Draft Initial Study / Mitigated Negative Declaration
Assembly and Light Manufacturing Building Project
October 2023

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1.0 INTRODUCTION

The Assembly and Light Manufacturing Building Project (herein referenced as the "project") proposes the development and operation of an approximate 173,000-square foot assembly and light manufacturing building on an approximate 9.2-acre site located at 21801 and 21823 Barton Road (Assessor Parcel Numbers [APNs] 1167-121-02; 1167-121-03; 1167-121-04; 1167-121-07; 1167-131-011; and a portion of 1167-121-08). Refer to Section 2.0, *Project Description* for greater detail. Following a preliminary review of the proposed project, the City of Grand Terrace (City) has determined that the project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with State CEQA (Public Resources Code Sections 21000-21189.70.10) and pursuant to the California Code of Regulations Section 15063, the City, acting in the capacity of CEQA Lead Agency, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may result in an unavoidable and significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration or Mitigated Negative Declaration for that project. Such a determination can be made only if "[t]here is no substantial evidence, in light of the whole record before the [L]ead [A]gency" that such impacts may occur (Public Resources Code Section 21080(c)(1)).

The environmental documentation outlined above, which is ultimately determined by the City in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation is subject to a public review period. During this review, comments on the document relative to environmental issues should be addressed to the City in writing. Following review of any written comments received, the City will consider these comments as a part of the project's environmental review and will include them with the Initial Study documentation for consideration by the City's decision-makers.

1.2 PURPOSE

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;

- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as a Lead Agency (in this case, the City of Grand Terrace) determines that an Initial Study is required for the project, the Lead Agency is directed to consult informally with Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, to obtain the recommendations of those agencies as to whether an EIR, MND, or ND should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

The following documents were utilized during preparation of this Initial Study and are incorporated into this document by reference. The documents are available for review online at the City's website (https://www.grandterrace-ca.gov/) and at the City's Planning Department located at City Hall at 22795 Barton Road, Grand Terrace, California 92313.

- *City of Grand Terrace General Plan* (adopted April 27, 2010). The General Plan includes forecasts of long-term conditions and outlines development goals and policies. It guides growth and development within the City by designating land uses in the proposed land use map and through implementation of the goals and policies of the General Plan. It also provides a long-term vision for the City, and through its implementation of goals and policies, indicates how that vision may be achieved over time. The General Plan includes the following elements: Land Use; Circulation; Open Space and Conservation; Public Health and Safety; Noise; Public Services and Facilities; Housing; and Sustainable Development. The 2013–2021 Housing Element was last updated and integrated into the General Plan in September 2016.

- *City of Grand Terrace General Plan Environmental Impact Report* (certified April 1, 2010). The General Plan EIR is intended to provide decision-makers and the public with information concerning the environmental effects of implementation of the General Plan. The General Plan EIR includes background data, analyzes potential environmental impacts, identifies General Plan policies and implementation plans that serve as mitigation, and identifies additional mitigation measures to reduce potentially significant effects due to implementation of the General Plan. The General Plan EIR determined that General Plan implementation would result in significant unavoidable environmental impacts in the following topic areas: air quality and noise.

- *Grand Terrace Municipal Code* (current covering Ordinances through 342, passed August 23, 2022). The Municipal Code provides regulations for governmental operations, development, infrastructure, public health and safety, and business operations within the City. Municipal Code Title 18, *Zoning* (Zoning Ordinance), is established to promote the public health, safety, peace, comfort, convenience, prosperity, and welfare of the City and its inhabitants. The Zoning Ordinance regulates the use of buildings, structures, and land for residential, commercial, industrial, and institutional purposes; regulates location, height, bulk, and area covered by buildings and structures; and controls lot size, yards, intensity of land use, signs, and off-street parking.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The City of Grand Terrace is located in the southwestern portion of the County of San Bernardino; refer to Exhibit 2-1, *Regional Vicinity*. Interstate 215 (I-215) runs from the northern border of the City to its western border. The City is located to the west of Loma Linda and to the south and east of Colton, on the eastern side of the Santa Ana River.

The project site is approximately 9.2 acres and is located in the western portion of the City at Assessor's Parcel Numbers (APNs) 1167-121-02, 1167-121-03, 1167-121-04, 1167-121-07, a portion of 1167-121-08; and 1167-131-011 refer to Exhibit 2-2, *Project Site*. Specifically, the project site is located at 21801 and 21823 Barton Road on the south side of Barton Road, between Terrace Avenue and La Crosse Avenue. Regional access to the project site is provided via I-215 and local access is provided via Barton Road, both of which are identified as major corridors in the City's General Plan Environmental Impact Report (EIR).

2.2 ENVIRONMENTAL SETTING

The project site is located within a developed and urbanized area of Grand Terrace. The site is bounded to the north by Barton Road, to the west by a Southern California Edison (SCE) utility easement, and to the south and east by existing commercial/industrial buildings. The former railroad grade for the Southern Pacific Railroad is located directly west alongside the project site. The project site includes approximately 660 linear feet (0.18-acre) of a storm drain alignment to the southwest.

Historically, the site was developed with agricultural, residential, and manufacturing land uses. At the time of initiating the project's environmental baseline (March 2023), the site was developed with three (3) buildings consisting of the following businesses: Nu-Ray Metals (manufacturer and installer of metal siding and roofing materials), Houston & Harris PCS, Inc. (sewer mainline cleaning and video inspection company), and a former administrative building. These three (3) buildings were approximately 12,950 square feet in size and located along the northeastern portion of the project site. As of August 2023, these buildings have since been demolished for safety reasons.[1] However, the demolition of these buildings has been studied as part of the project's environmental analysis.

The site includes asphalt/paved parking areas, concrete slab, and sparse vegetation with approximately twenty trees, mainly along the perimeter. Soils onsite consist of alluvium, comprised of clay, silt and gravel. The overall site topography slopes downward to the south at a gradient of less than one percent, with the exception of some local variation. The elevation at the project site is approximately 970 feet above mean sea level.

General Plan Land Use Designation and Zoning

The project site has a General Plan land use designation of Light Industrial. According to the General Plan Land Use Element, "permitted uses for properties designated as Light Industrial include those uses that can be made compatible with other surrounding uses within the City regarding noise, dust, odors, vibration, glare, air quality, traffic, aesthetics, and hazardous materials. Typical uses may include light manufacturing and assembly, small scale warehousing and

[1] City Demolition Permits B00-004-879, B00-004-880, B00-004-881.

distribution, research and development, and administrative and service types of uses." The proposed project is consistent with the General Plan.

The project site is zoned Restricted Manufacturing (MR). As described in Grand Terrace Municipal Code Chapter 18.39, *MR Restricted Manufacturing District*, the purpose of the MR district is to provide for the development of low intensity and low impact light manufacturing and industrial uses. Per the Municipal Code, regulations of this district are intended to allow various manufacturing and industrial uses which operate free of objectionable noise, dust, odor, or other nuisances to other (non-industrial uses) in planned, architecturally integrated building groups. Permitted uses in the MR district include, but are not limited to, agricultural and nursery supplies and services; automotive related services (including motorcycles, boats, recreational vehicles, trailers, and campers); parts and supplies; building maintenance services and supplies sales; communication services; laundry/cleaning services; light manufacturing; printing/reproduction services; public storage facilities; and research services. The proposed project is consistent with the zoning designation.

Surrounding Land Uses

Land uses surrounding the project site consist mainly of commercial and industrial uses, with multifamily residential northeast of the project site. Specifically, land uses surrounding the site include:

- *North*: Barton Road bounds the site to the north with the Barton Business Park located across Barton Road. Barton Business Park consists of three Class B Industrial buildings, out of which a variety of small businesses operate, including a fitness training facility and an artificial grass sales company. This area is designated by the General Plan Land Use Map as Industrial and is zoned Restricted Manufacturing (MR). The residences located northeast of the project site have a General Plan land use and zoning designation of Medium Density Residential (R-3).

- *East*: Adjacent to the east of the project site is a property containing a laboratory building for a water quality testing company. This area is designated by both the General Plan Land Use Map and Zoning Map as General Commercial.

- *South*: Directly south of the project site is the La Crosse Business Park, which is paved, landscaped, and built up with light industrial buildings. This area falls within the boundaries of the City of Colton and is designated by both the City of Colton General Plan Land Use Map and Zoning Map as Light Industrial (M-1).

- *West*: A utility easement bounds the site to the west. Just west of the easement is a disturbed, vacant lot. This area falls within the boundaries of the City of Colton and is designated by both the City of Colton General Plan Land Use Map and Zoning Map as Light Industrial (M-1).

2.3 PROJECT CHARACTERISTICS

Development Concept

The project is the development of an assembly and light manufacturing building up to a maximum of 171,300 square feet. The maximum building height of the two-story building is proposed at approximately 44 feet in accordance with the development standards contained in the City's Municipal Code Chapter 18.39, *MR Restricted Manufacturing District*. Refer to Exhibit 2-3, *Conceptual Site Plan*, and Table 1, *Project Characteristics*, which identifies the description, function, and size of the building use.

Site improvements include new parking, landscaping, trash enclosure area, lighting, security, 18 dock doors, perimeter wall and fencing, and street improvements along the north side of the site.

Table 1: Project Characteristics

Description	Approximate Size / Quantity
Office Space (includes restrooms and entry)	4,800 square feet
Assembly Area	50,326 square feet
Product Storage Area	115,026 square feet
Total Building Square Feet[2]	170,152 square feet
Parking	18 truck dock doors 240 vehicle parking spaces
Landscaping	The project proposes approximately 26,645 square feet (6.6 percent of the site's area) of landscaping on-site. The parking lot areas located on the northeast and northwest portions of the site would include 15- to 24-inch box trees and 5-inch gallon shrubs. A concrete screen retaining wall would be constructed that measures 6 feet tall and 8 feet high and would connect along the west side of the property line. The east side of the site would be bordered by a 6-foot-tall fence with green vines and decorative pilasters. The south side of the site would be bordered by an 8-foot-tall tubular steel fence.

Site Demolition

The project includes demolition and removal of existing concrete pads and asphalt paved areas.

Site Access

Site access is provided via Barton Road along the project's northern boundary. The emergency vehicle access driveway would be located along the northern boundary to the far east and be secured with a commercial anti-crash gate. Access and circulation improvements would be designed and constructed consistent with City design and engineering standards; refer to Exhibit 2-3, *Conceptual Site Plan.*

Landscaping

Landscaping for the project would be developed in accordance with the requirements of the Grand Terrace Municipal Code Title 15, *Buildings and Construction*, Section 15.56, *Water Efficient Landscape*.

The project proposes approximately 26,645 square feet (6.6 percent of the site's area) of landscaping on-site. The parking lot areas located on the northeast and northwest portions of the site would include 15- to 24-inch box trees and 5-inch gallon shrubs. A concrete screen retaining wall would be constructed that measures 6 feet tall and 8 feet high and would connect along the west side of the property line. The east side of the site would be bordered by a 6-foot-tall fence with green vines and decorative pilasters. The south side of the site would be bordered by an 8-foot-tall tubular steel fence.

[2] This Initial Study assesses a maximum square foot of up to 173,000 for the assembly and light manufacturing building.

Utilities

The following utilities would serve the project site:

- *Domestic Water*. The project site is served by the Riverside Highland Water Company (RHWC). RHWC is a privately owned and operated water purveyor serving the City of Grand Terrace and the adjacent unincorporated community of Highgrove.

- *Sewer*. The project site is served by a sanitary sewer system owned and operated by the City of Grand Terrace. Wastewater treatment is provided by the Colton Regional Wastewater Treatment Facility through an agreement between the City of Grand Terrace and the City of Colton.

- *Drainage*. The project site is served by a series of storm drains maintained by the City of Grand Terrace.

- *Electricity*. Electric service to the project site is provided by SCE.

- *Natural Gas.* Natural gas service is provided by the Southern California Gas Company.

- *Telecommunications.* Telecommunications (Wi-Fi, cable, and phone) service to the project site is provided by AT&T and Charter Communications.

2.4 PHASING/CONSTRUCTION

Project construction would occur as one (1) single phase and is anticipated to occur for approximately 14 months from approximately spring 2024 through summer 2025. The earthwork volumes are estimated at approximately 11,700 cubic yards of cut and 13,000 cubic yards of fill dirt, resulting in approximately 1,300 cubic yards of import soil.

The project would be constructed to conform with the City of Grand Terrace Municipal Code Title 15, *Buildings and Construction* and Title 18, *Zoning*, which includes development standards related to building size, height, and setback, landscaping, and signage.

2.5 OPERATIONAL ACTIVITIES AND HOURS

Once constructed, site operations would be consistent with the Light Industrial land use designation and Restricted Manufacturing (MR) zoning. Typical operational characteristics would include employees and customers traveling to and from the site, delivery of materials and supplies to the site, truck loading and unloading, and light manufacturing activities. Racks, forklifts, shelving units, automatic machines, conveyor belts would be utilized within the interior of the facility. Approximately 175 persons would be employed on site, with two shift periods occurring each day. Interior hours of operation would occur 24/7.

Hours of operation for deliveries are proposed from 6:00 AM to 11:00 PM. According to Municipal Code Chapter 8.108.050 - Prohibited noise, the following noises are prohibited and declared to be nuisances: (Item F) *Loading or Unloading of Trucks. No person shall create or cause to be created loud and excessive noise in connection with the loading or unloading of motor trucks and other vehicles, so as to disturb the peace and quiet of adjacent residential neighborhoods, between the hours of 10:00 p.m. and 7:00 a.m. The loading or unloading in such a manner as to be loud or excessive at a distance of 50 feet from the trucks or vehicles being unloaded shall be prima facie evidence of a violation of this Section.*

The project has been designed with loading docks located away from sensitive receptors, allowing the proposed building and walls to screen operations and noise from nearby sensitive receptors to the northwest. Additionally, the project is located more than 50 feet from sensitive land uses (existing residential neighborhood).

