	494
2017	493
2018	500
2019	547
2020	527
2021	561
Source: Ibid. page 6 -Table 2	

Automotive fuel consumption in the County from 2012 to 2022 is shown in **Table 14: Automotive Fuel Consumption in San Bernardino County 2012-2022**. As shown in **Table 14**, on-road automotive fuel consumption in the County increased between 2012 and 2019 and fluctuated from 2020 to 2022. Heavy-duty vehicle fuel consumption steadily increased between 2012 and 2022 with a slight decrease in 2018, and 2019.

Table 14: Automotive Fuel Consumption in San Bernardino County 2012-2022

Year	On-Road Automotive Fuel Consumption (gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (gallons)
2012	823,998,577	221,468,396
2013	824,054,602	231,100,540
2014	834,846,492	233,757,358
2015	863,626,512	236,687,334
2016	888,752,451	251,535,041
2017	896,771,954	263,723,118
2018	897,385,756	259,783,109
2019	898,685,412	261,139,639
2020	767,569,916	265,477,739
2021	874,282,902	272,787,528
2022	873,015,917	276,240,473
Source: Ibid. page 6 -Table 3		

Regulations and Significance Criteria

California's Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24)

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every three years (Title 24, Part 6, of the California Code of

Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020. The 2022 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2023.

The 2016 Standards improved upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 Standards, residential buildings are 28 percent more energy efficient and nonresidential buildings are 5 percent more energy efficient than under the 2013 Standards. Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features.

The 2019 Standards improve upon the 2016 Standards. Under the 2019 Title 24 standards, residential buildings are about 7 percent more energy efficient, and when the required rooftop solar is factored in for low-rise residential construction, residential buildings that meet 2019 Title 24 standards use about 53 percent less energy than those built to meet the 2016 standards.

The 2022 Title 24 standards became effective January 1, 2023, and will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption across California. For example, the 2022 Title 24 standards will require efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. Among other updates like strengthened ventilation standards for gas cooking appliances, the 2022 Energy Code includes updated standards in three major areas:

- New electric heat pump requirements for residential uses, schools, offices, banks, libraries, retail, and grocery stores.
- The promotion of electric-ready requirements for new homes including the addition of circuitry for electric appliances, battery storage panels, and dedicated infrastructure to allow for the conversion from natural gas to electricity.
- The expansion of solar photovoltaic and battery storage standards to additional land uses including high-rise multifamily residences, hotels and motels, tenant spaces, offices, (including medical offices and clinics), retail and grocery stores, restaurants, schools, and civic uses (including theaters auditoriums, and convention centers).

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. CALGreen also provides voluntary measures (CALGreen Tier 1 and Tier 2) that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2022 and went into effect January 1, 2023. Projects whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.[17]

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact.

Construction

The Project is anticipated to be constructed in one phase. Construction activity is anticipated to occur over a duration of approximately 10 months, beginning in October 2023. The energy associated with Project construction includes electricity use associated with water utilized for dust control, diesel fuel from on-road hauling trips, vendor trips, and off-road construction diesel equipment, as well as gasoline fuel from on-road worker commute trips. Because construction activities typically do not require natural gas, it is not included in the following discussion. The methodology for each category is discussed below. Quantifications of construction energy are provided by the Project below; see **Table 15, Energy Use During Construction.**

Table 15: Energy Use During Construction

Project Source	Total Construction Energy	San Bernardino County Annual Energy	Percentage Increase Countywide
Electricity Use		**GWh**	
Water Use[1]	0.0026	161,181	0.00002%
Diesel Use		**Gallons**	
On-Road Construction Trips[2]	37,606	279,150,963	0.0135%
Off-Road Construction Equipment[3]	91,335		0.0327%
Construction Diesel Total	128,941		0.0462%
Gasoline		**Gallons**	
On-Road Construction Trips	43,737	865,975,498	0.0051%

Notes:
1. Construction water use based on acres disturbed per day per construction sequencing and estimated water use per acre.
2. On-road mobile fuel source based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in San Bernardino for 2023.
3. Construction fuel use was calculated based on CalEEEMod emissions outputs and conversion ratios from the Climate Registry.

Source: ibid. page 12 – Table 4.

Electricity

Water for Construction Dust Control. Electricity use associated with water use for construction dust control is calculated based on total water use and the energy intensity for supply, distribution,

[17] Ibid. Page 8

and treatment of water. The total number of gallons of water used is calculated based on acreage disturbed during grading and site preparation, as well as the daily watering rate per acre disturbed.

- The total acres disturbed are calculated using the methodology described in Chapter 4.2 of Appendix C of the CalEEMod User's Guide.
- The water application rate of 3,020 gallons per acre per day is from the Air and Waste Management Association's Air Pollution Engineering Manual (1992).

The energy intensity value is based on the CalEEMod default energy intensity per gallon of water for the South Coast Hydrologic Region. As summarized in Table 15, the total electricity demand associated with water use for the Project construction dust control would be approximately 0.0026 GWh over the duration of construction.

Petroleum Fuel

On-Road Diesel Construction Trips. The diesel fuel associated with on-road construction mobile trips is calculated based on vehicle miles traveled (VMT) from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default diesel fleet percentage, and vehicle fuel efficiency in miles per gallon (MPG). VMT for the entire construction period is calculated based on the number of trips multiplied by the trip lengths for each phase shown in CalEEMod. Construction fuel was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. Total diesel fuel consumption associated with on-road construction trips for the Project would be approximately 37,606 gallons (see Table 15).

Off-Road Diesel Construction Equipment. Similarly, the construction diesel fuel associated with the off-road construction equipment that is calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. The total diesel fuel associated with the Project off-road construction equipment is approximately 91,335 gallons (see Table 15). Combined diesel usage from on-road and off-road construction sources is 128,941 gallons.

On-Road Gasoline Construction Trips. The gasoline fuel associated with on-road construction mobile trips is calculated based on VMT from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default gasoline fleet percentage, and vehicle fuel efficiency in MPG using the same methodology as the construction on-road trip diesel fuel calculation discussed above. The total gasoline fuel associated with Project on-road construction trips would be approximately 43,737 gallons (see Table 15).

Construction Energy Use Analysis

As indicated in Table 15, Project construction electricity would represent approximately 0.00002 percent of the current electricity use in San Bernardino County. In 2023, Californians are anticipated to use approximately 14,438,550,403 gallons of gasoline and approximately 3,189,559,232 gallons of diesel fuel.[18] San Bernardino County annual gasoline fuel use in 2023 is anticipated to be 865,975,498 gallons and diesel use would be approximately 279,150,963 gallons. Total Project construction gasoline fuel would represent approximately 0.005 percent of annual

[18] Ibid. page 13.

gasoline used in the County, and total Project construction diesel fuel would also represent 0.046 percent of annual diesel used in the County. Total Project construction gasoline and diesel fuel would also represent less than one percent (0.0003 percent and 0.004 percent, respectively) of the State's fuel use. Based on the total Project's relatively low construction fuel use proportional to annual County use, the Project would not substantially affect existing energy fuel supplies or resources. New capacity or additional sources of construction fuel are not anticipated to be required.

SCE's total energy sales are projected to be 94,230 GWh of electricity in 2023 (the first year of Project construction).[19] The Project's construction-related net annual electricity consumption of 0.0026 GWh would represent less than one percent of SCE's projected sales. Therefore, it is anticipated that SCE's existing and planned electricity capacity and electricity supplies would be sufficient to serve the Project's temporary construction electricity demand. Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude soil production would be sufficient to meet demand until 2050.[20] As such, it is expected that existing and planned transportation fuel supplies would be sufficient to serve the Project's temporary construction demand.

Furthermore, there are no unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, some 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 engines use highly efficient combustion engines to minimize unnecessary fuel use.

The Project would have construction activities that would use energy, primarily in the form of diesel fuel (e.g., mobile construction equipment) and electricity (e.g., power tools). Contractors would be required to monitor air quality emissions of construction activities using applicable regulatory guidance such as from SCAQMD CEQA Guidelines. Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce diesel PM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. This requirement indirectly relates to construction energy conservation because when air pollutant emissions are reduced from the monitoring and the efficient use of equipment and materials, energy use is reduced. There are no aspects of the Project that would foreseeably result in the inefficient, wasteful, or unnecessary use of energy during construction activities.

Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary use of energy during construction. There is growing recognition among developers and retailers that sustainable

[19] Ibid. page 13

[20] Ibid. page 14

construction is not prohibitively expensive and that there is a significant cost-savings potential in green building practices. 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. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the costs of business.

As described above, the Project's fuel consumption and energy usage from the entire construction period would increase fuel use in the County by less than one percent. It should be noted that the State CEQA Guideline Appendix G and Appendix F criteria require the Project's effects on local and regional energy supplies and on the requirements for additional capacity to be addressed. A less than one percent increase in temporary demand is not anticipated to trigger the need for additional capacity. Project construction would have a nominal effect on the local and regional energy supplies. Additionally, use of construction fuel would be temporary and would cease once the Project is fully developed. As such, Project construction would have a nominal effect on the local and regional energy supplies.

As stated above, there are no unusual characteristics that necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. It is expected that construction fuel use associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. Therefore, potential impacts are considered less than significant.

Operations

The energy consumption associated with Project operations would occur from building energy (electricity and natural gas) use, water use, and transportation-related fuel use. Annual energy use during Project operations is shown in **Table 16, Project Annual Energy Use During Operations**. It is noted that the Project's unmitigated energy consumption estimates are provided in Table 16 to provide a conservative impact analysis.

Table 16: Project Annual Energy Use During Operations

Source	Annual Operational Energy[3]	San Bernardino County Annual Energy	Percentage Increase Countywide
Electricity Use	**GWh**		
Total Electricity (Electricity Demand + Water Conveyance)	1.63	16,181	0.0101%
Natural Gas Use	**Therms**		
Area[1]	54,839	561,360,617	0.0098%
Diesel Use	**Gallons**		
Mobile[2]	193,574	280,907,070	0.0079%
Gasoline Use	**Gallons**		

Mobile[2]	64,978	853,915,250	0.0689%
Notes: 1. The electricity, natural gas, and water usage are based on Project-specific estimates and CalEEMod defaults. 2. Calculated based on the mobile source fuel based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2024. 3. Annual Operational Energy represents the mitigated operational from CalEEMod.			
Source: Ibid. page 15 – Table 5			

Petroleum Fuel

The gasoline and diesel fuel associated with on-road vehicular trips is calculated based on total VMT calculated for the analyses within the Project's Air Quality Assessment and average fuel efficiency from the EMFAC model. The EMFAC fuel efficiency data incorporates the Pavley Clean Car Standards and the Advanced Clean Cars Program.[21] As summarized in **Table 16**, the total gasoline and diesel fuel associated with on-road trips would be approximately 64,978 gallons per year and 193,574 gallons per year, respectively.

Electricity

The electricity use during the Project is based on CalEEMod defaults. The Project would use approximately 1.63 GWh of electricity per year (see **Table 16**). While the electricity associated with operational water use is estimated based on the annual water use and the energy intensity factor is the CalEEMod default energy intensity per gallon of water for San Bernardino County. Project area water use is based on the CalEEMod default rates. The Project would use approximately 66 million gallons annually of water annually which would require approximately 0.451 GWh per year for conveyance and treatment, which is 27.67 percent of the total electricity demand. Unmitigated Project electricity consumption would only increase countywide electricity use by 0.0101 percent; see **Table 16**.

Natural Gas

The methodology used to calculate the natural gas use associated with the Project is based on CalEEMod default rates. As shown in Table 16, unmitigated natural gas consumption from the Project would represent only 0.0098 percent increase over Countywide natural gas usage.

Operational Energy Use Analysis

Californians used 280,738.4 GWh of electricity in 2021, of which San Bernardino County used 16,180.8 GWh.[22] The Project's unmitigated operational electricity use would represent a nominal portion of electricity used in the State and Riverside County. Regarding natural gas, Californians used 11.9 billion therms of natural gas and 561.4 million terms of natural gas in San Bernardino County in 2021. The Project's unmitigated operational natural gas use would contribute to only 0.0005 percent of natural gas use in the State and 0.0098 percent in the County.

San Bernardino County's annual gasoline fuel use in 2024 is anticipated to be 853,915,250 gallons and diesel fuel is anticipated to be 280,907,070 gallons. Expected Project operational gasoline and

[21] Ibid. page 15.
[22] Ibid. page 16.

diesel consumption would represent approximately 0.0076 percent of gasoline use and 0.0689 of diesel use in the County.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2050.[23]

The Project's unmitigated energy consumption represents less than one percent of energy consumption within the County. Project operations would not substantially affect existing energy or fuel supplies or resources. The Project would comply with applicable energy standards and new capacity would not be required. Impacts would be less than significant.

Compliance with Energy Efficient Measures

As discussed above, California's Energy Efficiency Standards for Residential and Non-Residential Buildings create uniform building codes to reduce California's energy use and provide energy efficiency standards for residential and non-residential buildings. These standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas use. 2022 Title 24 standards for new residential and nonresidential buildings will focus on encouraging electric heat pump technology and use, promote electric-ready buildings to get owners to use cleaner electric heating, cooking, and vehicle charging, expanding solar photovoltaic systems and battery storage systems to reduce reliance on fossil fuel power plants.

Regarding water energy conservation, the Project would incorporate drought-tolerant landscaping throughout portions of the site. Water-efficient irrigation controls would also be used in landscaped areas. Comprehensive water conservation strategies would be developed to each respective land use as part of the Project plan development. Buildings would incorporate water-efficient fixtures and appliances, to comply with Title 24.

It should also be noted that SCE is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase total procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030. SB 100 revised the goal of the program to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. 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.

As discussed above, California's Energy Efficiency Standards create uniform building codes to reduce California's energy use and provide energy efficient standards for residential and non-

[23] Ibid. page 16.

residential buildings. These standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas use.

The Project's energy consumption would exceed less than one percent of the corresponding energy sources within the County. Project operations would not substantially affect existing energy or fuel supplies or resources. All Project buildings will comply with energy and fuel efficiency laws and regulations; thus, the Project would not be wasteful or inefficient. Therefore, the project would result in a less than significant impact in this regard.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Potential cumulative impacts to energy would result if the proposed Project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation.

The cumulative projects within the areas serviced by the energy service providers would be applicable to this analysis. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact.

Construction and operations associated with implementation of the Project would result in the use of energy, but not in an inefficient or wasteful manner. The use of energy would not be substantial in comparison to statewide electricity, natural gas, gasoline, and diesel demand; refer to **Table 15** and **Table 16**. As discussed above, the electricity used for construction would be less than that required during operation of the Project, would be temporary, and would have a minimal contribution to the Project's overall energy consumption. Construction of the Project would not typically involve the consumption of natural gas. The Project's construction electricity consumption would be negligible relative to SCE's generated electricity and electricity supplies would be sufficient to serve the Project's temporary construction electricity demand.

SCE will review the Project's estimated electricity consumption in order to ensure that the estimated power requirement would be part of the total load growth forecast for their service area and accounted for in the planned growth of the power system. It should be noted that SCE and SoCalGas consider planned development for their service areas and are in and of themselves providing for cumulative growth. Therefore, it is likely that cumulative growth associated with the related projects is already accounted for in the planning of future supplies to cover projected demand.

SCE and SoCalGas have policies, programs, and projects in place to provide continued, adequate energy to their users, including the proposed Project. Substantial reductions to the cumulative demand for energy can result from an increased reliance on renewable energy systems (as required by the State's Renewable Portfolio Standards) and the construction of energy-efficient buildings. Cumulative projects would be subject to applicable Title 24 and CALGreen requirements similar to the Project, which includes energy efficiency standards to minimize the wasteful and inefficient use of energy.

Furthermore, transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude oil production would be sufficient to meet worldwide consumption demand until 2050. As such, it is expected that existing and planned transportation fuel supplies would be sufficient to serve the Project's construction and operational demand. New capacity or supplies of energy resources would not be required. Additionally, the Project would be subject to compliance with all federal, state, and local requirements for energy efficiency. State regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects.

In consideration of cumulative energy use, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Additionally, as discussed above, the Project would increase overall electricity and natural gas demand but would not require additional facilities other than local connections to, or undergrounding of, existing facilities in the Project vicinity. Therefore, the proposed Project's incremental demand for electricity and natural gas facilities would not be cumulatively considerable. Thus, the Project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. A less than significant cumulative impact would occur.

The Project would also be required to comply with all the same applicable federal, state, and local measures aimed at reducing fossil fuel consumption and the conservation of energy. The anticipated Project impacts, in conjunction with cumulative development in the vicinity, would increase urbanization and result in increased energy use. Potential land use impacts are site-specific and require evaluation on a case-by-case basis. As noted above, the Project would not result in significant impacts to state or local plans for renewable energy or energy efficiency. Therefore, the Project and identified cumulative projects are not anticipated to result in a significant cumulative impact. Therefore, potential impacts are considered less than significant.

4.7 GEOLOGY AND SOILS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GEOLOGY AND SOILS. 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 Preliminary Geotechnical Evaluation (PGE) was prepared by LGC Geotechnical, Inc. on July 7, 2022; refer to **Appendix E**.

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.

ii) Strong seismic ground shaking?

Less than Significant Impact. As illustrated in the Highland GP, Figure 6-2: Potential Geologic Hazards, the Project site is not located within an Alquist-Priolo Earthquake Zone.[24] The nearest Alquist-Priolo Fault Zone is located approximately 1.90 miles northeast of the Project site. Therefore, the Project the possibility of the possibility of damage due to ground rupture, as a result of faulting, is considered very low since active faults are not known to cross the site. Similarly, the PGE also concluded that the Project is not located within a State of California Fault Rupture Hazard Zone and no known active or potentially active faults were mapped on the Project site. Nevertheless, the Project site is subject to regional seismicity and therefore, the Project's construction building would be designed in conformance to the seismic design parameter of the 2022 California Building Code (CBC). The 2022 CBC provides design standards for earthquake-resistant structural design that includes, but is not limited to, considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. This would ensure that impacts from strong seismic ground shaking would be minimized. A less than significant impact would occur.

Mitigation Measures: No mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking.

According to the PGE, the Project site is not located in zone mapped as susceptible liquefaction. The Project site will consist of compacted fill over medium dense to very dense alluvial soils. Due the absence of groundwater in the upper 50 feet and presence of medium dense to very dense sandy soils, the potential for liquefaction is considered very low. Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move down-slope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages

[24] City of Highland. (2012). General Plan, *Public Health and Safety Element***.** Available at: https://www.cityofhighland.org/191/General-Plan (accessed October 24, 2022).

pipelines, utilities, bridges, and structures. Due to the very low potential for liquefaction the potential for lateral spreading is considered very low.

Lastly, the PGE concluded that the Geologic Hazard Overlay for the San Bernardino County Land Use Plan also indicated that the Project site is not located in a liquefaction hazard zone. Therefore, no impact associated with ground failure due to liquefaction would occur.

Mitigation Measures: No mitigation is required.

iv) Landslides?

No Impact. Landslides can occur if areas of steep slopes consisting of unstable soils are disturbed by ground shaking and/or heavy rainfall. According to the PGE, research and field observations did not indicate the presence of landslides on the Project site or in the immediate vicinity. Additionally, the Highland GP, Figure 6-3: High Liquefaction and Landslide Susceptibility Areas shows that the Project site is not located in a zone of landslide susceptibility.[25] Furthermore, the surrounding area is relatively flat and developed. Therefore, no impacts associated with landslides would occur.

Mitigation Measures: No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact.

Construction

Ground disturbance activities and demolition during construction would expose soils to potential short-term erosion in the form of runoff. Consequently, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permitting process. The NPDES permit requires that a project applicant to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) which includes erosion-control and sediment-control Best Management Practices (BMPs) to reduce the amount of soil erosion and loss of topsoil. Erosion-control BMPs. are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. Additionally, the Project Applicant has prepared a Preliminary Water Quality Management Plan (PWQMP) which contains additional BMPs to address water quality concerns; refer to **Section 4.10, Hydrology and Water Quality** for more information.

Operations

In addition to the implementation of the BMPs, the Project would implement PGE design recommendations which would require that compacted finished grade soils adjacent to proposed structures be sloped away from the proposed structures and towards an approved drainage device or unobstructed swale. If required, drainage swales, wherever feasible, should not be constructed within 5 feet of buildings. Where lot and building geometry necessitates that drainage swales be routed closer than 5 feet to structural foundations, we recommend the use of area drains together with drainage swales. Drainage swales used in conjunction with area drains should be designed by the project civil engineer so that a properly constructed and maintained system will prevent

[25] Ibid.

ponding within 5 feet of the foundation. Code compliance of grades is not the purview of the geotechnical consultant. Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided. Implementation of these design recommendations would ensure that Project impacts are less than significant.

Mitigation Measures: No mitigation is required.

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

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

Less than Significant Impact. Refer to response a-iii and a-iv above for a discussion of landslide and liquefaction potential. Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence are those with high slit or clay content. An expansive soil is prone to expansion or shrinkage due directly to variation in water volume.

The PGE concluded the soils exposed at the proposed foundation level are anticipated to have a "Very Low" expansion potential (expansion index 20 or less). Consistent with the PGE's findings, special design considerations are not anticipated but would be verified based on as-graded conditions. Therefore, it is not anticipated that development of the Project would be developed on unstable or expansive soils. Impacts would be less than significant, and no mitigation is needed.

Mitigation Measures: No mitigation is required.

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

No Impact. The Project does not propose the implementation of septic tanks or any other alternative wastewater disposal system. As illustrated in **Exhibit 7**, the Project would connect to the existing sewer system for wastewater disposal. Therefore, no impact associated with the use of septic tanks or any other alternative wastewater disposal system would occur.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact. Refer to **Section 4.5, Cultural Resources,** threshold c) for more information. The CRA determined that while the Holocene geological units were of high preservation value, the material is unlikely to be fossil material due to the relatively modern associated dates of the soil deposits. Nevertheless, in the event that unique paleontological resource or unique geologic feature, the Project would implement **MM GEO-1**, to reduce impacts to the found paleontological resources to a less than significant level.

Mitigation Measures:

MM GEO-1: In the event that paleontological resources are found during excavation or grading activities, a Paleontological Construction Monitoring and Compliance Plan will be prepared and implemented to reduce potential impacts to paleontological resources to less than significant which includes the following:

- Prior to substantial excavations into older finer-grained Quaternary deposits, the Applicant shall retain a paleontological monitor, trained, and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full-time during the interval of substantial earth-disturbing activities.
- Should fossils be found within an area being cleared or graded, earth-disturbing activities shall be diverted elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor shall immediately divert construction and notify the monitor of the find.
- All recovered fossils shall be prepared, identified, and curated for documentation in the summary report and transferred to an appropriate depository (i.e., San Bernardino County Museum).
- A summary report shall be submitted to the City of Highland. Collected specimens shall be transferred with a copy of the report to the San Bernardino County Museum.
- The construction can re-commence with approval of the City of Highland.

Cumulative Impacts

Cumulative impacts concerning geology and sols are generally site-specific. The Project analysis determined that a less than significant impact related to geology and soils would occur. Existing State and local regulations and design standards are in place protect people and property from substantial adverse geological and soil effects including fault rupture, strong seismic ground shaking, liquefaction, and landslides, including adverse effects associated with soil erosion. As concluded in the Project-specific analysis above, impacts associated with geology and soil would be less than significant.

4.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
8. GREENHOUSE GAS EMISSIONS. 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		

Kimley-Horn and Associates prepared a Greenhouse Gas Emissions Assessment (GHG) for the Project on May 2023; refer to **Appendix F** of this IS/MND.

Background

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake,

vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere.[26]

Regulations and Significance Criteria

Appendix F contains relevant regulatory framework pertaining to GHGs. Some of the applicable regulatory information has been provided below; refer to **Appendix F,** Section 3: Regulatory Setting, for further information.

State

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO_2 equivalents (CO_2e) in the world and produced 369 million gross metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2020.[27] The transportation sector is the State's largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32, California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the legislation's major provisions.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

2017 CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual").[28] The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and

[26] Kimley-Horn and Associates. (2023). *Greenhouse Gas Emissions Assessment.* page 6.

[27] Ibid. page. 10.

[28] Ibid. page 10.

the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.[29] Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California's transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California's freight transport system is essential to supporting the State's economic development in coming decades while reducing pollution.
- CARB's Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO_2e ($MMTCO_2e$) to 545 $MMTCO_2e$. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower

[29] Ibid. page 11.

forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan[30]. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support other Federal actions.

2022 CARB Scoping Plan

Adopted December 15, 2022, CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In

[30] Ibid. page 12.

this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.[31] CARB specifically states that Appendix D does not address other land uses (e.g., industrial).[32] However, CARB plans to explore new approaches for other land use types in the future.[33]

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet AB 32's GHG reduction goals. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the

[31] Ibid. page 12.
[32] Ibid. page 13.
[33] Ibid. page 13.

Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2e (MMTCO2e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing

volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

Regional

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the SCAB, various utilities such as sanitation and power companies throughout the SCAB, industry groups, and environmental and professional organizations. The Working Group has proposed a tiered approach to evaluating GHG emissions for development projects where SCAQMD is not the lead agency, wherein projects are evaluated sequentially through a series of "tiers" to determine whether the project is likely to result in a potentially significant impact due to GHG emissions.

With the tiered approach, a project is compared against the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 $MTCO_2e$ per year for industrial projects and a 3,000 $MTCO_2e$ threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution. The Working Group indicated that the 10,000 $MTCO_2e$ per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, SCAQMD initially outlined that a project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. The Working Group folded the Tier 4 second option into the third option. Under the Tier 4 third option, a project would be excluded if it was below an efficiency-based threshold of 4.8 $MTCO_2e$ per service population per year. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

Tier 3 Screening Thresholds

When the tiered approach is applied to a proposed project, and the project is found not to comply with Tier 1 or Tier 2, the project's emissions are compared against a screening threshold, as described above, for Tier 3. The screening threshold formally adopted by SCAQMD is an "interim" screening threshold for stationary source industrial projects where the SCAQMD is the lead agency under CEQA. The threshold was termed "interim" because, at the time, SCAQMD anticipated that CARB would be adopting a statewide significance threshold that would inform and provide guidance to SCAQMD in its adoption of a final threshold. However, no statewide threshold was ever adopted, and the interim threshold remains in effect.

For projects for which SCAQMD is not a lead agency, no screening thresholds have been formally adopted. However, the SCAQMD Working Group has recommended a threshold of 10,000 $MTCO_2e$/year for industrial projects and 3,000 $MTCO_2e$/year for residential and commercial projects. SCAQMD determined that these thresholds would "capture" 90 percent of GHG emissions from these sectors, "capture" meaning that 90 percent of total emissions from all new projects would be subject to some type of CEQA analysis (i.e., found potentially significant).[34]

Southern California Association of Governments

On September 3, 2020, SCAG's Regional Council adopted the Connect SoCal which charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The Connect SoCal is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

San Bernardino County Greenhouse Gas Reduction Plan

The County of San Bernardino adopted the San Bernardino County Regional Greenhous Gas Reduction Plan (County GHG Reduction Plan) in September 2021 (GHG Reduction Plan). The County GHG Reduction Plan provides a means of implementing state regulations, including AB 32, AB 1493, Executive Order S-3-05, SB 375, Executive Order B-30-15, SB 32, AB 398, and SB 97, at the County level. The County GHG Reduction Plan provides a target and comprehensive set of actions for GHG emission reductions for the year 2030 (i.e., an emissions reduction 40 percent below 2007 levels). This reduction would be consistent with the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045.

Thresholds and Significance Criteria

Greenhouse Gas Emissions Thresholds

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine

[34] Ibid. page 19.

thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

South Coast Air Quality Management District Thresholds

On December 5, 2008, the SCAQMD Governing Board adopted a 10,000 $MTCO_2e$ industrial threshold for projects where the SCAQMD is lead agency. During the GHG CEQA Significance Threshold Working Group Meeting #15, the SCAQMD noted that it was considering extending the industrial GHG significance threshold for use by all lead agencies. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the SCAB, various utilities such as sanitation and power companies throughout the SCAB, industry groups, and environmental and professional organizations. However, the SCAQMD has not announced when staff is expecting to present GHG thresholds for land use projects where the SCAQMD is not the lead agency to the governing board. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). Additionally, the SCAQMD GHG Significance Threshold Stakeholder Working Group has specified that a warehouse is considered to be an industrial project.[35] Furthermore, the Working Group indicated that the 10,000 $MTCO_2e$ per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.).

Although the screening threshold for industrial projects is 10,000 $MTCO_2e$ per year, this analysis conservatively utilizes 3,000 $MTCO_2e$ per year as the Project GHG threshold.

Methodology

The Project's construction and operational emissions were calculated using the CalEEMod. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The Project's operational-related GHG emissions would be generated by vehicular

[35] South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #8*, 2009.

traffic, area sources (e.g., landscaping maintenance and consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

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Short-Term Construction Greenhouse Gas Emissions

Project construction activities would generate direct CO_2, N_2O, and CH_4 emissions from construction equipment, transport of materials, and construction workers commuting to and from the Project site. Total GHG emissions generated during all construction phases were combined and are presented in **Table 17, Construction-Related Greenhouse Gas Emissions**.