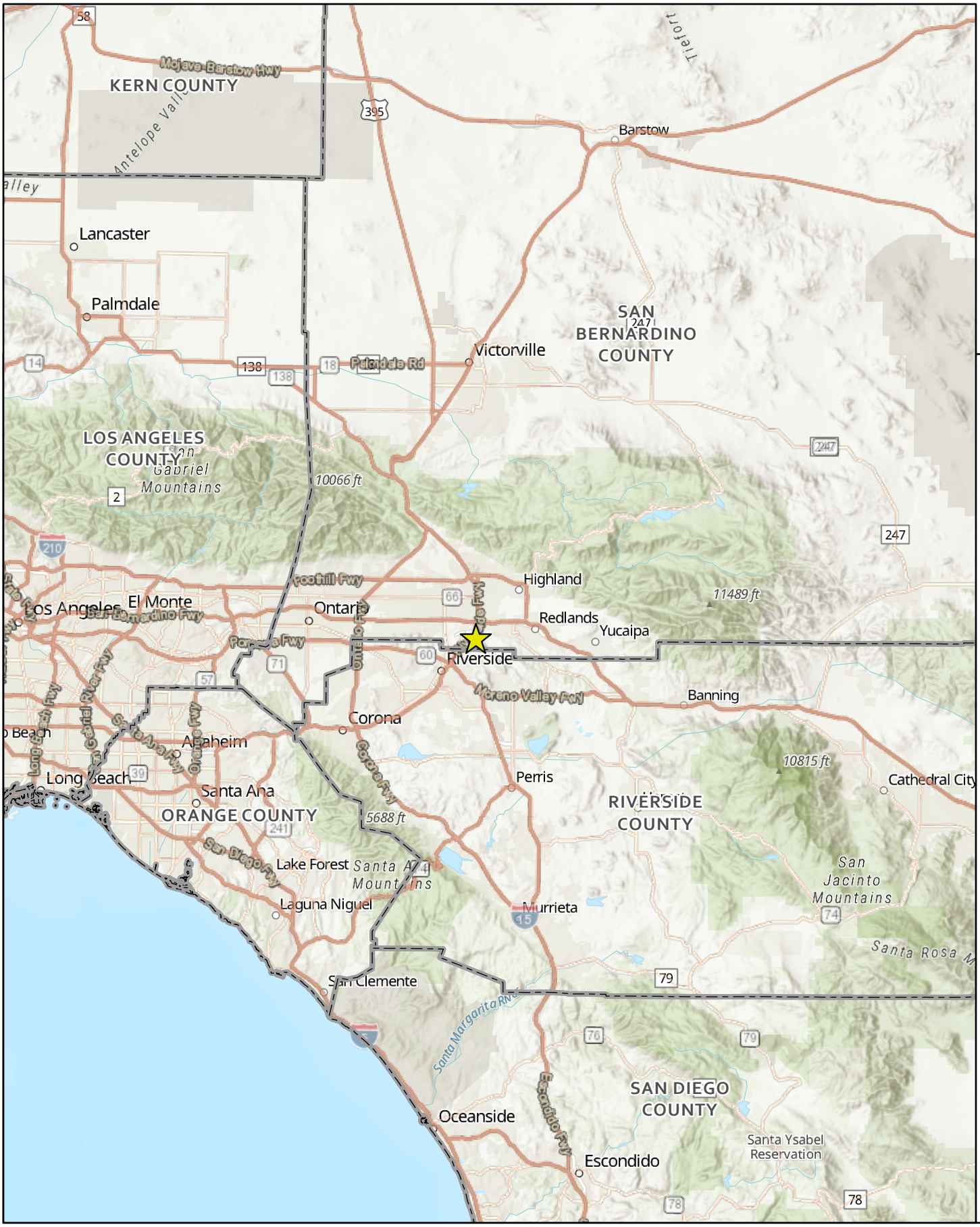
According to Municipal Code Chapter 18.06.032 - After-hours operation, "After-hours operation" means any use that has hours of operation at any time between 11:00 p.m. and 6:00 a.m. During this time, deliveries to the site and loading/unloading of materials is not permitted.

For security, the site would have on-site cameras that would be operated 24/7.

2.6 ANTICIPATED APPROVALS

The City of Grand Terrace has discretionary authority over the proposed project, which requires the following discretionary approvals:

- Conditional Use Permit (CUP 22-02)
- Lot Merger (LM 22-02)
- Site and Architectural Review (SA 22-08)
- Environmental (E 22-06) CEQA Compliance



Michael Baker INTERNATIONAL

0 5 10 20 Miles

Source: ESRI

Assembly and Light Manufacturing Building

Regional Vicinity

Exhibit 2-1

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Assembly and Light Manufacturing Building

Project Site

Michael Baker INTERNATIONAL

Source: Nearmaps, City of Grand Terrace

Exhibit 2-2

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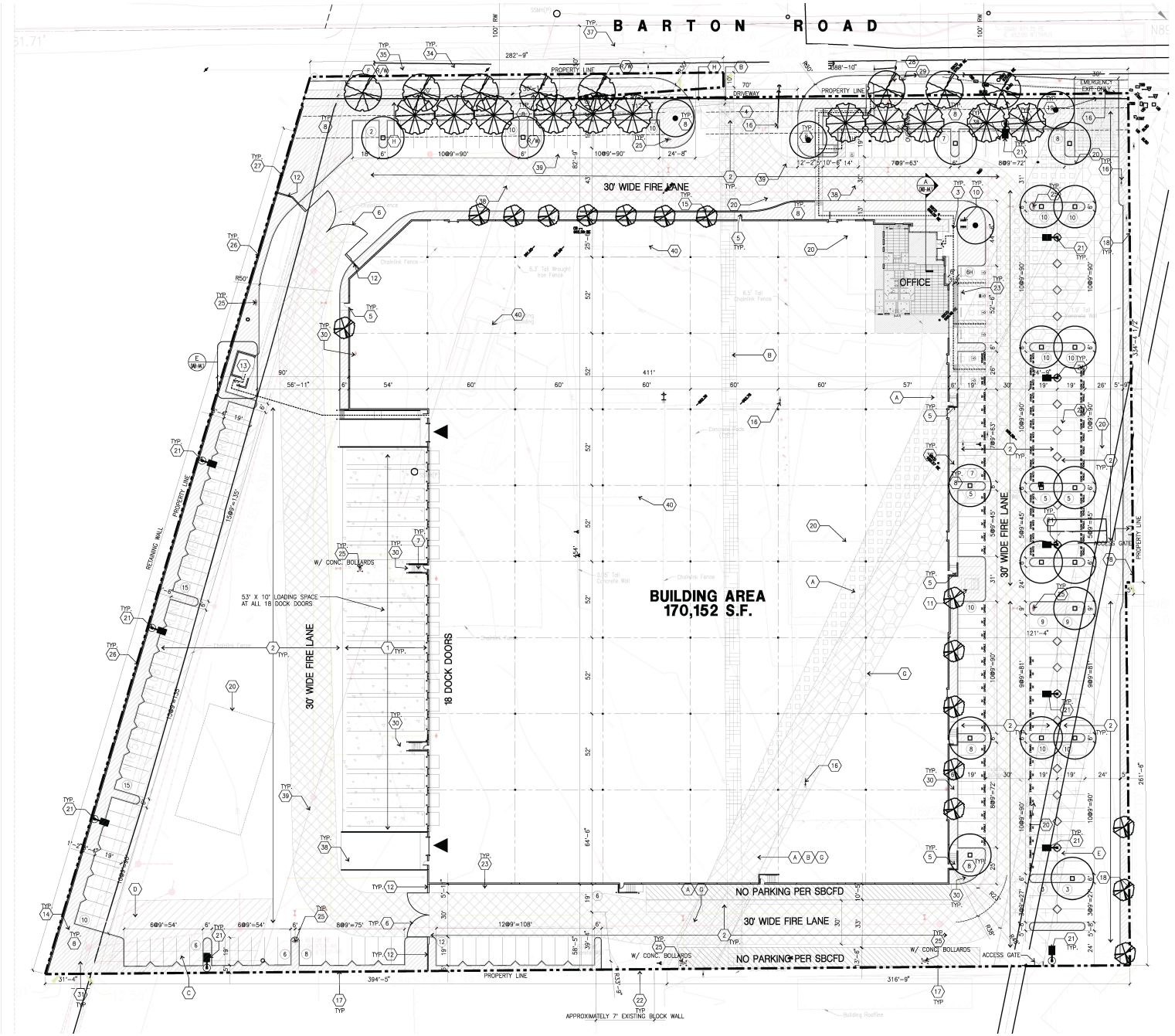

Assembly and Light Manufacturing Building

Conceptual Site Plan

Source: Hines, City of Grand Terrace

Exhibit 2-3

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Assembly and Light Manufacturing Building

Project Rendering

Source: Hines, City of Grand Terrace

Exhibit 2-4

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3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. **Project Title:**
   Assembly and Light Manufacturing Building Project

2. **Lead Agency Name/Address/Contact:**
   City of Grand Terrace, Planning and Development Services Department
   Konrad Bolowich, City Manager
   Phone: 909-954-5175
   22795 Barton Road
   Grand Terrace, CA 92313

3. **Project Location:**
   The project site is located at 21801 and 21823 Barton Road on the south side of Barton Road, between Terrace Avenue and La Crosse Avenue.

4. **Applicant's Name/Address/Contact:**
   Hines
   Matt Ciccotti, Director
   Phone: 610-405-4354
   444 South Flower Street, Suite 2100
   Los Angeles, CA 90071

5. **General Plan Designation:**
   Light Industrial

6. **Zoning:**
   Restricted Manufacturing (MR)

7. **Description of Project:**
   Refer to Section 2.3, *Project Characteristics*.

8. **Surrounding Land Uses and Setting:**
   Land uses surrounding the project site consist mainly of commercial and industrial uses, with multifamily residential northeast of the project site. Refer to Section 2.2, *Environmental Setting*.

9. **Other public agencies whose approval is required:**
   No other public agencies whose approval is required are expected at this time.

10. **Have California Native American tribes traditionally and culturally affiliated with the project site requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**
    In compliance with Assembly Bill (AB) 52, the City distributed letters notifying each tribe that requested to be on the City's list for the purposes of AB 52 of the opportunity to consult with the City regarding the proposed project.

The letters were distributed by certified mail on March 2, 2023. Of these tribes, the Yuhaaviatam of San Manuel Nation provided the only response to the consultation on March 22, 2023, requesting mitigation measures to be included as part of the project's conditions. Refer to Section 4.18, *Tribal Cultural Resources*, for additional information.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant Impact with Mitigation Incorporated" as indicated by the following checklist.

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This Initial Study analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines Appendix G and used by the City in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the proposed development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the proposed project. To each question, there are four possible responses:

- *No Impact*. The project would not have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The project would have the potential for impacting the environment, although this impact would be below established thresholds that are considered to be significant.

- *Less Than Significant Impact With Mitigation Incorporated*. The project would have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- *Potentially Significant Impact*. The project would have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential environmental impacts are anticipated to be significant, mitigation measures are required so that impacts may be avoided or reduced to less than significant levels.

3.4 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

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

Signature: _____

Title: Planning and Development Services Director

Printed Name: Scott Hutter

Agency: City of Grand Terrace

Date: _____

4.0 ENVIRONMENTAL ANALYSIS

4.1 AESTHETICS

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

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

Less Than Significant Impact. A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed.[3] Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated Federal and State lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape of nearby features.

The City has a policy to preserve areas designated as Open Space for their scenic and environmental resources (Land Use Element Policy 2.5.2). According to the General Plan Land Use Map, the project site's designated land use is Light Industrial. Thus, the proposed project would not conflict with Land Use Element Policy 2.5.2.

In addition, Blue Mountain is identified as a community symbol and scenic backdrop for the City by the Open Space and Conservation Element (Policy 4.5.2). Scenic views, including views of the San Bernardino Mountains to the north, are offered to residences nestled on the side of Blue Mountain. Since the project site is located to the west of the residences on the side of Blue Mountain, project implementation would not have the potential to impact these views. For this reason, the project would not conflict with Open Space and Conservation Element Policy 4.5.2. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

[3] A viewshed is the geographical area which is visible from a particular location.

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

No Impact. According to the California Department of Transportation (Caltrans) California State Scenic Highway Mapping System Map, there are no officially designated State scenic highways in the City of Grand Terrace. The nearest eligible highway is State Route 38 (SR-38), which is located nearly 9 miles northeast of the project site. Views of the project site are not afforded from SR-38 due to intervening topography, structures, and trees. Thus, the project would not substantially damage scenic resources within a State scenic highway. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are 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 project site is surrounded by urbanized uses; refer to Exhibit 2-2, *Project Site*. Thus, for the purposes of this threshold, consideration of whether the project would conflict with applicable zoning or other regulations governing scenic quality is made.

Construction Impacts

During construction, construction vehicles and equipment would be visible during construction activities. However, the presence of construction vehicles would be temporary and would cease upon completion of construction. Due to the temporary nature of construction activities, impacts to the visual character of the project site and its surroundings would be less than significant and no mitigation is required.

Operational Impacts

Zoning

Based on the City's Zoning Map, the project site has a zoning designation of Restricted Manufacturing (MR). The project would be subject to the design guidelines and development standards established by the Grand Terrace Municipal Code Chapter 18.39, *MR Restricted Manufacturing District,* refer to Section 4.11, *Land Use and Planning*. As such, the proposed project would not conflict with zoning regulations governing scenic quality. Impacts would be less than significant.