Table 17: Construction-Related Greenhouse Gas Emissions

Category	$MTCO_2e$
2023 Construction	259
2024 Construction	271
Total Construction Emissions	530
30-Year Amortized Construction	17.66
Source: Ibid. page 26 – Table 2	

As indicated in **Table 17**, the Project would result in the generation of approximately 530 $MTCO_2e$ over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period, then added to the operational emissions.[36] The amortized Project construction emissions would be 17.66 $MTCO_2e$ per year. Once construction is complete, construction-related GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators. Total GHG emissions associated with the Project are summarized in **Table 18, Project Greenhouse Gas Emissions**. As shown in **Table 18**, the Project's unmitigated GHG emissions would be approximately 3,839.66 $MTCO_2e$ annually from both construction and operations of the proposed Project. The existing steel processing facility and a residential unit uses currently located on the Project site generates approximately 595 $MTCO_2e$ annually and will be removed and replaced by

[36] The amortization period is 30 years per the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009).

the Project. Existing emissions have been estimated based on the CalEEMod default emissions factors for building operations and estimated trip generation. Therefore, the net unmitigated emissions from the proposed Project would be approximately 3,244.66 $MTCO_2e$/year.

Table 18: Project Greenhouse Gas Emissions

Emissions Source	$MTCO_2e$ per Year	
	Unmitigated	Mitigated
Proposed Emissions		
Construction Amortized Over 30 Years	17.66	17.66
Area Source	<1	<1
Energy[1]	551	551
Mobile	2,640	2,640
Off-Road – Forklifts[1]	228	0
Off-Road – Yard Trucks[1]	158	0
Waste	84	84
Water and Wastewater	161	161
Proposed Total	**3,839.66**	**3,453.66**
Existing Emissions		
Area Source	1	1
Energy	11	11
Mobile	22	22
Off-Road – Forklifts[2]	82	82
Off-Road – Yard Trucks[2]	475	475
Waste	1	1
Water and Wastewater	2	2
Existing Total	**595**	**595**
Net New Emissions	**3,244.66**	**2,858.66**
Threshold	*3,000*	*3,000*
Net Emissions Exceeds Threshold?	**Yes**	**No**

Notes:
1. Mitigation Measure HRA-1 (refer to the Project's Health Risk Assessment) requires operation of electric forklifts and yard trucks.
2. Three forklifts and two yard trucks have been assumed for the current steel processing facility on the proposed Project site.

Source: Ibid. page 27 – Table 3

The majority of Project-generated GHG emissions (67 percent unmitigated and 82 percent mitigated) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and federal standards, and the Project has no control over these standards.

The Project would reduce GHG emissions through implementation of **MM HRA-1**. **MM HRA-1** requires that off-road cargo handling equipment (e.g., forklifts and yard trucks) used during

operational activities be electrically powered/zero emission. As shown in **Table 18**, implementation of **MM HRA-1** would reduce the Project's net GHG emissions to 2,858.66 MTCO2e which is below the SCAQMD's 3,000 MTCO2e per year threshold. Therefore, the GHG emission of the proposed Project would be less than significant with implementation of **MM HRA-1**.

Laws, Ordinances, and Regulations:

Laws, Ordinances, and Regulations (LOR) are existing requirements that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

LOR GHG-1 Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

LOR GHG-2 Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Highland MC Chapter 16.40.390).

LOR GHG-3 The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10(b)1) require all buildings to be designed to have a total area of at least 15 percent (after subtracting any skylights) "solar ready" zone on the roof top that will structurally accommodate later installation of rooftop solar panels. The installation of the solar panels is specific to the end use and will be determined at the time the specific projects are developed. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR GHG-4 The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 4.303 (residential) and Section 5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with

Section 4.408.1 (residential) and Section 5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.

- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 4.410 (residential) and Section 5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with Section 4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

Mitigation Measures:

HRA-1 Only electric-powered off-road equipment (e.g., yard trucks/hostlers, forklifts, indoor material handling equipment, etc.) shall be utilized onsite for daily warehouse and business operations. The Project developer/facility owner shall disclose this requirement to all tenants/business entities prior to the signing of any lease agreement. In addition, the limitation to use only electric-powered off-road equipment shall be included in all leasing agreements.

Prior to issuance of a Business License for a new tenant/business entity, the Project developer/facility owner and tenant/business entity shall provide to the City of Highland Planning Department and Business License Department a signed document (verification document) noting that the Project development/facility owner has disclosed to the tenant/business entity the requirement to use only electric-powered equipment for daily operations. This verification document shall be signed by authorized agents for the Project developer/facility owner and tenant/business entities. In addition, if applicable, the tenant/business entity shall provide documentation (e.g., purchase or rental agreement) to the City of Highland Planning Department and Business License Department to verify, to the City's satisfaction, that any off-road equipment utilized will be electric-powered.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant with Mitigation Incorporated.

SCAG Connect SoCal Consistency

As noted above, SCAG's Regional Council adopted Connect SoCal. The Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation

commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's Connect SoCal establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The Connect SoCal contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The Connect SoCal is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the Connect SoCal is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project's consistency with the Connect SoCal is analyzed in detail in **Table 19, Connect SoCal Consistency.**

Table 19: Connect SoCal Consistency

SCAG Goals		Compliance	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a Project-specific policy and is therefore not applicable. However, the Project is located on an occupied site that is surrounded by development. Redevelopment of the site would contribute to regional economic prosperity.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent:	Although this Project is not a transportation improvement project, the Project is located near existing transit routes of I-215, I-10, and SR-210.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	Consistent:	The Project site is located within an urban area in proximity to existing transit routes, freeways, and residential development. Locating an employment center in close proximity to existing residential uses would potentially reduce trip lengths required for existing residents to travel to work and/or commercial services. Reduction of trip lengths would result in reduced GHG and air quality emissions. The

SCAG Goals		Compliance	
			Project would also reduce air quality and GHG emissions through mitigation measures such as providing renewable energy and electrifying cargo handling equipment (Mitigation Measure HRA-1).
GOAL 6:	Support healthy and equitable communities	Consistent:	As discussed in the Air Quality Assessment and the Health Risk Assessment, the Project would not exceed thresholds or result in health impacts. The Project does not violate any air quality standards or contribute substantially to an existing or projected air quality violation. The Project would not conflict with the surrounding community's ability to access healthy food or parks.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A:	This is not a project-specific policy and is therefore not applicable. However, the Project is located in a developed area in proximity to existing truck routes and freeways. Location of the Project within a developed area would reduce trip lengths, which would result in more efficient travel.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent:	The Project involves development of a warehouse and does not include housing.
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	This Project is located within an urban area and is not located on agricultural or habitat lands.
Source: Southern California Association of Governments, *Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy,* 2020.			

As shown in **Table 19**, the Project would be consistent with the stated goals of the Connect SoCal. Therefore, the Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

CARB Scoping Plan Consistency

As previously noted, the 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The transportation, electricity, and industrial sectors are the largest GHG contributors in the State. The 2022 Scoping Plan plans to achieve the AB 1279 targets primarily through zero-emission transportation (e.g., electrifying cars, buses, trains, and trucks). Additional GHG reductions are achieved through decarbonizing the electricity and industrial sectors.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-electric vehicle buses and trucks. Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-

Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As indicated in **Table 18**, approximately 92 percent of the Project's mitigated GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan measures described above. It should be noted that the City has no control over vehicle emissions (approximately 82 percent of the Project's total emissions). However, these emissions would decline in the future due to Statewide measures discussed above, as well as cleaner technology and fleet turnover. Several of the State's plans and policies would contribute to a reduction in mobile source emissions from the Project. These include the following:

- CARB's Advanced Clean Truck Regulation: Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- Executive Order N-79-20: Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035 and all medium and heavy-duty vehicles will be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."
- CARB's Mobile Source Strategy: CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.
- CARB's Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project site and may include existing trucks or new trucks that are part of the statewide goods movement sector.
- CARB's Emissions Reduction Plan for Ports and Goods Movement: CARB's Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any commercial activity associated with goods movement would be required to comply with these measures as adopted. The Project

would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. As such, the Project would not interfere with their implementation.

San Bernardino County Regional Greenhouse Gas Reduction Plan

The Project's GHG emissions would not conflict with the County GHG Reduction Plan. The Project would be consistent with the applicable Highland General Plan policies that form the foundation for the City's GHG emissions reduction measures outlined in the County GHG Reduction Plan. In addition, the Project would be required to implement **HRA-1** which would help reduce its GHG and air pollutant emissions, which would also support the goals of the County GHG Reduction Plan. Therefore, the Project would be consistent with the County GHG Reduction Plan.

Mitigation Measures: See **MM HRA-1** in threshold a) above.

Cumulative Impacts

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory.[37] The State CEQA Guidelines generally address GHG emissions as a cumulative impact because of the global nature of climate change.[38] As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself."[39] As such, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As discussed above, the Project would not conflict with the Connect SoCal, or the CARB Scoping Plan and the Project-related net GHG emissions would not exceed the SCAQMD's 3,000 $MTCO_2e$ threshold of significance with implementation of **MM HRA-1**. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

[37] Ibid. page 34.

[38] Ibid. page 34.

[39] *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 512.

4.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
9.	**HAZARDS AND HAZARDOUS MATERIALS. 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

Ramboll US Consulting, Inc. (Ramboll) prepared a Phase I Environmental Site Assessment (ESA); refer to **Appendix G**.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. As part of the Phase I ESA, site reconnaissance, interviews, review of historical records, and various federal, State, and local environmental databases records for the Project site and surrounding properties were conducted to identify Recognized Environmental Conditions (RECs) within the Project site. The following information is a summary of those efforts.

Records Search

A review of available historical resources and information were obtained from local governmental agencies and regulatory bodies. Based on the review of historical site documents and interview with site representatives, no prior Phase I ESAs, underground storage tanks (UST) closures, environmental sampling, or remediation activities were known to have been conducted at the Project Site.

In addition, Ramboll reviewed the results of the Federal and State environmental database searches performed by Environmental Data Resources (EDR) and from information available in the California GeoTracker, EnvironStor, and other pertinent databases listed in the Phase I ESA, Table 4 (see **Appendix G**). The Project site was not identified in any databases searched by EDR. Also, the Project site was not indicated to contain spills or releases and therefore, does not suggest a contamination concern.

Site Reconnaissance

Underground Storage Tanks (USTs)

The Phase I ESA concluded that there are not current or former USTs at the Project and no visual evidence of such (e.g., vent pipes, fill ports, or dispensing equipment) were identified during the site visit or in review of records pertaining to the site.

Aboveground Storage Tanks (ASTs)

Several ASTs are maintained at the site. The Phase I ESA concluded no evidence of staining or past releases from the on-site ASTs were observed. Current Project site occupants also indicated that there are no current or former underground transfer lines used to convey the materials from the tanks.

Other Chemical and Petroleum Containers

Other chemical and petroleum containers onsite were also observed on-site. Current on-site occupants did not know of any significant spills or releases of materials at drum and container storage areas. Similarly, Ramboll did not observe any evidence of spills or uncontrolled releases, other than minor staining on paved floors that did not appear to extend to unpaved surfaces.

Additional Considerations

The Phase I ESA also contained a preliminary summary of additional considerations associated with flood plans, wetlands, lead-based paint, and radon. Ramboll observed damaged and degraded paint in the two on-site residential buildings and indicated the possibility of those buildings to

contain lead-based paint. Furthermore, Ramboll also made limited visual observations to identify readily apparent presumed asbestos containing materials (PACMs) and suspected ACMs. Based on the age of most buildings, ACMs were assumed to be present within the buildings.

The complete EDR report is included as Appendix B of the Phase I ESA, provided as **Appendix G** to this IS/MND.

Construction and Operations

The Phase I ESA concluded that no RECs were identified on the Project site. Nevertheless, demolition of the existing buildings, removal/remediation of the existing on-site hazardous materials and waste, and the use, transportation, and disposal of gasoline fuels, asphalt, lubricants, toxic solvents, pesticides, and herbicides could create a significant hazard to the public and environment.

The transport, use, storage, and disposal of these materials would comply with existing regulations established by several agencies, including the Department of Toxic Substances Control, the U.S. EPA, the United Stated Department of Transportation (USDOT), and the Occupational Safety and Health Administration (OSHA). Furthermore, the Project is required to comply with all other applicable federal, State, and local regulations during Project construction and operations to ensure that the Project does not create substantial hazards to the public or environment. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Refer to response 9(a) above. The Project is not anticipated to create a significant hazard to the public or environment through the upset or accidental release of hazardous materials since the use, transport and disposal of hazardous materials would be subject to compliance to applicable federal, State, and local regulation. Additionally, as a requirement of the SWPPP and NDPES, the Project would be required to maintain supplies onsite for containing and cleaning small spills of hazardous materials and have a defined process for addressing spills.

Construction would also use equipment that would bring hazardous materials to the Project site, including diesel, gasoline, paints, solvents, cement, and asphalt. However, construction activities would be conducted in accordance with the SWPPP as part of the NPDES permit. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. BMPs for hazardous materials include, but are not limited to, off-site refueling, placement of generators on impervious surfaces, establishing clean out areas for cement, etc. While the risk of exposure to hazardous materials cannot be eliminated, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials and with the safety procedures mandated by applicable federal, state, and local laws and regulations.

Compliance with these regulations would ensure impacts associated with the upset and accidental release of hazardous materials is minimized to a less than significant level.

Mitigation Measures: No mitigation is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest school from the Project site is Cypress Elementary School, located approximately 0.38-mile northwest from the Project site. This school is located beyond the one-quarter mile radius, and it is not anticipated that the Project would emit hazardous emissions or handle hazardous or acutely hazardous materials near the school. No impact would occur.

Mitigation Measures: No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Consistent with American Society for Testing and Materials (ASTM) International E1527-13, environmental databases and records were reviewed to determine whether the Project site or surrounding properties are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Review of the The Project site is not located on the California Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances Site List or Cortese List.[40]

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact. The Project site is located within the Airport Influence Area Zone "E" (Negligible Risk Level) for the San Bernardino International Airport. The San Bernardino International Airport is under the jurisdiction of the San Bernardino International (SBI) Airport Authority (SBIAA). The Project site is located outside of the 65 dBA CNEL noise level contour boundary of the airport.[41] No exterior or interior noise mitigation is required to satisfy the policies in the Highland GP or Highland MC. Additionally, there are no private airstrips located within the Project vicinity. Therefore, the Project would not expose people working in the Project area to

[40] DTSC. (2022). *Hazardous Waste and Substances Site List.* Available at: https://www.envirostor.dtsc.ca.gov/public/search.asp?PAGE=4&CMD=search&ocieerp=&business_name=&main_street_number=&main_street_name=&city=&zip=&county=&branch=&status=ACT%2CBKLG%2CCOM&site_type=CSITES%2CFUDS&cleanup_type=&npl=&funding=&reporttype=CORTESE&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29&federal_superfund=&state_response=&voluntary_cleanup=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&display_results=&school_district=&pub=&hwmp=False&permitted=&pc_permitted=&inspections=&inspectionsother=&complaints=&censustract=&cesdecile=&ORDERBY=city&next=Next+50 (accessed October 27, 2022).

[41] Kimley-Horn and Associates. (2023). *Acoustical Assessment.* page 35

excessive airport- or airstrip-related noise levels and no mitigation is required. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Project would not impair the implementation or physically interfere with the City's adopted Emergency Plan. The Project's plans are subject to City Fire Department review and approval, prior to issuance of any building permit, to ensure that the Project's roads provide adequate vehicular ingress and egress during emergencies. Pursuant to Highland MC § 2.48.010, the Project Applicant would also be required to pay its fair share of additional cost of maintaining emergency fire and emergency medical services and attendant facilities in the form of a mitigation fee. With adherence to the Highland MC project development requirements associated with fire safety, and payment of mitigation fees, impacts concerning impairment or interference with the City's Emergency Plan would be less than significant.

Mitigation Measures: No mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. Refer to **Section 4.20, Wildfire**, for a further analysis on the Project's impacts associated with wildfires. As shown in Highland GP, Figure 6-6: Fire Hazards and Safety Overlay Areas, the Project site is not located in a fire severity zone.[42] Similarly, CAL FIRE's Fire Hazard Severity Zone (FHSZ) Map for the City shows that the Project site is located in a non-very high FHSZ.[43] This indicates that the Project would not be at risk of loss, injury or death involving wildland fires. No impact would occur.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The incremental effects of the Project and the adjacent uses are anticipated to be less than significant with the adherence of federal, State, and local laws and regulation. Therefore, the Project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. The Project would not result in a cumulatively considerable impact.

[42] City of Highland. (2006). Highland GP, *Public Health & Safety Element.* Available at: https://www.cityofhighland.org/DocumentCenter/View/159/Public-Health-and-Safety-Element-PDF (accessed October 28, 2022).

[43] CAL FIRE. (2008). Fire Hazard Severity Zone Map – City of Highland. Retrieved at: https://osfm.fire.ca.gov/media/5946/highland.pdf (accessed October 28, 2022).

4.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10. HYDROLOGY AND WATER QUALITY. 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:			X	
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 offsite?			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 Preliminary Water Quality Management Plan (WQMP) and Preliminary Hydrology Calculations were prepared for the Project by Thienes Engineering, Inc. in July 2022, and October 2022, respectively. These studies are included in this IS/MND as **Appendices H1** and **H2** respectively, and the results are summarized below.

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. The California Porter-Cologne Water Quality Control Act (Section 13000 [Water Quality"] et seq. of the California Water Code), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act) require water quality control plans to be developed for all water within the State of California. The Project's WQMP was prepared in compliance with the water Highland GP policies pertaining to water quality, the City's Municipal Storm Water Management Plan (MSWMP) and the NPDES stormwater permit program. The Project owner is responsible to implement the provisions of the WQMP and a Storm Water Quality Management Plan (also referred to as a Stormwater Pollution Prevention Plan) until the WQMP is transferred to the Project's new owner.

The Project's construction activities would include grading, clearing excavating, building construction, and Project operational activities would include landscaping maintenance and use of solvents. These activities would result in the generation of potential water quality pollutants that could adversely affect water quality. Accordingly, the Project's WQMP and SWPPP would identify programmatic and site-specific construction and post construction BMPs to reduce or eliminate sediment and other pollutants in stormwater and no stormwater runoff from the Project site. BMPs would include, but not limited to, the following:

- Minimization of disturbed area to the portion of the Project site necessary for construction;
- Stabilization of exposed or stockpiled soils and cleared or graded slopes;
- Establishment of permanent re-vegetation or landscaping as early as it is feasible;
- Removal of sediment from surface runoff before it leaves the Project site by silt fences or other similar devices around the site perimeter;
- Diversion of upstream runoff around disturbed areas of the Project site;
- Protection of all storm drain inlets on-site or downstream of the Project site to eliminate entry of sediment.

BMPs are designed to control and prevent discharges of pollutants that can adversely impact the downstream surface water quality. Accordingly, the Project would include on-site improvements such as storm drains, stormwater/water quality treatment facilities (including underground infiltration chambers), sewer (including a private lift station) that would serve to capture on-site runoff for pretreatment before flows are discharged from the site. Construction of the drainage and sewer improvements would not cause any significant water quality impacts. Furthermore, the Project would comply to the provisions of the Highland MC that include, but not limited to, Section 16.64.070 Erosion and Sediment Control, Chapter 16.64 Environmental Management pertaining to stormwater, and Section 16.40.390, Water efficient landscape requirements to ensure that impacts to surface or groundwater quality are minimized.

Therefore, mandatory compliance with the WQMP and SWPPP BMPs and adherence to other relevant regulations and policies concerning water quality would ensure that the Project's impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact. Refer to **Section 4.18, Utilities and Service Systems** for more information. The Project would be served potable water by EVWD during the Project's construction and operational phases. As concluded in **Section 4.18**, the EVWD would have adequate water supplies, including groundwater, to serve the Project. Furthermore, the Project would implement a storm drain system with on-site detention for pretreatment purposes. The proposed storm drain system would convey flows directly into the adjacent channel. This process would have a high pollutant removal efficiency and can also help groundwater recharge. Therefore, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Impacts would be less than significant. Refer to the following response for more information about the proposed storm drainage system.

Mitigation Measures: No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of 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?

Less than Significant Impact. In the existing condition, runoff from the Project site drains southwest to Meines Street; however, there is an existing storm drain connection to City Creek channel that appears to serve a portion of the Project site. Runoff from the east portion of the site tends to drain south to grate inlets. Runoff from the residential portion drains south to Meines Street. The northeast portion of the Project site drains to a grated inlet. Finally, the remaining north and west portions of the Project site drain to the southwest portion of the site and drains toward Meines Street.

Implementation of the Project includes a storm drain connection to the channel and is proposed near the northwest corner of the Project site. Runoff from the north portion of the proposed building, the east parking area, and the north truck yard area would drain to catch basins located in the parking lot and truck dock area. A proposed storm drain would convey runoff west through the truck yard area. Flows from the south portion of the building and the west parking area would be collected in catch basins located in the west parking lot. A proposed storm drain would convey flows north and would connect to the previously mentioned storm drain system. Finally, runoff from the north portion of Meines Street and the proposed landscaping adjacent to the street would be collected in a catch basin in Meines Street near the west driveway. The proposed storm drain would convey flows north through the site to the proposed connection to City Creek channel.

Furthermore, the Project would include on-site detention in the truck yard for areas tributary to this location. The proposed detention would reduce runoff from the Project site to less than

existing conditions. Overall, discharge rates are significantly less than existing conditions. Flow to Meines Street would be generally eliminated, providing relief to downstream areas. The proposed storm drain system conveys runoff directly to the channel, which is where flows area tabled. Applicable BMPs on Form 4.1-1 Non-Structural Sources Control BMPs provided in the WQMP and adherence to applicable Highland MC regulation pertaining to erosion and stormwater control would help minimize soil erosion.

Due to the Project's improvements to the existing storm drain system, implementation of BMPs, and adherence with applicable local regulation, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact. As concluded in response c.i) above, the surface runoff flows would be improved when compared to existing conditions. Project design features pursuant to BMPs within the WQMP and SWPPP, would reduce rate of runoff from 38.2 cfs to 20.2 cfs. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less than Significant Impact. As concluded in response c.i), the Project's on-site stormwater runoff would be conveyed through the proposed drainage system and detention basins. Furthermore, the Project would include runoff minimizing landscape pursuant to the Highland MC. The WQMP and Preliminary Hydrology Calculations concluded that the Project would adequately treat and retain the runoff, consistent with the San Bernardino County Hydrology Manual requirements. There, a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

iv) Impede or redirect flood flows?

Less than Significant Impact. As discussed in response c.i), the Project would reduce on-site flows with the implementation of the proposed storm drain and underground pretreatment system. Although flows to Meines Street have been generally eliminated, this would provide relief to downstream areas and convey flows directly to the channel where flows are tables. Therefore, the Project's impact to flood flows would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less than Significant Impact. The Project is more than 40 miles inland from the Pacific Ocean and therefore, would not be impacted by a tsunami. The project site is located within FEMA Flood Zone X (shaded) as shown on FIRM 06071C8702H (8-28-2008. Flood Zone X (shaded) is defined as "areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1' or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood". According to Highland GP Public Health and Safety Element, the Project site is located adjacent to a Special Flood Hazard Area Inundated by 100-Year Flood and subject to dam inundation from the Seven Oaks Dam. Although the Project could be subject to release of pollutants due to flood and dam inundation, the Project's proposed storm water and pretreatment systems would insure pollutants are minimized. Furthermore, the Project would adhere to Highland MC Chapter 16.76 Floodplain management provisions that would ensure that impacts are further reduced to a less than significant impact.

Mitigation Measures: No mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. In compliance with relevant State and local regulations, the Project prepared a preliminary WQMP and SWPPP, as part of the NPDESs permitting requirements. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Cumulative impacts related to hydrology and water quality are generally site-specific. As concluded above, the Project's impact concerning hydrology and stormwater runoff would be less than significant. The Project would take the required steps to reduce hydrologic and runoff impact as required via State and local regulation. Therefore, the Project's impact to hydrology and water quality would not be cumulative considerable.

4.11 LAND USE AND PLANNING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING. 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) Physically divide an established community?

Less than Significant Impact. An example of a project that has the potential to divide an established community includes the construction of a new freeway or roadway through an established neighborhood. The Project site is currently utilized by the Mazzulla Offroad and KCB Towers Inc., business for industrial purposes. The Project site also contains single-family residences. The Project proposes industrial uses that would be consistent with the (I) Industrial-zone and GP land use designation; refer to **Exhibit 3**. Although development of the Project would displace the persons, the single-family homes are not considered an established community and are non-conforming to the existing industrial zoning and land use designations. Nevertheless, the persons displaced could be eligible for Tenant Relocation assistance per the California Health and Safety Code. Furthermore, the Project would dedicate the appropriate right-of-way (ROW) improvements to Meines Street and Palm Avenue which includes, curb, gutter, sidewalk, and landscaping in their ultimate positions. Therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

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?

Less than Significant Impact. The Project would be consistent with the Industrial existing zoning and land use designations. The Project would also be compatible with the surrounding land uses. The Project site is also located within the Airport Influence Area Zone "E" (Negligible Risk Level) Overlay for the SBI Airport which would require the Applicant to submit FAA construction noticing and title disclosure as part of the Project's entitlement/permitting process. Lastly, the Project would be required to pay the appropriate development fees to cover any public infrastructure fees. Therefore, the Project would not conflict with any land use plan, policy, or regulation, and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Cumulative impacts concerning land use and planning are typically project specific. The analysis of potential impacts indicated that less than significant impacts would result from the Project's implementation. As a result, less than significant cumulative impacts related to land use and planning would occur.

4.12 MINERAL RESOURCES

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12.	**MINERAL RESOURCES. 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) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. The Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the area. Under SMARA, areas are categorized into MRZs as follows:

- **MRZ-1** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2** Areas where geologic data indicate that significant PCC-Grade aggregate resources are present.
- **MRZ-3** Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

Due to the City's large washes and stream channels, the City contains regionally significant construction aggregate and mineral resources. The primary minerals found in the area are iron, decorative rocks, clay, limestone, sand and gravel.[44] According to Highland GP, Figure 5-3: Mineral Resource Zones, the Project is within MRZ-2, meaning PCC-Grade aggregate resources could exist within the Project site. However, as concluded in the PGE (**Appendix E**), the native soil material on-site is likely overlain by thin areas of artificial fill associated with the existing on-site developments. Furthermore, it is likely that any mineral resources on-site have been disturbed during ground-disturbing activities such as grading from development of the existing industrial and residential uses.

[44] City of Highland. (2006). Highland GP, *Public Health & Safety Element.* Available at: https://www.cityofhighland.org/DocumentCenter/View/159/Public-Health-and-Safety-Element-PDF (accessed October 28, 2022).

It is not anticipated that the Project would result in the loss of availability of a known mineral resource. Additionally, the Project site is not currently utilized or will be utilized for mining activities for a known mineral resource. Therefore, a less than significant impact would occur, and no mitigation is required.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Cumulative impacts concerning mineral resources are typically site-specific. The analysis of potential impacts indicated that no significant impacts would result from the proposed Project. As a result, no cumulative impacts related to mineral resources would occur.

4.13 NOISE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
13. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			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	

Kimley-Horn and Associates prepared an Acoustical Assessment for the Project on May 2023; refer to **Appendix I** of this IS/MND. The results of the Acoustical Assessment are summarized below.

Sound and Environmental Noise

Acoustics is the science of sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. In acoustics, the fundamental model consists of a noise source, a receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of a base of steady background noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micro-pascals (µPa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness.

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level (Leq) represents the equivalent continuous sound pressure level over the measurement period, while the day-night noise level (Ldn) and Community Equivalent Noise Level (CNEL) are measures of sound energy during a 24-hour period, with dB weighted sound levels from 7:00 p.m. to 7:00 a.m. Most commonly, environmental sounds are described in terms of Leq that has the same acoustical energy as the summation of all the time-varying events. Each is applicable to this analysis and defined in **Table 20: Definition of Acoustical Terms**.

Table 20: Definition of Acoustical Terms

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in µPa (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in dB as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 µPa). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in dB as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L_{eq})	The average acoustic energy content of noise for a stated period of time. Thus, the Leq of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
Maximum Noise Level (L_{max}) Minimum Noise Level (L_{min})	The maximum and minimum dBA during the measurement period.
Exceeded Noise Levels (L_{01}, L_{10}, L_{50}, L_{90})	The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day-Night Noise Level (L_{dn})	A 24-hour average Leq with a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity at nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
Community Noise Equivalent Level (CNEL)	A 24-hour average Leq with a 5-dBA weighting during the hours of 7:00 a.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to

Term	Definition
	account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour Leq would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.
Source: Kimley-Horn and Associates. (2023). *Acoustical Assessment*. page 7 – Table 2.	

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

A-Weighted Decibels

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound.[45] When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions.[46] Under the dB scale, three sources of equal loudness together would produce an increase of approximately 5 dBA.

Sound Propagation and Attenuation

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as

[45] Ibid. page 8.
[46] Ibid. page 8.

a roadway, depending on ground surface characteristics.[47] No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA.[48] The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA.[49]

Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted:

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss. While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to

[47] Ibid. page 8.
[48] Ibid. page 9.
[49] Ibid. page 9.

chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance. Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA L_{dn} is the threshold at which a substantial percentage of people begin to report annoyance.[50]

Ground-Borne Vibration

Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions or heavy equipment use during construction). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is vibration decibels (VdB) (the vibration velocity level in decibel scale). Other methods are the peak particle velocity (PPV) and the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 21, Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where ground-borne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for ground-borne vibration are planes, trains, and construction activities

[50] Ibid. page 10.

such as earthmoving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

Table 21: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.008	--	Extremely fragile historic buildings ruins, ancient monuments	--
0.01	Barely Perceptible	--	--
0.04	Distinctly Perceptible	--	--
0.1	Strongly Perceptible	Fragile Buildings	--
0.12	--	--	Buildings extremely susceptible to vibration damage
0.2	--	--	Non-engineered timber and masonry buildings
0.25	--	Historic and some old buildings	--
0.3	--	Older residential structures	Engineered concrete and masonry (no plaster)
0.4	Severe	--	--
0.5	--	New residential structures, Modern industrial/commercial buildings	Reinforced-concrete, steel or timber (no plaster)
Source: Ibid. page 11 – Table 3			

Existing Conditions

Mobile Sources

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-10) and existing traffic volumes from the Project Traffic Study (**Appendix J**). The noise prediction model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (also referred to as energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans). The Caltrans data indicates that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels.