General Plan

Based on the General Plan Land Use Map, the project site has a land use designation of Light Industrial. According to the General Plan Land Use Element, permitted uses for properties designated as Light Industrial include those uses that can be made compatible with other surrounding uses within the City regarding noise, dust, odors, vibration, glare, air quality, traffic, aesthetics, and hazardous materials. Typical uses may include light manufacturing and assembly, small scale warehousing and distribution, research and development, and administrative and service types of uses. As such, the project's proposed assembly and manufacturing uses would not conflict with the permitted uses for areas zoned as Light Industrial.

In addition, while project implementation would change the visual quality of the site and its surroundings, the proposed project would not degrade the visual quality of the project site because the project is consistent with the surrounding

uses and its current zoning. Further, the project's design, including its architectural features, building materials, and landscaping, would be reviewed and approved by the City during the development review process. This process would verify that the project's design is compatible with development in the surrounding vicinity and that it is consistent with applicable zoning regulations. As a result, implementation of the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are 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. Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprising highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point source lighting that contrasts with existing low ambient light conditions.

Construction Impacts

Project construction activities could involve temporary glare impacts as a result of construction equipment and materials. Pursuant to Grand Terrace Municipal Code Section 8.108.040, *Special Activities*, project construction would be limited to the daytime hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday and would be prohibited on Sundays and national holidays. No after-hours construction would be permitted. {Therefore, short-term construction-related impacts pertaining to nighttime lighting are not anticipated.

Operation

The proposed project would increase lighting at the project site compared to existing conditions. Operation of the assembly and light manufacturing building would include lighting necessary for public safety and security. Project lighting would comply with applicable City standards related to the installation and operation of lighting features.

Grand Terrace Municipal Code Section 18.60.040, *Design Standards*, requires that all lighting associated with parking lots be shielded and arranged to reflect, or illuminate, away from adjoining properties and public streets. Further, the City would review the site-specific lighting plan as part of the City's Site and Architectural Review process. Building materials would also be reviewed during this regulatory process to ensure neighboring uses are not exposed to substantial daytime glare. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

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

No Impact. According to the California Department of Conservation (DOC) Important Farmland Finder, the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is designated as Urban and Built-Up Land. No lands within the project site are used for any type of agricultural use. Thus, the project would have no impact on Farmland, Unique Farmland, or Farmland of Statewide Importance.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Based on the City's Zoning Map, the project site is zoned Restricted Manufacturing (MR). No lands within the project site are used for any type of agricultural use, nor are any such lands zoned for agriculture. As such, the site is not subject to a Williamson Act contract. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project would not conflict with zoning for forestland, or cause rezoning of forestland (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]). No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Response 4.2(c). No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Responses 4.2(a) through 4.2(d). No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

This section is primarily based upon the following technical studies, provided as Appendix F and G, respectively:

- *Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis) prepared by EPD Solutions, Inc., dated July 5, 2023.

- *Comparison of Health Risk Impacts for the Proposed Barton Road Industrial Project and the Existing Land Use, Grand Terrace, CA (Revised)* (Health Risk Assessment [HRA]) prepared by EPD Solutions, Inc., dated July 5, 2023.

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

Less Than Significant Impact. The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). In order to reduce emissions, the SCAQMD adopted the *2022 Air Quality Management Plan* (2022 AQMP) which establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The AQMP is a regional and multi-agency effort including the SCAQMD, California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the US Environmental Protection Agency (EPA).

The 2022 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), 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 SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts.

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

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertains to pollutant concentrations, rather than to total regional emissions, an analysis of the project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(c), localized concentrations of carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would be less than significant during project construction and operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations.[4]

b) Would the project cause or contribute to new air quality violations?

As discussed in Response 4.3(b), the proposed project would result in emissions that are below the SCAQMD thresholds. Therefore, the project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The proposed project would result in less than significant impacts with regard to regional and localized concentrations during project construction and operations; refer to Responses 4.3(b) and 4.3(c). As such, the project would not delay the timely attainment of air quality standards or 2022 AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Determining whether a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

Growth projections included in the 2022 AQMP form the basis for the projections of air pollutant emissions and are based on general plan land use designations and SCAG's 2020-2045 RTP/SCS demographics forecasts. The

[4] Because reactive organic gases (ROGs) are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

population, housing, and employment forecasts within the 2020-2045 RTP/SCS are based on local general plans as well as input from local governments, such as the City. The SCAQMD has incorporated these same demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment) into the 2022 AQMP.

The project site has a General Plan land use designation of Light Industrial. According to the General Plan Land Use Element, "permitted uses for properties designated as Light Industrial include those uses that can be made compatible with other surrounding uses within the City regarding noise, dust, odors, vibration, glare, air quality, traffic, aesthetics, and hazardous materials. Typical uses may include light manufacturing and assembly, small scale warehousing and distribution, research and development, and administrative and service types of uses." As proposed, the project is consistent with the General Plan.

The project site has a zoning designation of Restricted Manufacturing (MR). As described in Grand Terrace Municipal Code Chapter 18.39, *MR Restricted Manufacturing District*, the purpose of the MR district is to provide for the development of low intensity and low impact light manufacturing and industrial uses. Per the Municipal Code, regulations of this district are intended to allow various manufacturing and industrial uses which operate free of objectionable noise, dust, odor, or other nuisances to other (non-industrial uses) in planned, architecturally integrated building groups. Permitted uses in the MR district include, but are not limited to, agricultural and nursery supplies and services; automotive related services (including motorcycles, boats, recreational vehicles, trailers and campers): parts and supplies; building maintenance services and supplies sales; communication services; laundry/cleaning services; light manufacturing; printing/reproduction services; public storage facilities; and research services. As proposed, the project is consistent with the zoning designation.

As discussed in Section 4.14, *Population and Housing*, the project would not generate new housing or new residents, and as such, would not induce population growth in the project area. In addition, the project site increase of approximately 175 permanent employees would be minimal in comparison to the increase anticipated in the SCAG Growth Forecast. The proposed project is an allowed use under the site's existing land use and zoning designations, and it can be concluded that the proposed project would be consistent with the projections included in the 2022 AQMP. A less than significant impact would occur in this regard.

b) Would the project implement all feasible air quality mitigation measures?

The proposed project would result in less than significant air quality impacts. Compliance with all feasible emission reduction rules and measures identified by the SCAQMD would be required as identified in Responses 4.3(b) and 4.3(c). As such, the proposed project meets this 2022 AQMP consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth in the AQMP?

Land use planning strategies set forth in the 2022 AQMP are primarily based on the 2020-2045 RTP/SCS. The project would implement a mandatory Commute Trip Reduction (CTR) program to encourage employees to carpool, take transit, and walk and bike to work. Therefore, the project would be consistent with the actions and strategies of the 2020-2045 RTP/SCS. In addition, as discussed above, the project would be consistent with the General Plan land use designation. As such, the proposed project meets this AQMP consistency criterion.

In conclusion, the determination of 2022 AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. Further, the proposed project's long-term influence on air quality in the Basin would also be consistent with the SCAQMD and SCAG's goals and policies and is considered consistent with the 2022 AQMP.

Mitigation Measures: No mitigation measures are 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.

Criteria Pollutants

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratosphere (the "good" ozone layer) extends upward from about 10 to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), NO_X, and sunlight to form; therefore, VOCs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the Earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction

operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to $PM_{2.5}$, both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the US Environmental Protection Agency (EPA) announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the US Supreme Court reversed this decision and upheld the EPA's new standards. On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised and established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Sulfur Dioxide (SO_2). SO_2 is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. SO_2 is often used interchangeably with SO_X. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: CO, CO_2, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG interchangeably (see below).

Reactive Organic Gases (ROG). Similar to VOC, ROG are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant.

Short-Term (Construction) Air Emissions

The following assumptions were used in the analysis of the proposed project's construction-related air emissions impacts:

- Construction would commence in Spring 2024 for a duration of approximately 15 months;
- Grading activity would involve the import of 7,000 cubic yards of soil;
- Fugitive dust mitigation was applied as per SCAQMD Rule 403 – Fugitive Dust (2 times watering per day), limiting vehicle speed on unpaved surfaces to 15 miles per hour, and soil moisture maintained at 12 percent);
- Construction equipment inventory was derived from the CalEEMod model equipment inventory; and
- Demolition and hauling of approximately 10,000 tons of existing structures and asphalt hardscape.

Table 2, *Project-Generated Construction Emissions*, presents the anticipated daily short-term construction emissions; refer to Appendix F, *AQ, GHG, and Energy Analysis*, for the CalEEMod outputs and results. As noted, the project's construction emissions would not exceed any SCAQMD's regional emissions significance thresholds. Therefore, project construction would not significantly impact regional air quality on a project-level or cumulative basis. Impacts would be less than significant.

Table 2: Project-Generated Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2024 Construction Emissions[2]	3.8	36.1	34.0	0.1	16.0	5.6
2025 Construction Emissions[2]	68.2	11.9	18.0	0.0	1.6	0.7
Maximum Daily Emissions	68.2	36.1	34.0	0.1	16.0	5.6
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Source: EPD Solutions, Inc., *Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis), July 5, 2023, Table 8.
Notes:
ROG = reactive organic gases NOx = oxides of nitrogen PM10 = particulate matter 10 microns or less in diameter
PM2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide SOx = sulfur oxides

Long-term (Operational) Air Emissions

Table 3, *Maximum Daily Regional Operational Emissions*, shows the project's operational mobile and area source emissions (described below). As shown, the project's energy source emissions would not exceed SCAQMD thresholds.

Mobile Source Emissions

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions, and constitute the largest source of operational emissions. The emissions from mobile sources are estimated based on the number of daily vehicle trips, vehicle trip distance, the types of vehicles, and emission factors that relate the emissions per vehicle mile traveled, time idling, and the number of vehicle starts. The operational vehicles of an industrial project typically consist of passenger, light-duty, medium-duty trucks, and heavy-duty trucks (2, 3, and 4+axle trucks).

The operational mobile emission analysis quantified the emissions from two classes of mobile source vehicles: 1) "local" project vehicles consisting of passenger vehicles and light heavy-duty trucks (2-axle trucks); and 2) and "haul" trucks consisting of medium-heavy (3-axle trucks) and heavy-heavy duty trucks (4+axle trucks). This classification was done to allow a more accurate accounting of differences in the trip distances (the distance each vehicle travels to and from the project site) from the various project vehicle types. The trip distance for the local project vehicles assumed the default trip distances prescribed in the CalEEMod model. The trip distance for the haul trucks assumed an average trip distance of 40 miles per SCAQMD guidance. The passenger vehicles, in turn, were subdivided into Light-Duty-Auto vehicles, Light-Duty-Trucks, and Medium-Duty-Vehicles vehicle types based on the relative percentages of these vehicles contained within the CalEEMod model. The number of daily vehicle trips and vehicle fleet mix for the project and the Existing Land Use were derived from the trip generation study results prepared for the project. The number of daily trips is estimated by applying a trip generation rate specific to the type and size of land use analyzed. The project is estimated to generate 457 daily vehicle trips.

As shown in Table 3, the project's operational mobile source emissions would not exceed SCAQMD thresholds. Impacts would be less than significant.

Area Source Emissions

The area source and energy source operational emissions for the project and the Existing Land Use were derived from the default estimates produced by the CalEEMod model. As shown in Table 3, the project's maximum daily regional operational emission estimates for all criteria pollutants would be below the SCAQMD's significance thresholds. Impacts would be less than significant.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity and natural gas (non-hearth) usage associated with the proposed project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. It should be noted that the project would comply with the most current version of the California Building Code and Title 24 standards, which would further reduce the proposed project's energy use. As indicated in Table 3, the project's operational energy source emissions would not exceed SCAQMD thresholds. Impacts would be less than significant.

Table 3: Maximum Daily Regional Operational Emissions

Operational Activity		Maximum Daily Regional Emissions (pounds/day)[1]				
		ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Area		5.4	0.1	7.5	<0.1	<0.1
Energy		0.1	1.2	1.0	0.1	0.1
Mobile		1.2	15.5	20.6	7.4	2.1
Offroad Equipment		0.0	1.8	17.6	0.0	0.0
Total Project Operational Emissions	**6.7**	**18.6**	**46.7**	**7.5**	**2.2**	
SCAQMD Threshold	*55*	*55*		*550*	*150*	*55*
Threshold Exceeded?	***No***	***No***		***No***	***No***	***No***

Source: EPD Solutions, Inc., *Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis), July 5, 2023, Table 1 and 13.
Notes:
(1) Indicated emissions are the greater of the winter and summer seasons
NOx = oxides of nitrogen PM10 = particulate matter 10 microns or less in diameter ROG = reactive organic gases
PM2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide.

Mitigation Measures: No mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The CARB has identified the following groups of individuals as those most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The closest sensitive receptor near the project site is an existing residence approximately 35 meters (approximately 115 feet) northwest of the Project across Barton Road. Therefore, the distance for sensitive receptors in the LST assessment was set to 35 meters to estimate PM_{10} and $PM_{2.5}$ impacts for exposures over 24 hours. The closest worker receptors where such a receptor could be exposed for up to 8 hours are located at the industrial buildings surrounding the project site. Therefore, the receptor distance for a worker receptor was set at 25 meters, the shortest distance contained in the SCAQMD's LST emission lookup tables for estimating NO_2 and CO impacts, defined as an average over a one-hour exposure duration. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds for construction and operational impacts (stationary sources only).

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, $PM_{2.5}$, and/or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The project site is located within Source Receptor Area (SRA) 34, Central San Bernardino Valley.