The average daily noise levels along roadway segments in proximity to the project are included in **Table 22, Existing Traffic Noise Levels**. **Table 22** shows the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 51.4 dBA CNEL to 68.3 dBA CNEL 100 feet from the centerline. As previously described, CNEL is 24-hour average noise level with a 5 dBA "weighting" during the hours of 7:00 a.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Table 22: Existing Traffic Noise Levels

Roadway	Roadway Segment	ADT	dBA CNEL 100 Feet from Roadway Centerline
Palm Avenue	Meines Street to 5th Street	15,810	64.5
	5th Street to 3rd Street	18,320	67.6
Meines Street	West of Palm Avenue	640	51.4
5th Street	Palm Avenue to Church Avenue	21,170	68.3
	Church Avenue to SR-210 EB Ramps at 5th Street	21,670	68.3
3rd Street	Palm Avenue to Church Avenue	700	56.7
ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level			
Source: Ibid. page 19 -Table 6.			

Stationary Sources

The nearest sources of stationary noise in the Project vicinity are generated by existing single-family residential properties to the north, south, and west, and industrial uses to the east, south, west, and at the Project site. Noise sources from residential uses typically include mechanical equipment such as HVAC, automobile related noise such as cars starting and doors slamming, and landscaping equipment. Noise sources from industrial uses typically include mechanical equipment (e.g., HVAC and mechanical tools) truck idling, and truck maneuvering. The noise associated with these sources may represent a single-event noise occurrence or short-term noise.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive uses typically include residences, hospitals, schools, childcare facilities, and places of assembly. Vibration sensitive receivers are generally similar to noise sensitive receivers but may also include businesses, such as research facilities and laboratories that use vibration-sensitive equipment. The Project site is primarily surrounded by commercial uses, industrial warehousing, logistics, and distribution related uses. The sensitive land uses nearest to the Project site consist of single-family residences located to the north, northeast, south, and west. Sensitive land uses nearest to the Project are shown in **Table 23, Sensitive Receptors**.

Table 23: Sensitive Receptors

Receptor Description	Distance and Direction from the Project(1)
Single-Family Residences	97 feet to the south
Single-Family Residences	240 feet to the north
Single-Family Residences	290 feet to the northeast
Single-Family Residences	310 feet to the southwest
Highland Community Park	370 feet to the northwest
Single-Family Residences	818 feet to the west
Cypress Elementary School	1,960 feet to the northwest
Source: Kimley-Horn and Associates. (2023). *Acoustical Assessment*. page 20 – Table 7.	

Noise Measurements

To quantify existing ambient noise levels in the Project area, Kimley-Horn conducted four short-term noise measurements on March 28, 2023. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were

taken between 2:09 p.m. and 3:32 p.m. Short-term Leq measurements are considered representative of the noise levels throughout the day. The average noise levels and sources of noise measured at each location are listed in **Table 24, Existing Noise Measurements**.

Table 24: Existing Noise Measurements

Site #	Location	Leq (dBA)	Lmin (dBA)	Lmax (dBA)	Duration	Time
1	Along Meines Street, near southwest corner of the Project site, approximately 968 feet west of Palm Avenue.	62.9	52.8	81.6	10 mins	2:09 p.m.
2	In the cul-de-sac at the end of Lillian Lane, approximately 775 feet south of Hibiscus Street and east of Highland Community Park.	48.8	44.0	59.5	10 mins	2:30 p.m.
3	In residential neighborhood to the north of the Project site at the intersection of Drummond Avenue and Fleming Street, adjacent to single-family residence.	55.4	50.4	72.4	10 mins	2:50 p.m.
4	In residential neighborhood to the northeast of the Project site at the intersection of Peacock Avenue and 6th Street.	50.5	41.2	65.7	10 mins	3:06 p.m.
5	Near the southeast corner of the Project site, at the corner intersection of Meines Street and Palm Avenue.	65.4	52.7	79.5	10 mins	3:22 p.m.
Source: Ibid. page 21 -Table 8.						

Regulations and Significance Criteria

State

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State's noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential and non-residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

City of Highland General Plan

Highland GP Noise Element (Chapter 7) identifies several policies to minimize the impacts of excessive noise levels throughout the community. Highland GP Table 7.3 provides noise criteria to evaluate the land use compatibility of transportation-related noise. The compatibility criteria indicate that residential land uses for residential low-density single-family dwellings, duplexes, and mobile homes are considered normally acceptable below 60 dBA L_{dn} and conditionally acceptable with noise levels less than 70 dBA L_{dn}. Residential land uses for multi-family dwellings are considered normally acceptable below 65 dBA L_{dn} and conditionally acceptable with noise levels less than 70 dBA L_{dn}.

General Plan Table 7-3 identifies a maximum allowable exterior noise level of 60 dBA CNEL and an interior noise level limit of 45 dBA CNEL for new residential developments; see **Table 25, City of Highland Interior Noise Standards** and **Table 26, City of Highland Exterior Noise Standards** below. The City identifies exterior noise level limits for residential, agricultural/equestrian, commercial, manufacturing or industrial, and open space uses and identifies interior noise level limits for residential, educational/churches/other institutional uses, general offices, retail stores/restaurants, manufacturing/warehousing, agricultural, and sand/gravel operations.

Furthermore, the City's Noise Control Ordinance (Chapter 8.50 of the Development Code) and the Noise Element specify the maximum acceptable levels of noise for residential uses in the City. These standards indicate that exterior noise levels at residential locations should not exceed a CNEL of 60 dBA from 7:00 a.m. to 10:00 p.m. and 55 dBA from while interior levels shall not exceed an annual CNEL of 45 dB in any habitable room.

Table 25: City of Highland Interior Noise Standards

Type of Land Use	CNEL (dBA)
Residential	45
Educational/churches, other institutional uses	45
General offices	50
Retail stores, restaurants	55
Manufacturing, warehousing	65
Agricultural	55
Sand and Gravel Operations	75
Source: City of Highland, *General Plan Noise Element, Table 7.1.*	

Table 26: City of Highland Interior Noise Standards

Type of Land Use	Time Interval	CNEL (dBA)
Residential	10:00 p.m. – 7:00 a.m.	55
	7:00 a.m. – 10:00 p.m.	60
Agricultural/Equestrian	10:00 p.m. – 7:00 a.m.	60
	7:00 a.m. – 10:00 p.m.	65
Commercial	10:00 p.m. – 7:00 a.m.	65
	7:00 a.m. – 10:00 p.m.	70
Manufacturing or Industrial	Any Time	75
Open Space	Any Time	75
Source: City of Highland, *General Plan Noise Element, Table 7.2.*		

Methodology

Noise Thresholds

Appendix G of the California Environmental Quality Act (CEQA) contains analysis guidelines related to noise impacts. These guidelines have been used by the City to develop thresholds of significance for this analysis. A project would create a significant environmental impact if it would:

- Generate 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;
- Generate excessive ground-borne vibration or ground-borne noise levels; and
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels.

Noise and Vibration Thresholds

Construction Noise Thresholds

The City does not establish quantitative construction noise standards and only limits the construction activities' timeframe; therefore, this analysis conservatively uses the following Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual thresholds to analyze construction noise impacts at adjacent properties:

- Residential: 80 dBA Leq (8-hour)
- Commercial: 85 dBA Leq (8-hour)
- Industrial: 90 dBA Leq (8-hour)

Operational Noise Thresholds

On-Site Stationary Noise

Operational noise is evaluated based on the standards within the Highland GP and MC. Highland MC Chapter 8.50 Noise Control identifies a daytime (7:00 a.m. – 10:00 p.m.) standard of 45 (interior) and 60 dBA (exterior) for residential uses and a nighttime (10:00 p.m. – 7:00 a.m.) standard of 45 dBA (interior) and 55 dBA (exterior); refer to **Tables 20** and **21**. The Highland MC also identifies a daytime standard of 70 dBA and nighttime standard of 65 dBA for commercial uses. Industrial uses have a standard of 75 dBA at any time.

Off-Site Mobile Traffic Noise

The City provides noise and land use compatibility standards (i.e., noise standards using a 24-hour metric such as Ldn or CNEL and with Normally Acceptable, Conditionally Acceptable, Normally Unacceptable, and Clearly Unacceptable designations) in the General Plan Noise Element. A potentially significant traffic noise impact would occur if the Project would cause ambient noise levels to increase by 3 dBA CNEL or more and the resulting noise falls on a noise-sensitive land use that exceeds the noise and land use

compatibility standards (i.e., causing the noise level of a noise sensitive land use within an area to be categorized as either "Normally Unacceptable" or "Clearly Unacceptable"). Note that noise level changes less than 3 dBA are not detectable by the human ear.

Noise levels up to 60 dBA CNEL are considered Normally Acceptable and noise levels up to 70 dBA CNEL are considered Conditionally Acceptable for single-family residential uses. Meeting the conditionally acceptable standards are appropriate as long as new construction or development is undertaken only after a detailed analysis of noise reduction and that noise insulation is included in the design. Therefore, the Project would result in a potentially significant traffic noise impact if Project traffic would increase the baseline traffic level by 3 dBA CNEL and exceed the Normally Acceptable land use compatibility standard. The environmental baseline is the Without Project condition.

Vibration Thresholds

The City currently does not have a significance threshold to assess vibration impacts. The Caltrans 2020 Transportation and Construction Vibration Guidance Manual (Caltrans Construction Vibration Guidance Manual) identifies the vibration threshold for human annoyance, vibrations levels of 0.4 in/sec PPV is when vibrations are considered severe by people subjected to continuous vibrations and levels of 0.2 in/sec is used for building damage.

Methodology

Construction

Construction noise levels were based on typical noise levels generated by construction equipment published by the FTA and FHWA. Construction noise is assessed in dBA Leq. This unit is appropriate because Leq can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period.

Construction noise modeling was conducted using the FHWA Roadway Construction Noise Model (RCNM). Reference noise levels are used to estimate operational noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Noise level estimates do not account for the presence of intervening structures or topography, which may reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual temporary construction noise. The City of Highland does not establish quantitative construction noise standards. As noted above, this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour Leq) or residential uses and 90 dBA (8-hour Leq) for non-residential uses to evaluate construction noise impacts.

Operations

The analysis of the operational noise environment is based on noise attenuation calculations (inverse square law) and empirical observations. Reference noise level data are used to estimate the Project operational noise impacts from stationary sources. Noise levels were collected from published sources from similar types of activities and used to estimate noise levels expected with the Project's stationary sources. The reference noise levels are used to represent a worst-case noise environment as noise level

from stationary sources can vary throughout the day. Operational noise is evaluated based on the standards within the Highland GP and MC.

An analysis was conducted of the Project's effect on traffic noise conditions at off-site land uses. Without Project traffic noise levels were compared to With Project traffic noise levels. The environmental baseline is the Without Project condition. The Without Project and With Project traffic noise levels in the Project vicinity were calculated using the FHWA Highway Noise Prediction Model (FHWA-RD-77-108). The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures (walls and buildings), barriers, and topography). The noise attenuating effects of changes in elevation, topography, and intervening structures were not included in the model. Therefore, the modeling effort is considered a worst-case representation of the roadway noise. In general, a 3-dBA increase in traffic noise is barely perceptible to people, while a 5-dBA increase is readily noticeable.

Vibration

Ground-borne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical ground-borne vibration levels associated with construction equipment, obtained from FTA published data for construction equipment. Potential ground-borne vibration impacts related to building/structure damage and interference with sensitive existing operations were evaluated, considering the distance from construction activities to nearby land uses and typically applied criteria.

For a structure built traditionally, without assistance from qualified engineers, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any vibration damage. FTA guidelines show that modern engineered buildings built with reinforced-concrete, steel or timber can withstand vibration levels up to 0.50 in/sec and not experience vibration damage. The Caltrans Construction Vibration Guidance Manual identifies the vibration threshold for human annoyance, vibrations levels of 0.4 in/sec PPV is when vibrations are considered severe by people subjected to continuous vibrations and levels of 0.2 in/sec is used for building damage.

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact.

Construction

On-site Construction Noise

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential uses surrounding the construction site. However, it is acknowledged that construction activities would occur throughout the project site and would not be concentrated at a single point near sensitive receptors.

Construction activities would include demolition, site preparation, grading, infrastructure improvements, building construction, paving, and architectural coating. Such activities could require dozers, excavators, and concrete saws during demolition; dozers and tractors during site preparation; excavators, graders, dozers, tractors, and scrapers during grading; tractors, pavers, and rollers during infrastructure improvements; cranes, generators, tractors, and welders during building construction; pavers, rollers, and a pavement scarifier during paving; and air compressors during architectural coating. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Typical noise levels associated with individual construction equipment are listed in **Table 27, Typical Construction Noise Levels**.

Table 27: Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 100 feet from Source(1)
Air Compressor	80	74
Backhoe	80	74
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Crane, Mobile	83	77
Dozer	85	79
Generator	82	76
Grader	85	79
Impact Wrench	85	79
Jack Hammer	88	82
Loader	80	74
Paver	85	79
Pneumatic Tool	85	79
Pump	77	71
Roller	85	79
Saw	76	70
Scraper	85	79
Shovel	82	76
Truck	84	78
Notes: 1. Calculated using the inverse square law formula for sound attenuation: dBA2 = dBA1+20Log(d1/d2) Where: dBA2 = estimated noise level at receptor; dBA1 = reference noise level; d1 = reference distance; d2 = receptor location distance		
Source: Ibid. page 26 – Table 9.		

Although the construction equipment noise levels in **Table 27** are from FTA Noise and Vibration Manual, the noise levels are based on measured data from a U.S. Environmental Protection Agency report which uses data from the 1970s,[51] the FHWA Roadway Construction Noise Model which

[51] Ibid. page 27.

uses data from the early 1990s, and other measured data. Since that time, construction equipment has been required to meet more stringent emissions standards and the additional necessary exhaust systems also reduce noise from what is shown in the table.

While the Highland MC does not establish quantitative construction noise standards, this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour Leq) for residential uses, 85 dBA (8-hour Leq) for commercial uses, and 90 dBA (8-hour Leq) for industrial uses to evaluate construction noise impacts.[52]

Project Construction Noise Levels

The noise levels calculated in **Table 28: Project Construction Noise Levels**, show the exterior construction noise without accounting for attenuation from existing physical barriers which have been estimated using RCNM. The nearest noise sensitive receptors are residences located approximately 97 feet south of the property line and 560 feet from the center of construction activity. Following FTA methodology, all equipment is assumed to operate at the center of the Project site because equipment would operate throughout the site and not a fixed location for extended periods of time. These assumptions represent a worst-case noise scenario as construction activities would routinely be spread throughout the construction site further away from noise sensitive receptors.

Table 28: Project Construction Noise Levels

Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA L_{eq})	Noise Threshold (dBA L_{eq})	Exceeded?
	Land Use	Direction	Distance (feet)[1]			
Demolition	Residential	North	524	66.0	80	No
	Residential	South	560	65.5	80	No
	Commercial	South	415	68.1	85	No
	Commercial	West	593	65.0	85	No
	Industrial	East	588	65.0	90	No
Site Preparation	Residential	North	524	67.2	80	No
	Residential	South	560	66.6	80	No
	Commercial	South	415	69.2	85	No
	Commercial	West	593	66.1	85	No
	Industrial	East	588	66.2	90	No
Grading	Residential	North	524	67.8	80	No
	Residential	South	560	67.2	80	No
	Commercial	South	415	69.8	85	No
	Commercial	West	593	66.7	85	No
	Industrial	East	588	66.8	90	No
Infrastructure Improvements	Residential	North	524	62.5	80	No
	Residential	South	560	61.9	80	No
	Commercial	South	415	64.5	85	No
	Commercial	West	593	61.4	85	No
	Industrial	East	588	61.5	90	No
Paving	Residential	North	524	66.1	80	No
	Residential	South	560	65.5	80	No
	Commercial	South	415	68.1	85	No
	Commercial	West	593	65.0	85	No
	Industrial	East	588	65.1	90	No
Building Construction	Residential	North	524	68.0	80	No
	Residential	South	560	67.4	80	No

[52] Ibid. page 27.

Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA L_{eq})	Noise Threshold (dBA L_{eq})	Exceeded?
	Land Use	Direction	Distance (feet)[1]			
	Commercial	South	415	70.0	85	No
	Commercial	West	593	66.9	85	No
	Industrial	East	588	67.0	90	No
Architectural Coating	Residential	North	524	53.3	80	No
	Residential	South	560	52.7	80	No
	Commercial	South	415	55.3	85	No
	Commercial	West	593	52.2	85	No
	Industrial	East	588	52.3	90	No
Overlapping Phases						
Demolition, Site Preparation, Grading	Residential	North	524	71.9	80	No
	Residential	South	560	71.3	80	No
	Commercial	South	415	73.9	85	No
	Commercial	West	593	70.8	85	No
	Industrial	East	588	70.9	90	No
Infrastructure Improvements, Paving, Building Construction	Residential	North	524	70.8	80	No
	Residential	South	560	70.3	80	No
	Commercial	South	415	72.9	85	No
	Commercial	West	593	69.8	85	No
	Industrial	East	588	69.8	90	No
Paving, Building, Architectural Coating	Residential	North	524	70.2	80	No
	Residential	South	560	72.3	80	No
	Commercial	South	415	72.3	85	No
	Commercial	West	593	69.2	85	No
	Industrial	East	588	69.2	90	No

Notes:
1. In accordance with methodology from the FTA Noise and Vibration Manual, the equipment distance is assumed at the center of the Project site.
2. Threshold from the FTA *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

Source: Ibid. page 28. Table 10.

FTA's construction threshold is an 8-hour Leq, which accounts for the percentage of time each individual piece of equipment operates under full power in that period. Additionally, construction equipment would move throughout the site during that period. Following FTA methodology, when calculating construction noise, all construction equipment is assumed to operate simultaneously at the center of the active construction zone to represent an average distance throughout the day. During construction, equipment would operate throughout the site and not all of the equipment would be operating at the point closest to the sensitive receptors and considering the distance between the center of the Project site and the sensitive receptors is a reasonable assumption.

As shown in **Table 28**, exterior noise levels during Project construction would range between 52.2 dBA and 73.9 dBA and would not exceed the FTA's construction noise thresholds at the nearest off-site uses. The City has set restrictions to control noise impacts from construction activities within the Highland MC. Highland MC § 8.50.050 states that no person shall be engaged in construction and operation-related activities, including operation of domestic power tools, electrically operated compressors, pile drivers, ground vehicles, etc., except within the hours of 5:00 a.m. and 10:00 p.m. on any day in the industrial (I) zone, and between the hours of 7:00 a.m. and 10:00 p.m. in all other zones. However, since the Project is adjacent to existing residences, the Project would be required to comply with the following Highland GP limitations on construction noise hours (Goal 7.3, Action 1):

As a condition of approval, limit non-emergency construction activities adjacent to existing noise-sensitive uses to daylight hours between 7:00 a.m. and 6:00 p.m. Discourage construction on weekends or holidays except in the case of construction proximate to schools where these operations could disturb the classroom environment.

With incorporation of the City's standard conditions from the General Plan, impacts from short-term construction noise would be less than significant.

Operations

Implementation of the Project would create new sources of noise in the Project vicinity. The major noise sources associated with the Project including the followings:

- Mechanical equipment (i.e., trash compactors, air conditioners, etc.);
- Slow moving trucks on the Project site, approaching and leaving the loading areas;
- Truck Back-Up Alarms;
- Activities at the loading areas (i.e., maneuvering and idling trucks, equipment noise);
- Parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and
- Off-Site Traffic Noise.

Each noise source is discussed in more detail below. On-site operational noise sources are expected to include rooftop air conditioning units, parking lot activity, and truck loading dock activity. Off-site noise could be generated by vehicles, including heavy trucks, accessing the Project site and contributing to vehicular roadway noise.

Mechanical Equipment

Potential stationary noise sources related to long-term operation of the Project site would include mechanical equipment. Mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment) typically generates noise levels of approximately 52 dBA at 50 feet.[53] The HVAC equipment would be roof mounted and would be located as close as approximately 170 feet from the nearest residential uses to the south. At this distance, HVAC equipment noise would be approximately 41.7 dBA based on distance attenuation alone (using the inverse square law of sound propagation)[54] and would not exceed the City's most stringent daytime or nighttime noise standards of 60 dBA and 55 dBA, respectively, for residential uses. It should also be noted that the proposed warehouse building would include a parapet wall along the perimeter of the roof that would reduce HVAC noise at sensitive receptors in the Project vicinity. Therefore, the Project would result in a less than significant impact related to mechanical equipment noise levels.

Truck and Loading Dock Noise

During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting braking activities; backing up toward the

[53] Ibid. page 30.

[54] Ibid. page 30.

docks; dropping down the dock ramps; and maneuvering away from the docks. Loading or unloading activities would occur on the northern façade of the proposed warehouse building in the northern portion of the Project site. Truck access to the site would occur via two 40-foot-wide access driveways along Meines Street and Palm Avenue (i.e., one access driveway from each roadway).

Typically, heavy truck operations generate a noise level of 70 dBA at a distance of 50 feet.[55] As the closest residences would be located approximately 400 feet north of the proposed truck loading area, truck and loading noise would be approximately 46.9 dBA,[56] which is below the City's most stringent daytime and nighttime noise standards of 60 dBA and 55 dBA, respectively, for residential uses. It should also be noted that the loading dock doors would be surrounded with protective aprons, gaskets, or similar improvements that, when a trailer is docked, would serve as a noise barrier between the interior warehouse activities and the exterior loading area. This would attenuate noise emanating from interior loading activities to negligible noise levels outside of the warehouse building, and as such, interior loading and associated activities would comply with Highland MC § 8.50.050(b) and would be permissible during all hours of the day.

It is also noted that cargo forklifts could be used at the outdoor loading dock area during daytime and nighttime hours for truck loading/unloading activities. Cargo forklifts generate noise levels of approximately 85 dBA at 3 feet.[57] The nearest sensitive receptors (single-family residences) would be located approximately 400 feet north of where cargo forklifts would operate at the Project site. At this distance, forklift noise levels would be approximately 37.5 dBA[58] and would not exceed the City's most stringent daytime or nighttime noise standards of 60 dBA and 55 dBA, respectively, for residential uses. As such, cargo forklift noise levels (37.5 dBA at the nearest sensitive uses) would be similar to background noise in a theater or a large conference room and would comply with Highland MC § 8.50.050(b).

As discussed above, noise levels associated with trucks and loading/unloading activities would not exceed the City's noise standards and would comply with the provisions of Highland MC § 8.50.050. Therefore, noise impacts from truck and loading dock noise would be less than significant.

Truck Back-Up Alarms**.** Medium and heavy-duty trucks reversing into loading docks would produce noise from back-up alarms (also known as back-up beepers). Back-up beepers produce a typical volume of 97 dBA at one meter from the source.[59] The nearest sensitive receptors (single-family residences) would be located approximately 400 feet north of the truck loading area where trucks would be reversing and maneuvering into the loading area. At this distance, exterior noise levels from back-up beepers would be approximately 49.5 dBA,[60] which is below the City's most stringent daytime or nighttime noise standards of 60 dBA and 55 dBA, respectively, for residential uses. Back-up beeper noise levels (49.5 dBA at the nearest sensitive uses) would be similar to that of a

[55] Ibid. page 30.
[56] Ibid. page 30.
[57] Ibid. page 31.
[58] Ibid. page 31.
[59] Ibid. page 31.
[60] Ibid. page 31.

dishwasher and would attenuate to at least 35 dBA (assuming a windows open condition) within the nearest residences and would be below the City's 45 dBA interior noise level standard. Further, it is noted that back-up beeper noise is short in duration and would occur intermittently throughout the day/night. Therefore, back-up beeper noise would not exceed the City's applicable noise standards and would comply with the provisions of Highland MC § 8.50.

Parking Noise

The Project would provide a total of 240 parking spaces, including 47 trailer stalls, 39 dock door parking spaces, and 193 standard auto parking spaces. Parking stalls would surround the proposed warehouse building to the north, east, and west. According to the Traffic Impact Study, the Project would generate up to 51 trips during the peak hour. For the purpose of providing a conservative, quantitative estimate of the noise levels that would be generated from the vehicles entering and exiting the parking lot, the methodology recommended by FTA for the general assessment of stationary transit noise sources is used. Using the methodology, the Project's peak hourly noise level that would be generated by the on-site parking levels was estimated using the following FTA equation for a parking lot:

$$L_{eq(h)} = SEL_{ref} + 10 \log (NA/1{,}000) - 35.6$$

Where:

$L_{eq(h)}$ = hourly L_{eq} noise level at 50 feet

SEL_{ref} = reference noise level for stationary noise source represented in sound exposure level (SEL) at 50 feet

NA = number of automobiles per hour

35.6 is a constant in the formula, calculated as 10 times the logarithm of the number of seconds in an hour

Using FTA's reference noise level of 92 dBA SEL[61] at 50 feet from the noise source, the Project's highest peak hour vehicle trips would generate noise levels of approximately 43.5 dBA L_{eq} at 50 feet from the parking lot. The closest sensitive receptor is located approximately 100 feet from the parking lot. Conservatively assuming that all vehicles would park at a location nearest to sensitive receptors rather than dispersed throughout all available parking and based strictly on distance attenuation, parking lot noise at the nearest receptor would be 37.5 dBA, which is below the City's most stringent daytime and nighttime noise standards of 60 dBA and 55 dBA, respectively, for residential uses. Parking lot noise would be consistent with the existing noise in the vicinity and would be partially masked by background noise from traffic along area roadways. Noise associated with parking lot activities is not anticipated to exceed the City's noise standards during operation. Therefore, noise impacts from parking lots would be less than significant.

[61] Ibid. page 32.

Off-Site Traffic Noise

Implementation of the Project would generate increased traffic volumes along nearby roadway segments. Based on the Traffic Study, the Project would result in approximately 487 daily trips. The Opening Year "2024 Without Project" and "2024 With Project" scenarios are compared in **Table 29, Project Traffic Noise Levels**. **Table 24** shows roadway noise levels without the Project would range from 51.4 dBA CNEL to 69.4 dBA CNEL and between 54.9 dBA CNEL and 69.6 dBA CNEL with the Project.

In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable.[62] As shown in **Table 29**, the "With Project" noise levels would result in a maximum increase of 3.5 dBA CNEL along Meines Street (West of Palm Avenue), which is largely attributed to heavy truck travel. Although this roadway segment would experience a barely noticeable traffic noise increase as a result of the Project, the "With Project" noise level would not exceed the Normally Acceptable noise standard along this roadway for residential uses; see **Table 29**. As such, traffic noise impacts from the Project would be less than significant.

Table 29: Project Traffic Noise Levels

Roadway Segment		2024 Without Project		2024 With Project		Change	Normally Acceptable Standard (dBA CNEL)[2]	Significant Impact[3]
		ADT	dBA CNEL[1]	ADT	dBA CNEL[1]			
Palm Avenue	Meines Street to 5th Street	17,680	65.0	18,140	65.2	0.2	70	No
	5th Street to 3rd Street	14,770	66.7	14,840	66.7	0.0	70	No
Meines Street	West of Palm Avenue	640	51.4	790	54.9	3.5	60	No
5th Street	Palm Avenue to Church Avenue	21,260	68.3	21,590	68.5	0.2	70	No
	Church Avenue to SR-210 EB Ramps at 5th Street	28,190	69.4	28,570	69.6	0.2	75	No
3rd Street	Palm Avenue to Church Avenue	6,870	66.7	6,920	66.5	-0.2	70	No

ADT = average daily traffic; dBA = A-weighted decibels; CNEL = community noise equivalent level.

Notes:
1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.
2. The lowest Normally Acceptable land use compatibility noise standard for developed uses along each roadway segment is conservatively used to analyze impacts
3. Potential impacts occur when the Project change exceeds 3 dBA and the Normally Acceptable land use compatibility standard is exceeded (i.e., both must occur).

Source: Ibid. page 33 – Table 11

Mitigation Measures: No mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact.

[62] Ibid. page 32.

Construction Vibration

Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. Construction on the project site would have the potential to result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

Table 30, Typical Construction Equipment Vibration Levels, lists vibration levels at 25 feet for typical construction equipment. Ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 30**, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 to 0.089 in/sec PPV at 25 feet from the source of activity.

Table 30: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 30 Feet (in/sec)[1]
Large Bulldozer	0.089	0.0677
Caisson Drilling	0.089	0.0677
Loaded Trucks	0.076	0.0578
Jackhammer	0.035	0.0266
Small Bulldozer/Tractors	0.003	0.0023

Notes:
1. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.

Source: Ibid. page 34 – Table 12.

As noted above, the nearest structure to the Project construction site is approximately 30 feet away. **Table 30** shows that at 30 feet, the vibration velocities from construction equipment would not exceed 0.0677 in/sec PPV, which is below the FTA's 0.20 in/sec PPV threshold for building damage and below the 0.4 in/sec PPV annoyance threshold. It is also acknowledged that construction activities would occur throughout the project site and would not be concentrated at

the point closest to the nearest structure. Therefore, vibration impacts associated with Project construction would be less than significant.

Operational Vibration

The Project would include truck movement activity at the Project site. These movements would generally be low-speed (i.e., less than 15 miles per hour) and would occur over new, smooth surfaces. For perspective, Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that "heavy trucks, and quite frequently buses, generate the highest earthborn vibrations of normal traffic." Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy trucks and poor roadway conditions (while such trucks were moving at freeway speeds). This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)". Since the Project's truck movements would be at low speed (not at freeway speeds) and would be over smooth surfaces (not under poor roadway conditions), Project-related vibration associated with truck activity would not result in excessive ground-borne vibrations; no vehicle-generated vibration impacts would occur. In addition, there are no sources of substantial ground-borne vibration associated with the Project, such as rail or subways. The Project would not create or cause any vibration impacts due to operations.