Construction LST

Table 4, *Localized Construction Emissions*, presents the project's localized construction impact assessment. As shown, the project's localized construction emissions would not exceed the SCAQMD's construction localized emission significance thresholds for any pollutant. Therefore, localized significance impacts from project-related construction activities would be less than significant.

Table 4: Localized Construction Emissions

Source	Pollutant (pounds/day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
2024 Localized Emissions	36.0	32.9	14.8	5.6
2025 Localized Emissions	10.4	13.0	0.4	0.4
Maximum Daily Emissions	**36.0**	**32.9**	**14.8**	**5.6**
Localized Significance Threshold	220	1,360	20	7
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Source: EPD Solutions, Inc., *Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis), July 5, 2023, Tables 3 and 9.
Notes:
NOx = oxides of nitrogen PM10 = particulate matter 10 microns or less in diameter
PM2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Operational LST

Table 5, *Localized Operational Emissions*, presents the project's localized operational impact assessment. As shown, the project's localized operational emissions would not exceed the SCAQMD's operational localized emission significance thresholds for any pollutant. Therefore, localized significance impacts from the project's operational activities would be less than significant.

Table 5: Localized Operational Emissions

Operational Activity	Maximum Daily Localized Emissions (pounds/day)[1]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	0.1	7.5	<0.1	<0.1
Energy	1.2	1.0	0.1	0.1
Mobile	1.6	3.5	0.1	<0.1
Offroad Equipment	3.5	35.2	0.0	0.0
Total Project Operational Emissions	**6.4**	**47.2**	**0.2**	**0.1**
SCAQMD Threshold	*270*	*1,748*	*7*	*2*
Threshold Exceeded?	***No***	***No***	***No***	***No***

Source: EPD Solutions, Inc., *Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis), July 5, 2023, Tables 4 and 14.
Notes:
1 = Indicated emissions are the greater of the winter and summer seasons
NOx = oxides of nitrogen PM10 = particulate matter 10 microns or less in diameter ROG = reactive organic gases
PM2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (e.g., adversely affecting residents, school children, hospital patients, and the elderly).

The Basin is designated as an attainment/maintenance area for the Federal CO standards and an attainment area under State standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on US urban and rural roads have increased; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.[5] Three major control programs have contributed to the reduced per-vehicle CO emissions, including exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD *CEQA Air Quality Handbook*, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 parts per million (ppm), which is the 8-hour California ambient air quality standard. The closest monitoring station to the project area that monitors CO concentration is San Bernardino – 4th Street station. The maximum CO concentration at San Bernardino – 4th Street station was measured at 1.553 ppm in 2023.[6] Given that the background CO concentration does not currently exceed 9.0 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

Air Quality Health Impacts

A noise (HRA) was prepared for the project on July 5, 2023, to identify the potential health risk impacts from the project's operation and compare these impacts to the operation of the Existing Land Use located at the project site. The HRA focuses on the emissions of diesel particulate matter (DPM) from the operation of the heavy-duty diesel vehicles that

[5] US Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10. Accessed August 23, 2023.
[6] California Air Resources Board, Air Quality and Meteorological Information, https://www.arb.ca.gov/aqmis2/aqdselect.php?tab=specialrpt. Accessed August 23, 2023.

would serve the project and the Existing Land Use on a daily basis. The CARB has identified DPM as a carcinogenic substance responsible for nearly 70 percent of the airborne cancer risk in California.

The City has not adopted a numerical significance threshold for cancer risk or non-cancer hazards. Therefore, this assessment adopted the significance thresholds recommended by the SCAQMD. The relevant significance thresholds are provided below:

- Cancer Risk: ten (10) persons per million population as the maximum acceptable incremental cancer risk due to exposure to toxic air contaminants (TAC);
- Non-cancer Hazard Index: 1.0

Table 6, *Summary of Health Risk Impact Assessment*, summarizes the cancer risks and chronic non-cancer hazards at the maximum impacted receptors resulting from the project's and the Existing Land Use's operational DPM emissions. As noted in Table 6, the net difference between the project's 30-year cancer risk exposure and the Existing Land Use is 0.5 in one million. As a result, the net difference is less than the SCAQMD's cancer risk significance threshold. In addition, the project's incremental maximum cancer risk of 1.1 in one million for the 30-year exposure duration is also less than the SCAQMD's cancer risk significance threshold. Impacts related to health risks would be less than significant.

Table 6: Summary of Health Risk Impact Assessment

Receptor[1]	**Maximum Cancer Risk[2] (per million)**					
	Project	**Existing Land Use**	**Net Difference (Project – Existing Land Use) (per million)**	**SCAQMD Significance Threshold (per million)**	**Net Difference Exceeds Threshold?**	**Project Exceeds Threshold ?**
Maximum Impact – 30-Year Lifetime	1.1	0.5	0.5	10	No	No
Maximum Impact – 9-Year Old Child	0.8	0.4	0.4	10	No	No
Maximum Impact – 70-Year Lifetime	1.3	0.6	0.7	10	No	No
Maximum Impact – Worker	0.2	0.1	0.1	10	No	No
Receptor[1]	**Maximum Chronic Non-Cancer Hazard Index**					
	Project	**Existing Land Use**	**Net Difference** (Project – Existing Land Use)	**SCAQMD Significance Threshold**	**Exceeds Threshold?**	**Project Exceeds Threshold ?**
Maximum Impact – Sensitive Receptors	<0.1	<0.1	<0.1	1.0	No	No
Maximum Impact – Worker Receptors	<0.1	<0.1	<0.1		No	No

Source: EPD Solutions, Inc., *Comparison of Health Risk Impacts for the Proposed Barton Road Industrial Project and the Existing Land Use, Grand Terrace, CA (Revised),* July 5, 2023, Table 11.

Notes:
1 = The maximum impacted sensitive receptor is located approximately 35 meters north of the project across Barton Road. The maximum worker receptor was located within the industrial area along the east boundary of the project.
2 = The indicated risks and hazards and the net differences are shown at the location of maximum impact from the project.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. The project would also comply with SCAQMD Regulation XI, *Rule 1113 – Architectural Coating*, which would minimize odor impacts from ROG emissions during architectural coating. Therefore, odors associated with project construction would be less than significant.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors. Therefore, odors associated with operation of the project would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.4 BIOLOGICAL RESOURCES

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

This section is primarily based upon the *General Biological Assessment for APNs 1167-121-02, 1167-121-03, 1167-121-04, 1167-121-07, a portion of 1167-121-08 and 1167-131-11* (General Biological Assessment) prepared by Hernandez Environmental Services, dated May 2023. The Biological Assessment is provided as Appendix A of this IS/MND.

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 part of the field survey conducted for the General Biological Assessment, two habitat types were observed within the project site: 7.71 acres of developed industrial habitat and 1.31 acres of disturbed habitat, with a further 0.18 acres consisting of disturbed dirt road. Developed industrial areas are the portions of the project site that were previously used as industrial and commercial buildings. The disturbed habitat appears to be graded or regularly disturbed for

weed abatement. Vegetation in these areas is predominantly non-native plant species. The dominant plant species observed within these areas include redstem filaree (*Erodium cicutarium*), shortpod mustard (*Hirschfeldia incana*), and stinknet (*Oncosiphon pilulifer*).

According to the General Biological Assessment, a total of 55 sensitive species of plants and 65 sensitive species of animals have the potential to occur on or within the vicinity of the project location. These include those species listed or candidates for listing by the US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), and Bureau of Land Management (BLM). No special-status plant or wildlife species identified by the California Natural Diversity Database (CNDDB) were observed during the field survey. The project site is not located within any designated Federal critical habitat.

Migratory non-game native bird species are protected under the Federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The entire study area (project site) has shrubs and trees that can be used by nesting songbirds during the nesting bird season. Therefore, the project has the potential to impact nesting birds due to the existing shrubs and trees that could be used by nesting birds during the nesting bird season. In order to avoid or reduce this potential environmental impact, the project is required to implement **Mitigation Measure BIO-1**, which requires a preconstruction nesting bird survey in the event that ground-disturbing and vegetation-clearing activities cannot be avoided during the nesting bird season. With implementation of **Mitigation Measure BIO-1**, impacts to nesting birds would be reduced to a less than significant level.

Mitigation Measures:

BIO-1 **Pre-Construction Nesting Bird Survey.** Pursuant to the Migratory Bird Treaty Act and the California Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat shall be conducted outside the avian nesting season. If ground disturbing and vegetation-clearing activities cannot be avoided during the nesting bird season (February 1 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey within all areas of breeding/nesting habitat within and adjacent to the project site prior to initiation of project activities that would remove vegetation or otherwise disturb nesting activity (for instance, mobilization of heavy equipment). Surveys shall be conducted not more than three days prior to initiation of activities.

If nesting birds are encountered, a qualified biologist shall establish an avoidance buffer zone around the nest (buffer zones vary according to species involved and shall be determined by the qualified biologist). No activities that would adversely affect the nest shall occur within the buffer zone until the qualified biologist has determined the nest is no longer active and the young are no longer dependent on the nest.

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

No Impact. According to the General Biological Assessment, the project site does not contain any drainages, riparian, or riverine features. There are no CDFW, US Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project boundaries. Therefore, the project would not involve substantial adverse effects on any riparian habitat or sensitive natural communities. No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The project site does not contain any wetlands or vernal pools. Therefore, the project would not involve substantial adverse effects on State or Federally protected wetlands. No impact would occur.

Mitigation Measures: No mitigation measures are 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?

No Impact. Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones. Usually, mountain canyons or riparian corridors are used by wildlife as corridors. The project site is surrounded by industrial areas and does not contain mountain canyons or riparian corridors nearby. Furthermore, the site is blocked off by industrial developments from the north, east, and south. No wildlife movement corridors were found to be present on the project site. Therefore, the project would result in no impact relative to wildlife corridors or native wildlife nursery sites.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The proposed project is required to comply with all relevant policies and ordinances relating to tree preservation, including Chapter 12.28, *Street and Parkway Trees*, of the Grand Terrace Municipal Code which regulates the installation, maintenance, removal and pruning of trees within the City's rights-of-way, and provides guidance on the maintenance, pruning, and removal of trees within the project site. The project does not include provisions that could conflict with the Grand Terrace Municipal Code; therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. According to the CDFW's *California Natural Community Conservation Plans*, the proposed project is not located within an adopted habitat conservation plan or natural community conservation plan. No other approved local, regional, or State habitat conversation plans apply to the site. Thus, development of the proposed project would not conflict with any approved habitat conservation plan. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.5 CULTURAL RESOURCES

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

This section is primarily based upon the *Cultural Resources Study for the Barton Road Warehouse Project* (Cultural Resources Study) prepared by BFSA Solutions, Inc., dated October 28, 2022, revised June 21, 2023, provided as Appendix I of this IS/MND.

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

Less Than Significant Impact. Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. Damaging or demolition of historic resources is typically considered to be a significant impact. Impacts to historic resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historic resource.

Based on the records search conducted as part of the project's Cultural Resources Study, one (1) historic resource (the Riverside-Warm Creek Canal) was recorded in the southeastern corner of the project site. However, no historic-period features associated with the Riverside-Warm Creek Canal were identified within the project site.

In addition, 39 additional resources were identified within one (1) mile of the project site. Of the previously recorded resources, 14 are prehistoric and remaining resources are all historic. The remaining historic resources are all associated with the built environment and consist of railroads, canals, residences, community buildings, bridges, industrial structures, and transmission lines/towers.

At the time of initiating the environmental review in March 2023 there were three (3) historic-era buildings remaining on-site. However, the site has since undergone demolition of these buildings per City-issued demolition permits. APN 1167-121-02 previously contained two commercial/industrial buildings with one built in 1953 and the other between 1959 and 1966, as well as one former residence. The Cultural Resources Study noted that none of the original buildings, built in 1938, appeared to be extant on the property. Further, none of the remaining buildings were determined to be eligible for listing as a historical resource pursuant to CEQA Guidelines Section 15064.5b, nor does there appear to be evidence that the property has the potential to yield important information regarding the history of Grand Terrace, San Bernardino County, or the nation. Therefore, a less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact with Mitigation Incorporated. No archaeological resources are known to exist within the City of Grand Terrace. Notwithstanding, should excavation activities associated with future development activities encounter archaeological resources during earthwork, implementation of General Plan Goal 4.9 and Policy 4.9.1 ensures that proper action would be taken with regard to the disposition of archaeological resources uncovered throughout the City.

Ground-disturbing activities have the potential to reveal buried deposits not observed on the surface during previous surveys. To minimize potential impacts to archaeological resources, **Mitigation Measure CR-1** requires a qualified archaeologist to assess any cultural resources discovered during construction activities. If a cultural resource is discovered, work must be temporarily halted, and a qualified archaeologist must be contacted to evaluate and recommend proper treatment for the resource. Further, and as a result of AB 52 consultation, **Mitigation Measure CR-2** has been included in the event a field discovery is made, then the project is required to implement a Monitoring and Treatment Plan. With the incorporation of **Mitigation Measures CR-1** and **CR-2,** impacts to archaeological resources would be less than significant.

Mitigation Measures:

CR-1 **Qualified Archeologist.** In the event that cultural resources are discovered during initial ground disturbing activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of the Interior standards shall be hired by the Project Owner to assess the find. Work on the other portions of the project site outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in Mitigation Measure TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regard to significance and treatment.

CR-2 **Cultural Resource Monitoring and Treatment Plan**. If during ground disturbing activities, significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended 2015), are discovered and avoidance cannot be ensured, the archaeologist shall implement a Monitoring and Treatment Plan, the drafts of which shall be provided to the YSMN for review and comment, as detailed in Mitigation Measure TCR-1. The archaeologist shall monitor the remainder of the project and implement the plan accordingly.