Mitigation Measures: No mitigation is required.

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?*

Less than Significant Impact. The closest airport is the San Bernardino International Airport and it is located approximately 0.5-mile southwest of the Project site. The Project site is located outside of the 65 dBA CNEL noise level contour boundary of the airport. No exterior or interior noise mitigation is required to satisfy the policies in the Highland GP and MC. Additionally, there are no private airstrips located within the Project vicinity. Therefore, the Project would not expose people working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Cumulative Construction Noise

The Project's construction activities would not result in a substantial temporary increase in ambient noise levels. Construction noise would be periodic and temporary noise impacts that would cease upon completion of construction activities. The Project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. As discussed above, Project

construction noise levels would not be significant, and the Project would not represent a noticeable increase over the ambient conditions. Therefore, the Project's construction noise would not represent a substantial noise increase in excess of City standards and would not be cumulatively considerable.

Construction activities at other planned and approved projects near the Project site would be required to comply with applicable City rules related to noise and would take place during daytime hours on the days permitted by the Highland MC, and projects requiring discretionary City approvals would be required to evaluate construction noise impacts, comply with the City's standard conditions of approval, and implement mitigation, if necessary, to minimize noise impacts. Construction noise impacts are by nature localized. Based on the fact that noise dissipates as it travels away from its source, noise impacts would be limited to the Project site and vicinity. Therefore, Project construction would not result in a cumulatively considerable contribution to significant cumulative impacts, assuming such a cumulative impact existed, and impacts in this regard are not cumulatively considerable.

Cumulative Operational Noise

Cumulative Off-Site Traffic Noise

Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the Project and other foreseeable projects. Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the Project and other projects in the vicinity. Cumulative increases in traffic noise levels were estimated by comparing the Existing and Opening Year Without Project scenarios to the Opening Year Plus Project scenario. The traffic analysis considers cumulative traffic from future growth assumed in the transportation model, as well as cumulative projects.

A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The following criteria is used to evaluate the combined and incremental effects of the cumulative noise increase.

- *Combined Effect.* The cumulative with Project noise level ("Opening Year With Project") would cause a significant cumulative impact if a 3.0 dB increase over "Existing" conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use. Although there may be a significant noise increase due to the Project in combination with other related projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the Project.
- *Incremental Effects*. The "Opening Year With Project" causes a 1.0 dBA increase in noise over the "Opening Year Without Project" noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded, and the resultant noise level exceeds the Normally Acceptable land use compatibility noise standard. Noise by definition is a localized phenomenon and reduces as distance from the source increases. Consequently, only the Project and growth due to occur in the general area would contribute to cumulative noise impacts.

Table 31, Cumulative Off-Site Traffic Noise Levels identifies the traffic noise effects along roadway segments in the Project vicinity for "Existing," "Opening Year Without Project," and "Opening Year With Project," conditions, including incremental and net cumulative impacts. **Table 31** shows the combined and incremental effect criterion would not be exceeded along any of the Project roadway segments. As discussed above, a cumulative traffic noise impact would occur if both the combined and incremental effects criteria are exceeded, and the resultant noise level exceeds the Normally Acceptable land use compatibility standard. Therefore, cumulative traffic impacts from the Project would be less than significant.

Cumulative Stationary Noise

Stationary noise sources of the Project would not result in an incremental increase in non-transportation noise sources in the Project vicinity. Furthermore, as discussed above, operational noise caused by the Project would be less than significant. Similar to the Project, other planned and approved projects would be required to mitigate for stationary noise impacts at nearby sensitive receptors, if necessary. As stationary noise sources are generally localized, there is a limited potential for other projects to contribute to cumulative noise impacts.

No known past, present, or reasonably foreseeable projects would combine with the operational noise levels generated by the Project to increase noise levels above acceptable standards because each project must comply with applicable City regulations that limit operational noise. Therefore, the Project, together with other projects, would not create a significant cumulative impact, and even if there was such a significant cumulative impact, the Project would not make a cumulatively considerable contribution to significant cumulative operational noises.

Given that noise dissipates as it travels away from its source, operational noise impacts from on-site activities and other stationary sources would be limited to the Project site and vicinity. Thus, cumulative operational noise impacts from related projects, in conjunction with Project specific noise impacts, would not be cumulatively significant.

Table 31: Cumulative Off-Site Traffic Noise Levels

Roadway Segment		Existing[1]	Opening Year Without Project[1]	Opening Year With Project[1]	Combined Effects	Incremental Effects	Normally Acceptable Standard (dBA CNEL)[2]	Cumulatively Significant Impact?[3]
					Difference In dBA Between Existing and Opening Year With Project	Difference In dBA Between Opening Year Without Project and Opening Year With Project		
Palm Avenue	Meines Street to 5th Street	64.5	65.0	65.2	0.8	0.3	70	No
	5th Street to 3rd Street	67.6	66.7	66.7	-0.9	0.0	70	No
Meines Street	West of Palm Avenue	51.4	51.4	54.9	3.4	3.4	60	No
5th Street	Palm Avenue to Church Avenue	68.3	68.3	68.5	0.2	0.2	70	No

Roadway Segment		Existing[1]	Opening Year Without Project[1]	Opening Year With Project[1]	Combined Effects	Incremental Effects	Normally Acceptable Standard (dBA CNEL)[2]	Cumulatively Significant Impact?[3]
					Difference In dBA Between Existing and Opening Year With Project	Difference In dBA Between Opening Year Without Project and Opening Year With Project		
	Church Avenue to SR-210 EB Ramps at 5th Street	68.3	69.4	69.6	1.3	0.2	75	No
3rd Street	Palm Avenue to Church Avenue	56.7	66.7	66.5	9.7	-0.2	70	No

ADT = average daily trips; dBA = A-weighted decibels; CNEL = Community Noise Equivalent Level

Notes:
1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.
2. The lowest Normally Acceptable land use compatibility noise standard for developed uses along each roadway segment is conservatively used to analyze impacts
3. A significant impact would result only if both the combined and incremental effects criteria have been exceeded, and the resultant noise level exceeds the Normally Acceptable land use compatibility standard.

Source: Ibid. page 38 – Table 13.

4.14 POPULATION AND HOUSING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
14. POPULATION AND HOUSING. 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. As of 2022, the population of the City of Highland was 56,546 persons, with 17,127 housing units.[63] The Southern California Association of Government (SCAG)'s Connect SoCal projects that the City's population will grow to 68,900 persons and 21,400 housing units by 2045.[64] The Project does not involve the construction of new homes or the extension of roads. Therefore, it would not directly induce population growth in the area.

The Project would induce population growth indirectly by generating permanent employment growth in the area. The City has a significantly high unemployment rate of approximately seven percent. Therefore, the Project's permanent employment opportunities would be adequately served by the City's residents. A less than significant impact would occur.

Mitigation Measures: No mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. As discussed in Section Land use and Planning, the Project would displace persons who live in the existing single-family home located on the Project site. However, the single-family home currently non-conforming with the industrial zoning and land use designations and the property has been purchased by the Project applicant. As needed, the displaced persons could be eligible for Tenant Relocation assistance per the California Health and Safety Code. Therefore, the Project's impact would be less than significant.

[63] Department of Finance (DOF). (2022). Table 2: E-5 City/County Population and Housing Estimates, 1/1/2022. Available at http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed October 28, 2022).

[64] SCAG. (2020). Connect SoCal Demographics and Growth Forecast – Table 14. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579 (accessed October 28, 2022).

Mitigation Measures: No mitigation is required.

Cumulative Impacts

As concluded above, the Project would not significantly induce population grow or displace substantial amount of housing. Therefore, no cumulative impacts associated with population and housing would result from Project implementation.

4.15 PUBLIC SERVICES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. Would the project:				
a) 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:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?			X	

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:

i) Fire protection?

Less than Significant Impact. Fire suppression, prevention, and emergency medical services are provided to the City by the California Department of Forestry and Fire Protection or CAL FIRE. The Project site would be primarily served by Highland Fire Department Station 541, located 1.32 kilometers north of the Project site at 26974 Base Line Street.

The Project would be designed and constructed in accordance with the latest CBC and California Fire Code standards. Pursuant to Highland MC Chapter 2.46, Fire and Medical Services Mitigation Fee, the Project Applicant would pay its fair share of additional cost of maintaining emergency fire and emergency medical services and attendant facilities via a mitigation fee. Furthermore, the Project's interior and perimeter roadways would be designed to allow adequate emergency access. Therefore, a less than significant impact would occur, and no mitigation is required.

Mitigation Measures: No mitigation is required.

ii) Police protection?

Less than Significant Impact. The City contracts with the San Bernardino County Sheriff's Department for its law enforcement and police protection services.[65] The City's main station is located at 26985 East Base Line near City Hall. The station is currently staffed with 34 sworn officers, as well as nine non-sworn civilian employees. The Project is not a residential project so it would not result in permanent increase of residents in the City. Accordingly, it is not anticipated that the Project's demand for additional police protection services would be significant. Nevertheless, the project would pay all applicable development impact fees to the City, which would assist the City's payment for any additional police facilities. Therefore, the Project's impact to police protection services would be less than significant.

Mitigation Measures: No mitigation is required.

iii) Schools?

Less than Significant Impact. The Project site is located in the San Bernardino City Unified School District (SBCUSD). The nearest school from the Project site is Cypress Elementary School, located approximately 0.38-mile northwest from the Project site. As previously discussed, the Project would not result in the permanent increase of people to the City. Therefore, the project is not expected to increase the number of students in the area. Regardless, the Project would comply with Highland GP Policies 4.9-2 and 4.9-3 and pay applicable school impact fees that would be allocated by the SBCUSD to offset any impacts. Therefore, impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation is required.

iv) Parks?

Less than significant Impact. The closest park to the Project site is the Highland Community Park located across the City Creek channel to the northwest. The Project would not contribute to the population growth of the City and therefore would not result in the need for additional parks services. Furthermore, the Project is an industrial project and therefore exempt from payment of fees pursuant Highland MC § 16.40.200.B Park and recreation facilities. Therefore, impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation is required.

v) Other public facilities?

Less than Significant Impact. Other public facilities in the area would not be adversely impacted because the Project would not produce a substantial increase in population that would require additional public facilities.

Mitigation Measures: No mitigation is required.

[65] City of Highland. (2006) City of Highland General Plan – *Public Services and facilities Element*. p. 4-20. Available at: https://www.cityofhighland.org/DocumentCenter/View/152/Public-Services-and-Facilities-Element-PDF (accessed January 2023).

Cumulative Impacts

The Project, combined with other cumulative projects, would collectively increase demand for public services including, police, fire, schools, and parks. Similar to the Project, all cumulative projects would be required to adhere with the Highland GP goals and policies and pay any applicable fees pursuant to the Highland MC. Therefore, the present, and future projects in the City would not result in a cumulative impact related to the provision of public services with adherence to local regulation and payment of development impact fees.

4.16 RECREATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION.				
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) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project would induce population growth that would require the need to develop additional parks or recreational facilities, nor would it include recreational facilities that might have an adverse physical effect on the environment. Therefore, no impact would occur.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The Project would not result in an increased use of recreational facilities nor requires construction or expansion of existing recreational facilities. Therefore, no cumulative impacts on recreational facilities would result from Project implementation.

4.17 TRANSPORTATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRANSPORTATION. Would the project:				
a) Conflict with an 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?				

A Traffic Study was prepared for the Project on May 2023 by Kimley-Horn and Associates, and is included in this IS/MND as **Appendix J**. The results of the Traffic Study are summarized below.

a) Conflict with an program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The Project and the frontage improvements to Meines Street and Palm Avenue would be designed consistently with applicable Highland GP Policies pertaining to the City's circulation system, and Highland MC design ordinances. Additionally, the proposed street improvements would be designed to not conflict with the existing pedestrian and bicycle along Palm Avenue. Therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "Level of Service" (LOS) for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts. The Natural Resources Agency adopted updates to CEQA Guidelines to incorporate SB 743 that requires VMT for the purposes of determining a significant transportation impact under CEQA.

Currently, the City has not adopted VMT guidelines. The County's Transportation Impact Study Guidelines (July 2019) were used as they provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds are broken down into the following criteria:

1. Project Type Screening
2. Transit Priority Area (TPA) Screening
3. Low VMT Area Screening

Projects that meet one or more of the above screening thresholds may be presumed to create a less than significant impact on transportation and circulation. The screening thresholds were reviewed and evaluated for this Project.

Project Type Screening

Projects which serve the local community and have the potential to reduce VMT should not be required to complete a VMT assessment. These projects are noted below:

- K-12 School
- Local-serving retail less than 50,000 SF
- Local Parks
- Day Care Centers
- Local Serving Gas Station
- Local Serving Banks
- Student Housing Projects
- Local Serving Community Colleges
- Projects generating less than 110 daily vehicle trips

Based on the project description and estimated trip generation, the project would not meet the Project Type Screening Criteria.

Transit Priority Area (TPA) Screening

Projects located within a TPA may be presumed to have a less-than-significant impact. A TPA is defined as a half-mile area around an existing major transit stop of an existing stop along a high-quality transit corridor. 'Major transit stop means a site containing an existing rail station, a ferry

terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and evening peak commute periods. A 'high-quality transit corridor' means a corridor with a fixed route bus service with service intervals no longer than 15 minutes during the peak commute hours. Based on

the SBCTA VMT Screening Tool, the project is not located within a TPA. Therefore, the TPA Screening criteria is not met.

Low VMT Area Screening

Projects located within a low VMT generating area (PA VMT per employee, 4% below County baseline) may be presumed to have a less-than-significant impact. Based on review of the VMT screening criteria, the project meets the Low VMT Area Screening threshold. Therefore, the Project would result in a less-than-significant VMT impact, and no additional VMT analysis is required.

Mitigation Measures: No mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. The Project would require street frontage improvements to Meines Street and Palm Avenue to allow vehicular access to and from the Project site. More specifically, direct vehicular access provisions for the project site would be provided via two driveways on Palm Avenue and one driveway on Meines Street. Trucks would enter and exit the site via the north driveway on Palm Avenue and the driveway on Meines Street. Trucks would be restricted from making left-turns out of the site onto Palm Avenue. Passenger vehicles would have full access at all three Project driveways to enter and exit the site. The Project would also include on-site drive aisles/fire lanes that would allow the efficient and safe access for vehicles throughout the project site.

All proposed street frontage improvements and on-site internal circulation features would be designed to be both efficient and safe for vehicular traffic pursuant to relevant Highland GP policies and Highland MC § 16.40.040. Furthermore, Additionally, the Project's proposed components would not be an incompatible use that would substantially increase hazards. Therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

d) Result in inadequate emergency access?