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

Less Than Significant Impact with Mitigation Incorporated. Due to the level of disturbance on the project site and in the site vicinity, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or ground-disturbing activities. Nonetheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws, and **Mitigation Measure CR-3** has been included pursuant to AB 52 consultation. If human remains are found, those remains would require proper treatment in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 requires if any human remains are accidentally discovered during excavation of a site, the County coroner shall be notified of the find immediately, and 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. As required by State law, if the remains are determined to be Native American, the County coroner shall notify the Native American Heritage

Commission (NAHC), which would 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 and shall have the opportunity to offer recommendations for the disposition of the remains. Following compliance with Mitigation Measure CUL-3, impacts related to the disturbance of human remains would be less than significant.

Mitigation Measure:

CR-3 **Human Remains.** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County coroner shall be contacted pursuant to California Health and Safety Code Section 7050.5 and that code enforced for the duration of the project.

4.6 ENERGY

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

This section is primarily based upon the *Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis) prepared by EPD Solutions, Inc., dated July 5, 2023. The AQ, GHG, and Energy Analysis is provided as Appendix F of this IS/MND.

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

Less Than Significant Impact.

Construction Impacts

Electricity and Natural Gas Usage

During project construction, SCE would provide temporary electric power for necessary lighting and electronic equipment such as computers inside temporary construction trailers. The electricity used for such activities would be temporary, substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption.

Natural gas is not anticipated to be required during project construction. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below in the "Petroleum Fuel Usage" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. Impacts would be less than significant.

Petroleum Fuel Usage

Petroleum would be consumed throughout project construction. Off-road heavy-duty construction equipment associated with construction activities would rely on diesel fuel as vendors and haul trucks would deliver building materials and remove the demolition debris and soil from the project site. Construction workers would travel to and from the project site throughout construction. This analysis assumed construction workers would travel to and from the site in gasoline-powered passenger vehicles (cars, SUVs, and light-duty trucks) while all vendor and haul trucks were assumed to be diesel-fueled. Project construction is estimated to require 25,423 gallons of diesel fuel and 12,396 gallons of gasoline for the off-road construction equipment. These estimates are based on the total fuel consumption and horsepower-hour data in the CARB OFFROAD2021 emission model for specific diesel construction equipment

employed in the project construction. Note that the estimated total fuel consumption during construction likely substantially overstates the actual amount of fuel usage. Although construction equipment is listed under a particular construction activity, there is a likelihood that the particular equipment would not operate over the entire duration of the construction activity. For example, a crane is listed during building construction. However, it is not anticipated that the crane would operate over the entire duration of 230 days assumed during the building construction activity.

Table 7, *Estimated Project Construction Vehicle Fuel Usage*, summarizes the project's construction vehicle fuel usage. The fuel usage is based on the vehicle type (worker vehicle, vendor vehicle, and haul truck), vehicle miles traveled, and fuel usage factors contained in the CARB EMFAC2021 mobile source emission model. Table 8, *Total Project Construction Fuel Usage*, summarizes the total fuel construction during construction.

Table 7: Estimated Project Construction Vehicle Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	4,526	0
Vendor Trucks	8,770	0
Worker Vehicles	0	12,396
Construction Vehicles Total	**13,296**	**12,396**
Source: EPD Solutions, Inc., Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA (July 5, 2023), Table 27.		

Table 8: Total Project Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	13,296	12,396
Off-road Construction Equipment	12,127	0
Construction Total	**25,423**	**12,396**
Source: EPD Solutions, Inc., Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA (July 5, 2023), Table 28.		

The equipment used for project construction would be required to conform to CARB regulations and California emissions standards. For example, California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3) limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. All project-related construction equipment would be required to conform to current emissions standards (and related fuel efficiencies). Therefore, the project's construction-related energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Operational Impacts

Table 9, *Annual Operational Energy Requirements*, summarizes the project's operational energy requirements compared to the existing land use. As detailed in Table 9, operation of the project would result in greater fuel use, vehicle miles traveled, natural gas usage, and electrical demand compared to the existing land use.

Table 9: Annual Operational Energy Requirements

Operational Source (value per year)			
	Annual VMT	**Gallons of Fuel**	
		Gasoline	**Diesel**
Transportation – Project	1,776,426	52,285	63,581
Transportation – Existing Land Use	922,562	27,153	33,020
Transportation – Net	853,864	25,132	30,561
Thousand Kilowatt Hours			
Electricity – Project	1,101,640		
Electricity – Existing Land Use	123,514		
Electricity – Net	978,126		
Thousand Kilowatt Hours			
Natural Gas – Project	4,540,604		
Natural Gas – Existing Land Use	555,375		
Natural Gas – Net	3,985,229		
Source: EPD Solutions, Inc., Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA (July 5, 2023), Table 28.			

The project would be subject to the 2022 California Green Building Standards Code (CALGreen). The project would provide for and promote energy efficiencies equal to or beyond those required under other applicable Federal and State standards and regulations, and in so doing, would meet or exceed all the standards of California Building Standards Code (CBC) Title 24. The project's building shell and components—windows, roof systems, electrical and lighting systems, and heating, ventilating, and air conditioning systems—would be required to meet applicable Title 24 standards. Because the project is required by State law to be designed, constructed, and operated to meet or exceed all applicable energy efficiency standards, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Accordingly, impacts would be less than significant. Moreover, energy consumed by project operations is calculated to be comparable to, or less than, energy consumed by other industrial uses of similar scale and intensity that are constructed and operating in California. Therefore, the project's operational energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Following completion of the proposed project, Southern California Edison (SCE) would provide electricity, and Southern California Gas Company (SoCalGas) would provide natural gas to the project site. Energy use associated with operation of the proposed project would be the same as typical industrial developments. The project does not include any unusual project characteristics or require special equipment that would be more energy intensive than typical uses. The project would include ENERGY STAR-rated appliances and energy efficient boilers and heating, ventilation, air conditioning (HVAC) systems, and water-efficient landscaping in compliance with the most current Title 24 energy efficiency standards. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employees as they travel to and from work. With regard to transportation energy use, the proposed project would not have control over fuel consumption factors such as vehicle type(s), engine efficiency, vehicle miles traveled, etc. However, due to CARB's increasing vehicle efficiency standards it is assumed the long-term transportation fuel consumption from employees would steadily decline over time and ensure that vehicle fuel consumption is not wasteful or inefficient.

The proposed project would be subject to all relevant provisions of the most recent update of the California Building Energy Efficiency Standards and CALGreen Code. Compliance with these standards would ensure that the building

energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less than Significant Impact. The City currently does not have a plan pertaining to renewable energy or energy efficiency. Future development projects would be required to comply with the applicable goals and policies identified in the City's General Plan, as outlined in Table 10, *General Plan Project Consistency Analysis*.

Table 10: General Plan Project Consistency Analysis

Goals/Policies	Project Consistency
Goal 4.6: The City shall support and promote the conservation of energy resources.	
Policy 4.6.3: The City shall encourage energy and environmentally sustainable design in new land development projects using the standards of Leadership in Energy and Environmental Design (LEED).	**Consistent.** The project would be required to comply with Title 24 Building Energy Efficiency Standards, under which nonresidential buildings would use about 30 percent less energy, mainly to lighting upgrades, when compared to 2016 standards. The project would also be required to comply with applicable requirements of the CALGreen Code. The CALGreen code requires installation of electric vehicle (EV) charging stations, designated EV parking spaces, and bike parking spaces. Upon compliance with 2022 Title 24 Building Energy Efficiency Standards and the CALGreen code, the project would be consistent in this regard.
Policy 4.6.4: The City shall work with its franchised solid waste collection company to implement recycling programs designed to reduce the per capita waste generation within the City while responding to the requirements of the California Integrated Waste Management Act of 1989.	**Not Applicable.** This goal is directed at the City, and not at individual development projects. Nonetheless, as discussed in Section 4.19, *Utilities and Service Systems*, the project would not generate solid waste in excess of Sate or local standards and would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. The project would be consistent in this regard.
Goal 4.7: Support air quality planning through land use policies, outreach efforts, and participation in regional air quality planning.	
Policy 4.7.7: The City shall promote energy conservation efforts in new and existing residences and businesses.	**Consistent.** Refer to Policy 4.6.3.
Goal 9.1: Reduce the City's per capita energy usage.	
Policy 9.1.1: The City shall work with Southern California Edison to promote energy conservation at residences and businesses.	**Not Applicable.** This goal is directed at the City, and not at individual development projects.
Policy 9.1.2: The City shall incorporate energy conservation measures into conditions of approval for new development projects.	**Consistent.** Refer to Policy 4.6.3.

Goals/Policies	Project Consistency
Goal 9.2: Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.	
Policy 9.2.2: Require all new development projects to recycle construction and demolition wastes.	**Consistent.** As discussed in Section 4.19, *Utilities and Service Systems*, the project would be required to recycle construction and demolition wastes. In addition, implementation of the project would not involve significant impacts related to solid waste. The project would be consistent in this regard.
Goal 9.3: Support sustainable development through good urban design practices.	
Policy 9.3.1: Incorporate "green" building practices into the review of all new or renovated development projects.	**Consistent.** Refer to Policy 4.6.3.
Policy 9.3.2: Site and building design in new developments should maximize opportunities for efficient energy performance.	**Consistent.** Refer to Policy 4.6.3.
Source: City of Grand Terrace, *Grand Terrace General Plan,* adopted April 27, 2010.	

As shown in Table 10, the project would comply with the General Plan's energy-efficient goals and policies that would implement energy-efficient measures and subsequently reduce energy consumption within the City. Compliance with Title 24 and CALGreen standards would ensure that the project incorporates energy-efficient windows, insulation, lighting, and ventilation systems, as well as water-efficient fixtures and EV charging infrastructure, which is consistent with the goals and policies of the General Plan. Additionally, per the Renewables Portfolio Standard (RPS), the project would utilize electricity provided by SCE that would achieve 100 percent renewable energy by 2045. Therefore, the project would result in less than significant impacts associated with renewable energy or energy efficiency plans.

Mitigation Measures: No mitigation measures are required.

4.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
2) Strong seismic ground shaking?			✓	
3) Seismic-related ground failure, including liquefaction?				✓
4) Landslides?				✓
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		✓		
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				✓
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

The analysis and findings throughout this section are based on the *Geotechnical Investigation, Proposed Warehouse, 21801-21823 Barton Road* (Geotechnical Investigation), prepared by Southern California Geotechnical, dated March 11, 2022, and the *Paleontological Assessment for the Barton Road Warehouse Project, City of Grand Terrace, San Bernardino County, California, APNs 1167-121-02, -03, -04, -07, a portion of -08 and APN 1167-131-11* (Paleontological Study) prepared by BFSA Environmental Services, dated June 21, 2023. The Geotechnical Investigation and Paleontological Study are provided as Appendix C and K, respectively, of this IS/MND.

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The project site, like the rest of Southern California, is located within a seismically active margin between the North American and Pacific tectonic plates. Faults that have historically produced earthquakes or show evidence

of movement within the past 11,000 years are known as "active faults." Based on the California Department of Conservation Earthquake Hazards Zone Application, the project site is not located within an Alquist-Priolo Fault Zone. Therefore, the possibility of significant fault rupture on the site is considered to be low. Although no active faults traverse the project site, as a condition of issuance of building and grading permits, the project would be required to comply with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, as well as with the 2019 CBC (adopted by reference in Grand Terrace Municipal Code Chapter 15.08, *Building Code*), which includes specific design measures intended to maximize structural stability in the event of an earthquake. The project would result in no impact.

Mitigation Measures: No mitigation measures are required.

2) Strong seismic ground shaking?

Less Than Significant Impact. Future development associated with the project site could expose persons or structures to the effects of strong seismic ground shaking. The intensity of ground shaking and the degree of impact would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter to the project site. Impacts concerning strong seismic ground shaking would be addressed by compliance with the seismic design requirements identified in the 2022 CBC. Pursuant to the 2022 CBC, which the City utilizes as its building code, structures built for human occupancy must be designed to meet or exceed the 2022 CBC standards for earthquake resistance. The 2022 CBC includes earthquake safety standards based on a variety of factors including occupancy type, types of soils and rocks on-site, and strength of probable ground motion at the project site. Compliance with the 2022 CBC would reduce impacts related to strong seismic ground shaking to less than significant levels.

Mitigation Measures: No mitigation measures are required.

3) Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction and seismically induced settlement or ground failure is generally related to strong seismic shaking events where the groundwater occurs at shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless deposits. Liquefaction typically results in the loss of shear strength of a soil, which occurs due to the increase of pore water pressure caused by the rearrangement of soil particles induced by shaking or vibration. During liquefaction, soil strata behave similarly to a heavy liquid. Based on the Geotechnical Investigation, the project site is not located within an area of liquefaction susceptibility. As such, there would be no impact.

Mitigation Measures: No mitigation measures are required.

4) Landslides?

No Impact. According to the General Plan, the project site is not prone to slope instability hazards, such as landslides. The project site generally slopes downward to the south at an approximate gradient of less than one percent. Thus, the potential for landslides is not expected to occur on the project site. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Soil erosion typically occurs within unconsolidated alluvium and surficial soils in sloping topographies. Construction activities associated with future development would include clearing, excavation, and

grading, which would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion.

Short-term construction activities could increase soil exposure and result in limited soil erosion, depending on the extent of clearing, grading, or excavation and the length of time that disturbed soils are left exposed. However, all construction activities would be subject to compliance with the requirements set forth in the Santa Ana Regional Water Quality Control Board's Stormwater Quality Management Plan, and the implementation of best management practices (BMPs) would reduce the volume of sediment-laden runoff discharging from the site during project construction, and less than significant impact would occur in this regard.

Additionally, General Plan Policy 5.1.4 requires that grading plans for development projects include an approved drainage and erosion control plan to minimize the impacts from erosion and sedimentation during grading. Following compliance with the National Pollutant Discharge Elimination System (NPDES), the *Preliminary Water Quality Management Plan* (WQMP), and Stormwater Quality BMP Guidance Manual requirements, the project's operational impacts related to erosion or loss of topsoil would be less than significant.

Mitigation Measures: No mitigation measures are 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?

Less Than Significant Impact With Mitigation Incorporated: Refer to Responses 4.7(a)(3) and 4.7(a)(4) for a discussion concerning liquefaction and landslides.

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move down slopes on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, the liquefiable soil zone must be laterally continuous, unconstrained laterally, and free to move along sloping ground. Based on the Geotechnical Investigation, the potential for lateral spreading on the project site is considered to be low. Therefore, impacts would be less than significant in regard to lateral spreading.

Subsidence can occur in various ways during an earthquake. Large areas of land can subside drastically during an earthquake because of offset along fault lines; land subsidence can also occur as a result of settling and compacting of unconsolidated sediment (i.e., settlement) from seismic shaking. Based on the Geotechnical Investigation, the potential for subsidence on the project site is considered to be low. Therefore, impacts would be less than significant in regard to subsidence.

Collapsible soils are generally dry, low density, silty soils with high void space or air gaps between the soil grains, which, when unsaturated, can withstand relatively high pressure without showing significant change in volume. However, upon wetting, these soils are susceptible to a large and sudden reduction in volume. Based on the Geotechnical Investigation, some of the native alluvium within the upper six feet of existing soil possesses a slight potential for collapse when inundated with water. **Mitigation Measure GEO-1** requires that the project site be over-excavated during grading to remove potentially collapsible soils. With implementation of **Mitigation Measure GEO-1**, impacts related to soil collapse would be less than significant.

Mitigation Measures:

GEO-1 **Over-Excavation.** During grading activities, the Construction Contractor shall ensure that that existing soils are over-excavated to a depth of six (6) feet below existing grade and to a depth of four

(4) feet below the pad grade. The foundation influence zones shall be over-excavated to a depth of at four (4) feet below foundation bearing grade. The over-excavation shall also extend to a sufficient depth to remove any artificial fill soils. This measure will require site verification by the City Inspector, City Engineer, or its representative.

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

No Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements. According to the Geotechnical Investigation, the soils on the project site contain a very low expansive potential. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. No septic tanks or alternative wastewater systems would be constructed as part of the project. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated.

According to the Paleontological Study, the project site is located at the northern edge of the Peninsular Ranges geologic province, just southwest of the San Jacinto fault zone. The Santa Ana River lies less than a mile north. The project site is mapped as underlain by middle to early Pleistocene-aged very old alluvial fan sediments, composed of thick, yellowish-brown, massive to moderately well-bedded, sparsely conglomeratic arkosic sandstone,[7] with scattered pebbly horizons. This geologic unit is said to be extensively developed in the Grand Terrace area and locally contains well-bedded silty, possibly lacustrine (lake) sediments along the banks of the Santa Ana River.

The Paleontological Study prepared for the project confirmed the existence of potentially fossiliferous middle to early Pleistocene very old alluvial fan deposits at the project site. The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene alluvial fan sediments across the Inland Empire is well documented. The "high" paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments for yielding paleontological resources supports the recommendation that paleontological monitoring be implemented during mass grading and excavation activities in undisturbed Pleistocene alluvial fan sediments, as provided for in **Mitigation Measure GEO-2**, below. If paleontological resources are discovered and are determined to be significant by the project paleontologist, full-time monitoring shall be implemented. With implementation of **Mitigation Measure GEO-2**, potentially significant impacts to paleontological resources would be reduced to a less than significant level.

[7] Arkose is a detrital sedimentary rock, specifically a type of sandstone containing at least 25 percent feldspar.

Mitigation Measures:

GEO-2 **Paleontological Resources Impact Mitigation Program.** The project applicant shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) prior to approval of the grading permit and shall adhere to the following conditions:

- All mitigation programs shall be performed by a qualified professional (project) paleontologist, defined as an individual with an M.S. or Ph.D. in paleontology or geology who has proven experience in San Bernardino County paleontology and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork shall be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.

- Monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be performed by a qualified paleontologist or paleontological monitor. Starting at 5 feet below the surface, monitoring shall be conducted part-time in areas of grading or excavation in undisturbed sediments of alluvial fan deposits to look for potential fossils that might be uncovered or exposed. The frequency of part-time monitoring shall be at the discretion of the project paleontologist, based on the conditions and geology encountered, as observed by the monitoring paleontologist. If paleontological resources are discovered and are determined to be significant by the project paleontologist, full-time monitoring shall be implemented. Monitoring of disturbed deposits or artificial fill is not warranted.

- Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.

- Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils shall be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes shall be taken on the map location and stratigraphy of the site, which shall be photographed before it is vacated and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils shall be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.

- Isolated fossils shall be collected by hand, wrapped in paper, and placed in temporary collecting flats or 5-gallon buckets. Notes shall be taken on the map location and stratigraphy of the site, which shall be photographed before it is vacated and the fossils are removed to a safe place.

- Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several 5-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, multiple 5-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment.

- In accordance with the "Microfossil Salvage" section of the Society of Vertebrate Paleontology guidelines, bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) shall be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth.

- In the laboratory, individual fossils are cleaned of extraneous matrix, any breaks are repaired, and the specimen, if needed, is stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72).

- Recovered specimens shall be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.

- Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., San Bernardino County Museum) shall be conducted. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the Lead Agency (e.g., the City of Grand Terrace) shall be consulted on the repository/museum to receive the fossil material.

- A final report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate Lead Agency, shall signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

4.8 GREENHOUSE GAS EMISSIONS

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

This section is primarily based upon the *Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA*, (AQ, GHG, and Energy Analysis) prepared by EPD Solutions, Inc., dated July 5, 2023. The AQ, GHG, and Energy Analysis is provided as Appendix F of this IS/MND.

GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 418 million metric tons of carbon dioxide equivalent (million $MTCO_2e$) per year.[8] Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of carbon dioxide (CO_2), CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of July 2023, the highest monthly average concentration of CO_2 in the atmosphere was recorded at 420.09 ppm.[9]

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO_2e) concentration is required to keep global mean warming below 2 degrees Celsius (ºC),[10] which in turn is assumed to be necessary to avoid dangerous climate change.

[8] California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2019*, accessed August 2, 2023, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf
[9] Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory, The Keeling Curve*, accessed July 20, 2023, https://scripps.ucsd.edu/programs/keelingcurve/.
[10] Carbon Dioxide Equivalent (CO2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

REGULATORY FRAMEWORK

Federal

Energy Independence and Security Act of 2007. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct the National Highway Traffic Safety Administration to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

US Environmental Protection Agency Endangerment Finding. The EPA's authority to regulate GHG emissions stems from the US Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence, the EPA found that six GHGs (CO_2, CH_4, N_2O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Clean Air Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

State

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

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

The Executive Order directed the California Environmental Protection Agency (Cal/EPA) Secretary to coordinate a multiagency effort to reduce GHG emissions to the target levels. The Secretary is required to submit biannual reports to the Governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with Executive Order S-3-05, the Cal/EPA Secretary created the California Climate Action Team, made up of members from various State agencies and commissions. The Climate Action Team released its first report in March 2006, which proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08. Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of State's first climate adaptation strategy. This would result in consistent guidance from experts on how to address climate change impacts in California.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500-38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to Assembly Bill (AB) 1493 (Pavley Bill) should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Senate Bill 375. Senate Bill (SB) 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities' strategy (SCS) or alternative planning strategy (APS) that would prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, is required to provide each affected region with GHG reduction targets emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets are to be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding.

Senate Bill 32. 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.

CARB Scoping Plan. On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California would implement to reduce CO_2e emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions levels of 596 million $MTCO_2e$ under a business as usual (BAU)[11] scenario. This is a reduction of 42 million $MTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, and requires the reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, industrial, commercial, and residential). CARB used three-year average emissions, by sector, from 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce projected 2020 BAU emissions to 1990 levels, as required by AB 32.

[11] "Business as usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to http://www.arb.ca.gov/cc/inventory/data/bau.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The 2014 Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction 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. The 2014 Scoping Plan also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term Statewide emission limit would ensure that the State stays on course to meet our long-term goal." The 2014 Scoping Plan does not establish or propose any specific post-2020 goals, but identifies such goals adopted by other governments or recommended by various scientific and policy organizations.

In December 2017, CARB approved the *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Scoping Plan). This update focuses on implementation of a 40 percent reduction in GHGs by 2030 compared to 1990 levels. To achieve this, the 2017 Scoping Plan draws on a decade of successful programs that addresses the major sources of climate changing gases in every sector of the economy:

- *More Clean Cars and Trucks:* The 2017 Scoping Plan establishes far-reaching programs to incentivize the sale of zero-emission vehicles, drive the deployment of zero-emission trucks, and shift to a cleaner system of handling freight Statewide.

- *Increased Renewable Energy:* California's electric utilities are ahead of schedule meeting the requirement that 33 percent of electricity come from renewable sources by 2020. The 2017 Scoping Plan guides utility providers to 50 percent renewables, as required under SB 350.

- *Slashing Super-Pollutants:* The 2017 Scoping Plan calls for a significant cut in super-pollutants, such as $CH_4$and HFC refrigerants, which are responsible for as much as 40 percent of global warming.

- *Cleaner Industry and Electricity:* California's renewed cap-and-trade program extends the declining cap on emissions from utilities and industries and the carbon allowance auctions. The auctions would continue to fund investments in clean energy and efficiency, particularly in disadvantaged communities.

- *Cleaner Fuels:* The Low Carbon Fuel Standard would drive further development of cleaner, renewable transportation fuels to replace fossil fuels.

- *Smart Community Planning:* Local communities would continue developing plans which would further link transportation and housing policies to create sustainable communities.

- *Improved Agriculture and Forests:* The 2017 Scoping Plan also outlines innovative programs to account for and reduce emissions from agriculture, as well as forests and other natural lands.

Title 24, Part 6. The California Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6 of the California Code of Regulations (CCR) and commonly referred to as "Title 24," were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Part 6 of Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Title 24 standards took effect on January 1, 2020.

Title 24, Part 11. The California Green Building Standards Code (CCR Title 24, Part 11), commonly referred to as CALGreen, is a Statewide mandatory construction code developed and adopted by the California Building Standards

Commission and the Department of Housing and Community Development. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in five green building topical areas. The 2022 CALGreen Code went into effect on January 1, 2023.

Regional

Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. On September 3, 2020, the Regional Council of SCAG formally adopted the 2020-2045 RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by eight percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are to:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the State-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking by focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

Local

City of Grand Terrace General Plan 2010. The General Plan was adopted on April 27, 2010. The General Plan Open Space and Conservation Element and Sustainable Development Element contain the following goals and policies that are designed to reduce GHG emissions:

Open Space and Conservation Element

Goal 4.6: The City shall support and promote the conservation of energy resources.

Policy 4.6.3 The City shall encourage energy and environmentally sustainable design in new land development projects using the standards of Leadership in Energy and Environmental Design (LEED).

Policy 4.6.4 The City shall work with its franchised solid waste collection company to implement recycling programs designed to reduce the per capita waste generation within the City while responding to the requirements of the California Integrated Waste Management Act of 1989.

Goal 4.7: Support air quality planning through land use policies, outreach efforts, and participation in regional air quality planning.

Policy 4.7.7 The City shall promote energy conservation efforts in new and existing residences and businesses.

Sustainable Development Element

Goal 9.1: Reduce the City's per capita energy usage.

Policy 9.1.1 The City shall work with Southern California Edison to promote energy conservation at residences and businesses.

Policy 9.1.2 The City shall incorporate energy conservation measures into conditions of approval for new development projects.

Goal 9.2: Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.

Policy 9.2.2 Require all new development projects to recycle construction and demolition wastes.

Goal 9.3: Support sustainable development through good urban design practices.

Policy 9.3.1 Incorporate "green" building practices into the review of all new or renovated development projects.

Policy 9.3.2 Site and building design in new developments should maximize opportunities for efficient energy performance.

Goal 9.5: Provide alternative transportation modes designed to reduce vehicle miles traveled.

Policy 9.5.1 The City shall encourage alternative transportation modes, including mass transit, ride sharing, bicycles, and pedestrian transportation.

Policy 9.5.2 The City shall encourage the creation of local jobs designed to reduce commuter mileage and fuel consumption.

Policy 9.5.3 The City shall encourage new and rehabilitation projects that support alternative transportation modes.

Goal 9.8: The City Shall lead the development community by example in green building, and energy and resource conservation practices.

Policy 9.8.1 The City shall support green development standards for new or rehabilitated public buildings and facilities.

Policy 9.8.2 The City shall actively reduce greenhouse gas emissions from public facilities throughout the community.

THRESHOLDS OF SIGNIFICANCE

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a quantified or performance-based threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)).

The California Natural Resources Agency (CNRA) has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (see CEQA Guidelines Section 15064(h)(3)).[12] A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.[13]

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions, nor have the South Coast Air Quality Management District (SCAQMD), CARB, or any other State or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project's impacts related to GHG emissions focuses on its consistency with Statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the project's GHG-related impacts on the environment.

Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project's GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the project's incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

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

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

[12] See California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action (December 2009), pp. 11-13, 14, 16*; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, secretary for Natural Resources, April 13, 2009, accessed July 28, 2021, https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf.
[13] California Code of Regulation, Title 14, *CEQA Guidelines*, §15064(h)(3).