Less than Significant Impact. As previously noted in Threshold c) above, the Project's design features, and street frontage improvements would be developed in compliance with all relevant design regulations pertaining to emergency access and regulations. Per Highland GP Policy 3.1.5, the Project would employ traffic control measures (e.g., install traffic signals, provide access restrictions, etc.) to ensure that Meines Street and Palm Avenue and function as intended, and would allow emergency vehicles to safely enter and exit the Project site during construction activity. As a standard practice, if road closures (complete or partial) were necessary, the City Police and Fire Departments would be notified of the construction schedule and any required detours would allow emergency vehicles to use alternate routes for emergency response. Therefore, adherence with all applicable local policies, regulations, and design standards would ensure that adequate emergency access would not be affected. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

A Traffic Study was conducted for the Project in accordance with the traffic study requirements of the City's 2016 Public Works Policies, Procedures and Standards and the San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP). However, the following analysis is provided for informational purposes only, as additional delay – to an intersection or roadway segment – is no longer required by or considered a significant impact under CEQA.

As discussed in the Traffic Study, the Project, in conjunction with cumulative projects, would contribute to the level of service (LOS) deficiency of two intersections by Project Opening Year 2024. To address deficiencies at the identified intersections, the Traffic Study recommended improvements that may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches. Similar to the Project, cumulative projects would be subject to similar improvements, and payment of fees to ensure that impacts to the existing circulation system are minimized.

Additionally, as discussed above, the Traffic Study also analyzed the Project's VMT impacts using the County's Transportation Impact Study Guidelines which provides options for both methodologies and VMT screening. As concluded in Threshold b), the Project is located in a Low VMT Area and therefore met the Low VMT Area Screening criteria. Therefore, a less than significant cumulative impact would occur regarding VMT.

4.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES. Would the project:				
a) 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				
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)?			X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

a) 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:

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)?

Less than Significant Impact. As part of the cultural resources research conducted, a records search of the NAHC Sacred Lands File (SLF) concluded a positive result for potential cultural resources within the Project site. The NAHC provided a list of Native American tribes who also have knowledge of cultural resources in the Project area.

As previously discussed in **Section 4.5, Cultural Resources**, a records search conducted by SCCIC revealed that 21 cultural resource studies have taken place within one-half mile of the Project site.

One of the previous studies assessed a small portion at the eastern edge of the Project site and one cultural resource (P-36-13750) was identified within the Project boundaries. Furthermore, 12 properties containing historic-period buildings were identified during the Field survey. As concluded in Section 4.5, Cultural Resources, P-36-13750 was not identified as a site for potential cultural resources. Furthermore, the 12 subject properties on the Project site are not listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). Therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant with Mitigation Incorporated. The City completed the AB 52 tribal consultation for the Project on December 2022. On December 1, 2022, the City initiated tribal consultation with interested California Native American tribes consistent with AB 52. Those tribes were the: Gabrieleno Band of Mission Indians – Kizh Nation, Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians), and Soboba Band of Luiseno Indians.

As part of the Tribal Consultation process, no tribe requested further consultation with the City. However, the Yuhaaviatam of San Manuel Nation sent the City an email expressing their interest of the Project site. Although Yuhaaviatam of San Manuel Nation did not have any concerns with the Project's implementation, they provided information supporting the need for the implementation of **MMs TCR-1** and **TRC-2** due to the potential for tribal cultural resources to be discovered during ground disturbance activities. Therefore, implementation of **MMs TCR-1** and **TCR-2** would ensure that impacts to tribal cultural resources would be reduced to a less than significant level.

Mitigation Measures:

MM TCR-1 The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resource Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

MM TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

Cumulative Impacts

The Project would not result in tribal cultural resources impacts beyond what was contemplated for the Project site. Therefore, no cumulative impacts related to tribal cultural resources would result from Project implementation.

4.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			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 impair 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) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact.

The following utilities would be necessary for the Project site:

- Water – East Valley Water District
- Wastewater (Sewer) – East Valley Water District (EWVD)
- Drainage (Stormwater) – San Bernardino County Flood Control District (SBCFCD)
- Solid Waste – Burrtec Waste Industries, Inc. (Burrtec)
- Electricity – Southern California Edison (SCE)

- Natural Gas – Southern California Gas Company (SoCal Gas)
- Telecommunications – AT&T and Time Warner Cable

Wastewater

The Project would receive wastewater services from the EWVD. EWVD maintains the City's sewer system and accepts all sewage generated within its service boundary, including the City. EVWD's existing sewer system consists of approximately 213 miles of pipeline, 4,400 sewer manholes, and five diversion structures. Wastewater treatment is conveyed to the regional treatment plant (San Bernardino Water Reclamation Plant [SBWRP]) via its Joint Powers Agreement (JPA) with the San Bernardino Municipal Water District (SBMWD) who treats all wastewater generated within the EVWD service area. The SBWRP processes an average sewage flow of approximately 26 to 27 mgd from its service area, including the City. The plant's total sewage capacity is 33 mgd. Additionally, EVWD, constructed its Sterling Natural Resource Center (SNRC) that initially treats up to 8 MGD and is expandable to treat ultimate buildout of approximately 10 MGD. The EVWD's Sewer Master Plan addresses the current and future needs of its service area. Since the Project would be consistent with current land use designations, the EVWD would not require the construction of new or expanded wastewater facilities to serve the Project. Therefore, impacts would be less than significant.

Water[66]

Water services to the Project would also be provided by the EVWD and would be subject to the Upper Santa Ana River Watershed's 2020 Integrated Regional Urban Water Management Plan (IRUWMP) for the EVWD. EVWD's water supply consists primarily of groundwater from wells in the western portion of the service area. These wells, in the San Bernardino Basin, supply approximately 80% of the total water supply. In addition to groundwater, EVWD provides treated surface water from the Santa Ana River and the State Water Project (SWP) by way of Plant 134, an 8 MGD water treatment plant. Plant 134 was originally constructed in 1996 and upgraded from 4 MGD to 8 MGD in 2013.

The Project would comply with the Highland GP Policies 4.2.1 which would require the Project Applicant to work with EVWD to meet water supply requirements which includes, but is not limited to, connection fees and monthly water service charge. Additionally, the Project applicant is required to complete a water-efficient landscape plan pursuant to Highland MC § 16.40.390 to reduce water consumption.[67] Lastly, EVWD has taken the water demand of future industrial projects (including the Project) into account towards year 2045 and indicates that no additional or new water facilities would be needed. Imported water is also available to EVWD and is available for purchase from Valley District which would be used to supplement EMVD's water supply. Therefore, the Project's use of water services would be less than significant.

[66] Water Systems Consulting, Inc. (2022). *2020 IRUWMP – EVWD 2020 UWMP.* Available at: https://eastvalley.org/DocumentCenter/View/2734/Part-2-Chapter-6_EVWD-2020-UWMP_Final (accessed January 2023).

[67] City of Highland. (2022). *Highland MC – Section 16.40.390 Water efficient landscape requirements.* Available at: https://www.codepublishing.com/CA/Highland/#!/html/Highland16/Highland1640.html (accessed January 2023).

Electricity, Natural Gas, Telecommunications

SCE would provide electricity services to the Project; SoCal Gas would provide natural gas services to the Project; and AT&T or Time Warner would provide telecommunication services to the Project. Implementation of the Project would not require the relocation existing utility facilities nor create the need to construct additional electricity, natural gas, and telecommunication facilities to meet the Projects utility demand. The Project Applicant would also be subject to all applicable connection fees pursuant to the Highland MC. Therefore, the Project's use of electricity, natural gas, and telecommunications would be less than significant. Refer to Section 4.6 Energy, for more information regarding the Project's impact concerning electricity and natural gas.

Mitigation Measures: No mitigation is required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. As previously noted above, the Project would be served with potable water by EVWD, which is 26.54 million gallons of water per year (m/gal/yr) and is comprised of groundwater, imported water and surface water. Based on the data reflected in the 2020 IRUWMP, EVWD is projected to have a water production potential of 24,923 acre-feet per year (AFY) to 28,188 AFY in a single dry year and multiple projected dry years, with a 3,677 AFY water supply surplus.[68] Therefore, the Project would have sufficient water supplies throughout future operations during normal, dry, and multiple dry years due to EVWD's excess water supply. Additionally, a will-serve letter provided by EVWD confirmed that there would be sufficient water resources to supply the Project. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. As discussed above, the EVWD would have sufficient wastewater treatment facilities and capacity to service the Project. The Project also proposes sewer improvements to and from the Project site. service the Project. A due diligence report conducted for the Project concluded that no issues with the capacity of downstream facilities would occur with implementation with the Project. The Project Applicant would also pay a pass-through fee to the City of San Bernardino required for treatment. Therefore, the EVWD has adequate capacity to serve the Project's projected demand, and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

[68] Water Systems Consulting, Inc. (2022). *2020 IRUWMP – EVWD 2020 UWMP.* Available at: https://eastvalley.org/DocumentCenter/View/2734/Part-2-Chapter-6_EVWD-2020-UWMP_Final (accessed January 2023).

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Solid waste service for the City is provided by the Mid-Valley and San Timoteo landfills. The San Timoteo landfill is located in the City of Redlines, approximately seven miles to the south, and it is the closest landfill to the Project site. According to CalRecycle, the San Timoteo landfill has a maximum permitted throughput of 2,000 tons per day. The landfill has a maximum permitted capacity of 23,685,785 cubic yards, and a remaining capacity of 12,360,396 cubic yards.[69]

The Project would generate solid waste in both short-term construction and long-term operation phases. According to CalRecycle's Estimated Solid Waste Generation Rates, the Project is anticipated to generate the following pounds of waste:[70]

Warehouse: 13.82 lb/emp/day

- Proposed Industrial building = 13.82/285 emp/day
  = 3,939 lbs/day

As previously shown, the Project's total anticipated solid waste would be approximately 3,939 lbs per day or 1.97 tons per day. When compared to the San Timoteo landfill, the Project's solid waste generation would equate to 0.09 percent of the landfill's maximum permitted throughput. Therefore, the Project would not generate solid waste in excess of State or local standards, and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The Project is required to adhere to all applicable Highland MC ordinances pertaining to waste reduction, recycling, and management which includes, but is not limited to, Highland MC Chapter 8.13 Mandatory Organic Waste Disposal Reduction and Chapter 8.12, Integrated Waste Management. The Project would also implement BMPs pursuant to the Project's WQMP and SWPPP that would help reduce solid waste generation and runoff via stormwater. Therefore, with adherence of applicable State, and local regulations, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

The context for accessing cumulative impacts to utilities varies depending on project's location to each service area and the capacity of the utility. Long-term maintenance and expansion of both wet and dry utilities would be required as the region continues to grow. Development of public utility infrastructure is

[69] CalRecycle. (2023). *San Timoteo Sanitary Landfill (36-AA-0087)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1906?siteID=2688 (accessed January 2023).
[70] CalRecycle. (1993). *Estimated Solid Waste Generation Rates.* Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed January 2023).

part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. Projects are required to coordinate with the City and service provider to ensure that adequate utility resources are available to serve the cumulative demand of planned and future projects. Therefore, each individual project would be subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with service providers would also allow for the provision utility services. Furthermore, all projects are subject to applicable development impact fees, connection fees, and service fees designed to maintain and incrementally expand infrastructure to meet existing and growing demand.

The Project would require both wet and dry utilities for construction and operational activities. As concluded in the analysis above, the Project would have a less than significant impact to existing utilities and service systems. Therefore, the Project would not create a significant impact on utilities and services, no significant cumulative impacts would occur.

4.20 WILDFIRE

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

No Impact. CAL FIRE's VHFHSZ in Local Responsibility Areas Map (LRA) for the City shows that the Project site is not located in or near a State Responsibility Area (SRA). The nearest SRA to the Project site is located approximately 1.1 miles southeast, generally located between I-210 and Orange Street. The Project site is located in an LRA and not classified as a high or very high FHSZ. The closest VHFHSZ is located approximately 2.3 miles northeast of the Project site. Review of Highland GP Public Health and Safety Element, Figure 6-6, supports the finding that the Project site is located in or near an SRA and the Project site is not with a VHFHSZ. Therefore, no impact associated with the substantial impairment of an adopted emergency response plan would occur.

Mitigation Measures: No mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. Refer to response a). The Project is not located in or near an SRA and the Project site does not contain lands classified as VHFHSZ. The Project site is relatively flat and near urban development. Therefore, the Project would not exacerbate wildfire risks, and thereby expose

project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impact would occur.

Mitigation Measures: No mitigation is required.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

No Impact. Refer to response a). The Project site is not located in or near an SRA and the Project site does not contain lands classified as VHFHSZ. The Project would include construction of a warehouse and associated infrastructure improvements. Development of the Project would not increase the risk of fire nor would it require the installation/maintenance of infrastructure near or in a SRA that would exacerbate fire risk. Therefore, no impact would occur.

Mitigation Measures: No mitigation is required.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

No Impact. Refer to response a). The Project site is not located in or near an SRA and the Project site does not contain lands classified as VHFHSZ. The Project site is located in an urbanized area and therefore would not 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 associated areas within a SRA. Therefore, no impact would occur.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

As concluded above, Project site is not located in or near an SRA and the Project site does not contain lands classified as VHFHSZ. Accordingly, the Project, related to wildfire hazards, would not contribute to an increase in other impacts including pollution, flooding, and emergency access and evacuation. Since the Project would not have any wildfire-related impacts, the Project would also not contribute to any potential cumulative impacts.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
21.	**MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:**				
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. All impacts concerning the substantial degradation to the quality of the environment, including impacts to the habitat of a fish or wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plant or animal species, and historical and prehistorical resources were evaluated as part of this IS/MND. As concluded in **Section 4.4, Biological Resources**, **Section 4.5, Cultural Resources** and **Section 4.17, Tribal Cultural Resources**, impacts would be less than significant with the implementation of **MMs BIO-1, CUL-1, GEO-1, TCR-1,** and **TCR-2**. Therefore, with the implementation of mitigation measures, the Project would not substantially degrade the quality of the environment as impacts would be reduce to a less than significant level.

Mitigation Measures: See **MMs BIO-1, CUL-1, GEO-1, TCR-1,** and **TCR-2** in their respective sections.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. As discussed throughout this IS/MND, the Project would not have impacts that would be cumulatively considerable. In all instances where the Project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation has been imposed to reduce potential effects to less than significant levels. As such, incorporation of **MM HRA-1** (refer to Section 4.8, Greenhouse Gas Emissions), the Project would reduce potential significant greenhouse gas effects.

Mitigation Measures: See **MM HRA-1** in Section 4.8, Greenhouse Gas Emissions of this IS/MND.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. The Project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this IS/MND in each respective section. No portion of the proposed Project is anticipated to have or cause a cumulative environmental effect that would cause substantial effects on human beings with implementation of **MM HRA-1**. A less than significant impact is anticipated to occur.

Mitigation Measures: See **MM HRA-1** in Section 4.8, Greenhouse Gas Emissions of this IS/MND.

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