***Less Than Significant Impact*.**

Existing and Estimated Project Greenhouse Gas Emissions

Construction activities produce combustion emissions from various sources, such as site excavation, grading, utility engines, heavy-duty construction vehicles onsite, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from onsite construction activities would vary daily as construction activity levels change.

In addition, operation of the proposed project would result in area and indirect sources of operational GHG emissions that would primarily result from vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the building would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source.

The estimated operational and construction GHG emissions that would be generated from implementation of the proposed project are shown in Table 11, *Estimated Greenhouse Gas Emissions*. In accordance with SCAQMD recommendation, the project's amortized construction related GHG emissions are added to the operational emissions estimate in order to determine the Project's total annual GHG emissions. In addition, the operational emissions generated from the existing land use are shown in Table 11. As shown in Table 11, the total net difference of GHG emissions that would be generated from implementation of the proposed project in comparison to the existing land use would be less than SCAQMD and County's GHG Reduction Plan threshold of 3,000 MTCO2e per year.

Table 11: Estimated Greenhouse Gas Emissions

Activity	Project Annual GHG Emissions(1) (MTCO2e)	Existing Annual GHG Emissions(1) (MTCO2e)
Area	3	1
Energy	469	55
Mobile	2,910	792
Waste	110	5
Water	55	8
Refrigeration	2	1
Offroad Operations	46	12
Total Operational Emissions	3,596	873
Project Construction Emissions	20	-
Total Emissions	**3,616**	**873**
Net Emissions	**2,743**	
Significance Threshold	**3,000**	
Threshold Exceeded?	**No**	

Note
(1) The CalEEMod model provides GHG emission estimates in units of CO2e; which is comprised of carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). CO2 contributes more than 99 percent of the total MTCO2e emissions.

The project's regional and local operational emissions are greater than the emissions from the existing industrial land uses. As shown in Table 11, the existing uses on the site produce approximately 873 MTCO2e, the majority of which come from mobile sources (792 MTCO2e), with energy (55 MCTO2e) being the second most intensive source of GHGs. Compared to the existing land uses on the project site, the project would generate 2,743 MTCO2e more GHG emissions than at present.

Consistency with Applicable GHG Plans, Policies, or Regulations

Federal

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO_2e)[14] concentration is required to keep global mean warming below 2 degrees Celsius (^oC), which in turn is assumed to be necessary to avoid dangerous climate change.

State

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

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

Senate Bill 32. Signed into law on 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 Scoping Plan. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million

[14] Carbon Dioxide Equivalent (CO_2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

$MTCO_2e$ under a business as usual (BAU)[15] scenario. This is a reduction of 42 million $MTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, but requires further reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan 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. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term Statewide emission limit will ensure that the State stays on course to meet our long-term goal."

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017 and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 million $MTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO_2 capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.

[15] "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to http://www.arb.ca.gov/cc/inventory/data/bau.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands (NWL) to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

Consistency with the 2022 Scoping Plan

The 2022 Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2045 target. These measures build upon those identified in the First Update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions would be adopted as required to achieve Statewide GHG emissions targets. Table 12, *Consistency with the 2022 Scoping Plan*, evaluates the project's consistency with applicable reduction actions and strategies by emissions source category to determine how the project would be consistent with or exceed reduction actions and strategies outlined in the 2022 Scoping Plan.

Table 12: Consistency with the 2022 Scoping Plan

Actions and Strategies	Project Consistency Analysis
Smart Growth / Vehicles Miles Traveled (VMT)	
Reduce VMT per capita to 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	**Consistent**. The project is consistent with the existing General Plan Land Use, so the project would not interfere with the analysis completed for the Connect SoCal report outlining VMT reduction targets and measures. The project would include 12 EV charging stations and 36 additional EV supply equipment installed.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030	**Consistent.** The Project would comply with the 2022 Title 24, Part 6 building energy requirements, including increases in onsite renewable energy generation requirements as well as improved insulation reducing energy consumption.
Construction Equipment	
Achieve 25% of energy demand electrified by 2030 and 75% electrified by 2045	**Consistent.** The proposed Project would be required to use construction equipment that are registered by CARB and meet CARB's standards. CARB set's its standards to be in line with the goal of reducing energy demand by 25% in 2030 and 75% in 2045.
Source: California Air Resources Board, *2022 Scoping Plan*, November 2022.	

Local

2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy

On September 3, 2020, the Regional Council of the Southern California Association of Governments (SCAG) formally adopted the *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045

RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are to:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the State-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

Table 13: Consistency with the 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
• Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking)	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	**Consistent.** The project site is located within an area that is planned for industrial uses. The proposed project would be required to incorporate pedestrian-oriented features, such as sidewalks to promote other forms of transportation. Therefore, the project would focus growth near destinations and mobility options.
Leverage Technology Innovations		
• Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space	**HQTA, TPAs, NMA, Livable Corridors.**	**Consistent.** The project would include 12 EV charging stations and 36 additional EV supply equipment installed in accordance with the 2022 Title 24 standards and CALGreen Code. Therefore, the proposed project would leverage technology

• Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation		innovations and help the City, County, and State meet its GHG reduction goals. The project would be consistent with this reduction strategy.
Support Implementation of Sustainability Policies		
• Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support Statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	**Consistent.** As previously discussed, the project would comply with sustainable practices included in the CALGreen Code and 2022 Title 24 standards. Thus, the project would be consistent with this reduction strategy.
Promote a Green Region		
• Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land	**Green Region, Urban Greening, Greenbelts and Community Separators.**	**Consistent.** The project would be required to comply with CALGreen Code and 2022 Title 24 standards, which would help reduce energy consumption and reduce GHG emissions. Thus, the project would support efficient development that reduces energy consumption and GHG emissions. The project would be consistent with this reduction strategy.

• Identify ways to improve access to public park space		

Source: Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal*, September 3, 2020.

City of Grand Terrace

The City of Grand Terrace has not developed a numeric GHG significance threshold. However, the San Bernardino County GHG Plan includes a GHG Development Review Process (DRP) that specifies a two-step approach to quantifying GHG emissions. First, a screening threshold of 3,000 MT CO2e per year is used to determine if additional analysis is required. Projects with GHG emissions less than the 3,000 MTCO2e per year threshold are considered consistent with the County's GHG Reduction Plan and determined to have a less than significant individual and cumulative GHG emissions impact.

Projects with GHG emissions that exceed 3,000 MTCO2e are required to employ mitigation to reduce the project's GHG emissions. As part of its GHG Emission Reduction Plan, the County has devised a set of Screening Tables that can be used to mitigate project emissions. Projects exceeding 3,000 MTCO2e are required to achieve a minimum 100 points per the Screening Tables or a 31% reduction over 2007 emissions levels. Consistent with CEQA guidelines, such projects would be determined to have a less than significant individual and cumulative impact on GHG emissions.

Conclusion

In summary, the project would generate 2,789 MTCO2e more GHG emissions than the existing land uses at the project site. However, this net difference in GHG emissions does not exceed the 3,000 MTCO2e GHG significance threshold. More specifically, the GHG plan consistency analysis provided above demonstrates that the BRSP complies with the regulations and GHG reduction goals, policies, actions, and strategies outlined in the 2017 Scoping Plan and the City's General Plan. Consistency with these plans would reduce the impact of the project's incremental contribution of GHG emissions. Accordingly, the project would not conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing GHG emissions. Therefore, the project's GHG emissions would result in a less than significant project-level and cumulative GHG impact.

***Mitigation Measures*:** No mitigation measures are required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

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

This section is primarily based upon the *Phase I Environmental Site Assessment* (Phase I ESA) prepared by Bureau Veritas, dated June 27, 2023. The Phase I ESA is provided as Appendix B of this IS/MND.

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. Exposure of the public or the environment to hazardous materials could occur through improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel, a transportation accident, environmentally unsound disposal methods, or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

The proposed project could result in increased transport, use, storage, and disposal of hazardous materials in the project site, which could expose construction workers and the public to temporary hazards related to the transport, use, and maintenance of construction equipment and/or materials (i.e., oil, diesel fuel, and transmission fluids). These activities would be short term in nature, and the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. Construction activities associated with the project would demonstrate

compliance with the applicable laws and regulations governing the use, storage, and transportation of hazardous materials, ensuring that all potentially hazardous materials are used and handled in an appropriate manner. Therefore, impacts concerning the routine transport, use, or disposal of hazardous materials during project construction would be less than significant.

Hazardous materials are not typically associated with assembly and light manufacturing uses. Anticipated hazardous materials use may include minor cleaning products and the occasional use of pesticides and herbicides for landscape maintenance. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. As such, impacts concerning the routine transport, use, or disposal of hazardous materials during project operations would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact with Mitigation Incorporated. One of the means through which human exposure to hazardous substance could occur is through accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, the hazardous substances can migrate into the soil or enter a local stream or channel, causing contamination of soil and water. Human exposure to contaminated soil, soil vapor, or water can result in potential health effects due to a variety of factors, including the nature of the contaminant and the degree of exposure.

According to the Phase I ESA, there are currently no active cleanup sites within the project site. However, several recognized environmental conditions (RECs) were identified in connection with the project site as follows. As such, the project could create a significant hazard to the public or the environment and mitigation measures are required.

- **Recognized Environmental Condition: Former Miscellaneous Automotive/Industrial Operations.** Numerous potentially environmentally significant tenants (e.g., tire service, automotive service) were identified through a review of historical documentation. No evidence of concentrated chemical or waste storage or concentrated storage/processing systems was identified at the project site. However, numerous violations regarding the handling and storage of hazardous wastes were identified, including a note from a previous health department inspection stating "*ongoing problem for years. Equipment rental and manufacturing facility has a large storage tank without secondary containment. It appears the tank has overflowed throughout the years. Spill marks are visible on the tank and the ground below the tank. It appears at least one-third of the property has problems due to contamination. Oil is washed off the equipment right onto the dirt. There is a nearby wetlands area.*" Based on this information, miscellaneous surface releases associated with the former uses of the project site represent an REC.

- **Recognized Environmental Condition: Historical Railroad Tracks.** Railroad tracks were depicted on the west perimeter of the project site from at least the late 1890s to circa 2012-2016. Herbicides are often applied to railroad tracks to prevent vegetation growth and railroad ties can often be treated with wood treatment chemicals, such as creosote. Creosote, a compound containing 85 percent polycyclic aromatic hydrocarbons (PAHs) by weight, is commonly used in the wood-preserving industry to treat railroad ties and timbers for marine use. Creosote is produced in coke ovens and contains substantial amounts of benzo(a)pyrene and

other PAHs. Shallow soil contamination in areas of former railroad tracks is commonly found. Based on this information, likely releases associated with the historical railroad tracks represent an REC.

- **Controlled Recognized Environmental Condition: Former Underground Storage Tank (UST)**. One 1,000-gallon UST system containing gasoline was removed in 1988. The exact location of the former UST is unknown; however, based on historical information, it appears to have been located at the northwest portion of the project site, in the vicinity of a currently vacant residence-type structure. Review of a Tank Closure Report prepared by the County of San Bernardino Environmental Health Services Department dated 1988 indicated that concentrations of constituents of concern (petroleum hydrocarbons, volatile organic compounds, etc.) allowed to remain in the UST excavation were below regulatory thresholds and that further investigation was not warranted. It is unclear from the available documentation if contamination was allowed to remain above unrestricted use cleanup levels. Based on this information including the "no further action" status and the industrial use of the property, the release from the former UST at the subject property represents a controlled REC.

In addition, the Phase I ESA identified the following "business environmental risks":

- **Suspect Asbestos-Containing Materials (ACMs) Identified.** Based on the dates of construction, there is a potential that ACMs exist at the project site. The suspect ACM were observed to be in generally good to fair condition.

- **Suspect Lead-Based Paint (LBP).** Based on the date of construction, there is a potential that LBP exists at the project site. Suspect LBP identified as part of the Phase I ESA assessment was not sampled. The identified suspect lead paint is in generally good condition.

- **Historical Drinking Water Wells and/or Septic Tanks.** Based on the historical uses of the project site for agricultural and possible residential uses, it is possible that drinking water wells and/or septic tanks were historically installed at the subject property. None of these features were observed during the on-site reconnaissance and the subject property is currently supplied with municipal water and sewer service.

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. However, these types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by the City during routine inspections during construction activities. This handling of hazardous materials would be a temporary activity coinciding with the short-term construction period. Any handling of hazardous materials would be limited in both quantity and concentration and the level of risk associated with the accidental release of hazardous substances is not considered significant. The construction contractors would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and Federal law. In addition, implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 below, would reduce the project's potentially significant hazardous materials impacts to less than significant levels.

Refer to Response 4.9(a) for a description of impacts related to project operations. During operation of project, hazardous materials may be transported and used on-site. However, assembly and light manufacturing uses associated with the project typically do not generate, store, or dispose of large quantities of hazardous materials that could be released into the environment.

Mitigation Measures:

HAZ-1 **Soil Management Plan.** Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall be made available to the contractor and the City Engineer for use during grading activities. The SMP shall include guidelines for safety measures and soil management in the event that soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a decision framework and specific risk management measures for managing soil, including any soil import/export activities, in a manner protective of human health and consistent with applicable regulatory requirements.

As part of this SMP, all excavation activities shall be documented daily using digital photography. In addition, the sides and the bottom of the excavation areas of concern shall be appropriately logged on scaled paper. Observed materials, including an estimate of the quantity observed, and PID and dust monitor readings shall be recorded on the Daily Field Record and/or the Direct Reading Log.

The SMP shall include measures should evidence of possible USTs be discovered during grading activities. If during grading activities evidence of a possible UST is discovered, the SMP shall require the project Applicant, or his designee, to contact the San Bernardino County Environmental Health Services Division (EHS) for further guidance and oversight, if deemed necessary by EHS.

If the results of the stockpile samples show no contamination, or detected concentrations of chemicals within acceptable regulatory limits for commercial uses, then the soil may be redistributed within the excavation. If soil is deemed contaminated, then it shall be disposed of off-site at an approved landfill facility. Should any soils be imported or exported at an off-site location, a Phase II/Site Characterization Specialist shall verify that all imported/exported soils are not contaminated with hazardous materials above regulatory thresholds. If import/export soils are determined to be contaminated above regulatory thresholds, the Phase II/Site Characterization Specialist would recommend proper handling, use, and/or disposal of these soils.

HAZ-2 **Asbestos and Lead-Containing Materials:** Prior to modification or demolition of existing structures (including piping materials), the project Applicant shall complete and submit a survey of all asbestos containing-materials (ACMs) and lead-based paints (LBP) to the San Bernardino County Fire Department (SBCFD) for review and comment and to the City Engineer for approval. Should ACMs be identified, removal shall be performed by a State-certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403. Should LBPs be identified, LBPs shall be removed and disposed of in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. The project Applicant shall inform the project Engineer, via the monthly compliance report, of the date when all ACMs and LBPs are properly removed from the project site.

HAZ-3 **Historical Drinking Water Wells and/or Septic Tanks:** Prior to ground disturbing activities, the project applicant shall retain a professional geologist to verify the presence or absence of an abandoned septic tank and/or groundwater well at the former residential structure. In the event either feature is identified, the former septic tank and/or groundwater well shall be abandoned and/or removed in accordance with applicable laws, ordinances, and regulations. The City of Grand Terrace

Building and Safety Department shall verify these features have been abandoned and/or removed prior to ground disturbance activities.

Should drinking water wells and/or septic tanks be identified during project construction activities, the project applicant shall take appropriate actions in accordance with applicable regulatory requirements. Such actions, if warranted, would typically be limited to the proper abandonment of the water wells and proper decommissioning of septic tanks.

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

Less Than Significant Impact. The nearest school to the project site is Grand Terrace Elementary School at 12066 Vivienda Avenue, located approximately 0.4-mile northeast. As discussed above, the project would require the limited use of routine hazardous materials during construction activities. Following compliance with existing State and Federal laws and regulations, impacts related to the emission or handling of hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school would be less than significant.

Mitigation Measures: No mitigation measures are 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. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) to compile and update a regulatory sites list (pursuant to the criteria of the section). The California Department of Public Health is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Health and Safety Code Section 116395. Government Code Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of CCR Title 14, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

According to the Phase I ESA, the project site is not listed pursuant to Government Code Section 65962.5. No impact would result in this regard.

Mitigation Measures: No mitigation measures are 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?

No Impact. The project site is not located within an airport land use plan or within two (2) miles of a public airport. Additionally, the project site is not located within the vicinity of a private airstrip or related facilities. The nearest airport is the San Bernardino International Airport, located approximately 6 miles to the northeast at 1601 East Third Street, in the City of San Bernardino. According to the County of San Bernardino General Plan Hazard Overlays Map (Map No. EHFH B), the project site is located outside of any Noise Hazard Overlay Districts or Airport Safety Review Areas of the San Bernardino International Airport. Therefore, project implementation would not expose people residing or working in the project site to excessive airport noise levels or safety hazards. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The project does not propose permanent alterations to vehicular circulation routes or obstruct public access along adjacent roadways. The project would be constructed in accordance with City-adopted Fire and Building Codes. These developments would also be subject to review by the San Bernardino County Fire Department and provide the features deemed necessary during such reviews to ensure adequate emergency response facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. According to the California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zone Map, the project site is not designated as a very high fire hazard severity zone under local or State responsibility. The project site consists of, and is surrounded by, urban/developed land and no areas of wildland are present in the project vicinity. Therefore, the project would not expose people or structures to a significant risk involving wildland fires, and no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.10 HYDROLOGY AND WATER QUALITY

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

This section is primarily based upon the *Preliminary Hydrology Study for Barton Road Industrial Development* (Hydrology Study) prepared by Kier & Wright Civil Engineers and Surveyors, Inc., dated March 2023, and the *Preliminary Water Quality Management Plan* (WQMP) prepared by Kier & Wright Civil Engineers and Surveyors, Inc., dated June 21, 2022. The WQMP and Hydrology Study are provided as Appendix D and E, respectively, of this IS/MND.

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

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the EPA established regulations under the NPDES program to control direct stormwater discharge. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. The City of Grand Terrace is under the jurisdiction of the Santa Ana RWQCB.

The City is a co-permittee under Santa Ana RWQCB Order number R8-2010-0036, NPDES Permit No. CAS618036, also known as the Municipal Separate Storm Sewer System or MS4 permit. The San Bernardino County Water Quality Management Plan was developed to implement compliance with the MS4 permit.

Construction Impacts

Project construction would be required to comply with Grand Terrace Municipal Code Section 13.20.270, *General Permit for Stormwater Discharges from Construction Activity*. Any development disturbing more than one acre would be required to apply for coverage under the general stormwater permit for construction activity with the SWRCB, as well as an NPDES Construction Permit. This would include the submittal of a Notice of Intent (NOI) application to the SWRCB, the receipt of a Waste Discharge Identification Number from the SWRCB, and the preparation of a Storm Water Pollution Prevention Plan (SWPPP) for construction discharges. A SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES permit. The SWPPP is intended to facilitate a process whereby the operator evaluates potential pollutant sources at the site and selects and implements BMPs designed to prevent or control the discharge of pollutants in stormwater runoff. During the grading and construction period, the project applicant would use a series of BMPs to reduce erosion and sedimentation. These measures may include the use of gravel bags, silt fences, check dams, hydroseed, and soil binders. The construction contractor would be required to operate and maintain these controls throughout the duration of on-site activities. In addition, the construction contractor would be required to maintain an inspection log and have the log on-site to be reviewed by the City and representatives of the RWQCB.

A NPDES permit would generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria). The permittee may choose which technologies to use to achieve that level. Some permits, however, do contain certain generic BMPs. Table 14*, National Menu of Stormwater Best Management Practices* lists BMPs for runoff control, sediment control, erosion control, and housekeeping that may be used for project development during construction.

Table 14: National Menu of Stormwater Best Management Practices

Runoff Control	Sediment Control	Erosion Control	Good Housekeeping
• Minimize clearing • Preserve natural vegetation • Stabilize drainage ways	• Install perimeter controls • Install sediment trapping devices • Inlet protection	• Stabilize exposed soils • Protect steep slopes • Complete construction in phases	• Create waste collection area • Put lids on containers • Clean up spills immediately

Source: US Environmental Protection Agency, National Menu of Stormwater Best Management Practices, accessed July 20, 2023, https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater. More detailed BMPs are available at this website.

Implementation of NPDES permits for the project would ensure that the State's mandatory standards for the maintenance of clean water and the Federal minimums are met. Through implementation of the BMPs detailed in an SWPPP and periodic inspections by RWQCB staff, water quality impacts during construction would be less than significant and no mitigation is required.

Operational Impacts

Development of the project would result in an increased number of impervious surfaces as compared to existing conditions. In accordance with Grand Terrace Municipal Code Section 13.20.260, *Stormwater Quality Management Plan,* subsection (B), a Storm Water Quality Management Plan (SWQMP) must be prepared for commercial developments of 100,000 square feet or more, including nonresidential developments such as hospitals, educational institutions, recreational facilities, mini-malls, hotels, office buildings, warehouses, and light industrial facilities. The SWQMP would be submitted to the Director of Building & Safety/Public Works on a form provided by the City. The SWQMP would identify all BMPs that would be incorporated into the project to control stormwater and non-stormwater pollutants during and after construction and would be revised as necessary during the life of the project. The SWQMP

submittal applies to construction projects covered by the NPDES general construction permit as well as construction projects of less than one acre.

In accordance with Grand Terrace Municipal Code Section 13.20.300, *Best Management Practices,* the SWQMP would include post-construction BMPs as listed in the SWQMP or the *California Stormwater Best Management Practice Handbook*, to reduce pollutants to the maximum extent practicable or to the extent required by law. BMPs would include but not be limited to on-site storm drain inlets, catch basins, dry wells, pervious area installation and BMP management of site design and landscape planning, efficient irrigation, roof runoff controls, storm drain signage, and private street sweeping. With implementation of an SWQMP and with described BMPs in accordance with the *California Stormwater Best Management Practice Handbook*, operational impacts to water quality would be less than significant.

Mitigation Measures: No mitigation measures are 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. The project site overlies the Riverside North Groundwater Basin and is within the jurisdiction of the Riverside Highland Water Company (RHWC) service area. According to the *Upper Santa Ana River Watershed 2020 Integrated Regional Urban Water Management Plan*, the RHWC's water supply is composed entirely of local groundwater. The project site does not include any parcels that are used for groundwater recharge of the Riverside North Groundwater Basin. The Urban Water Management Plans for the SBVMWD and the RHWC, respectively, concluded that both the SBVMWD and RHWC would be capable of providing sufficient water supply services and that the project site would not contribute to the depletion of groundwater supplies or interfere substantially with groundwater recharge. Regardless, the project is required to obtain a Will Serve Letter from the RHWC to verify whether the RHWC has full capability to provide adequate water services for the proposed project uses. As such, implementation of the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge in a manner that would impede sustainable groundwater management of the Riverside North Groundwater Basin. Impacts in this regard are less than significant.

Mitigation Measures: No mitigation measures are 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:

1) Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Project implementation would preserve the existing street network and storm drain system and drainage patterns would remain similar to existing conditions. The project has prepared a Hydrology Study as required per the City's existing regulations, which includes an analysis of pre- and post-development hydrology conditions to ensure the project does not substantially alter the site's drainage pattern, resulting in substantial erosion, flooding, or significant risk of loss. In addition, the project has prepared a WQMP, which includes low-impact development design, BMPs, and other proposed water quality features which would reduce peak flow rates or runoff volumes, as discussed above. Further, erosion/siltation during construction activities would be minimized through the NPDES program. Implementation of a SWPPP would minimize construction water quality impacts (including erosion and siltation) to less than significant levels. Through compliance with all applicable regulations, proposed runoff rates are anticipated to be equal to or less than existing conditions. Impacts related to erosion and siltation would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Refer to Response 4.10(c)(1) above. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The site generally slopes from northeast to southwest. Within the 12-foot strip to the southwest, the site then slopes southwesterly from approximately 953 feet to 949 feet above sea level toward an existing public catch basin on De Berry Street. The existing storm drain would have sufficient capacity to convey stormwater runoff created from project construction.

Based on the Hydrology Study prepared for the project, in the proposed condition, gutters would direct stormwater from the roof and impervious areas into catch basins throughout the project site. Storm drains would convey stormwater through a couple of Modular Wetlands System biofiltration units and then to an underground detention system near the southwest corner of the site. The detention system would be sized to mitigate the 100-year post-development peak flow rate to less than or equal that of the 25-year pre-development peak flow rate. Stormwater that exceeds the capacity of the detention system would be conveyed via a proposed 24-inch storm drain pipe to the existing catch basin on De Berry Street. Stormwater that is below the detention system outflow pipe would be pumped out to the outflow pipe.

Additionally, with required adherence to a SWPPP and WQMP, as discussed above, the project would not generate a substantial source of polluted runoff. Therefore, implementation of the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

4) Impede or redirect flood flows?

Less Than Significant Impact. Refer to Response 4.10(c)(1). Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact.

Flood Hazard

According to the Federal Emergency Management Agency's (FEMA) *National Flood Hazard Layer*, accessed July 19, 2023, the project site is not located within a 100-year flood hazard area. No impact would occur.

Tsunami

A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. The project site is approximately 30 miles inland from the Pacific Ocean, a sufficient distance so as to not be subject to tsunami impacts. No impact would occur.

Seiche

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. The project site is not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche. No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The 2014 Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or prepare an alternative to a GSP. As discussed above, the project site overlies the Riverside North Groundwater Basin, which is ranked as a "very low" priority basin by the SGMA Basin Prioritization Dashboard. Therefore, there is no groundwater sustainability plan established for the Riverside North Groundwater Basin. The project would not conflict with or obstruct a sustainable groundwater management plan in this regard.

The Santa Ana RWQCB manages surface waters through implementation of its *Water Quality Control Plan for the Santa Ana River Basin - Region 8* (Basin Plan). Chapter 2, Plans and Policies, includes a number of water quality control plans and policies adopted by the SWRCB that apply to the Santa Ana RWQCB. Chapter 4, Water Quality Objectives, of the Basin Plan includes specific water quality objectives according to waterbody type (i.e., ocean waters, enclosed bays and estuaries, inland surface waters, and groundwaters). Implementation of the project would not conflict with the Basin Plan. The project would be required to comply with the NPDES requirements as discussed under Response 4.10(a), and thus, would not conflict with the Basin Plan. Further, the project would not substantially deplete groundwater supplies or interfere with groundwater recharge; refer to Response 4.10(b). As such, with compliance with all applicable regulations, the project is not anticipated to conflict with or obstruct implementation of the Basin Plan. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			✓	

a) Physically divide an established community?

No Impact. The factors that could physically divide a community are generally large, linear infrastructure projects including but not limited to:

- Construction of major highways or roadways;
- Construction of storm channels;
- Closing bridges or roadways; and
- Construction of utility transmission lines.

None of the proposed project components would constitute a barrier that would physically divide an established community. No new linear features are included in the project. Access to and movement throughout the project site and the City would not be physically impaired due to the project. Thus, the project would not physically divide an established community, and no impact would occur in this regard.

Mitigation Measures: No mitigation measures are 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 site has a land use designation of Light Industrial. According to Table 2.3, *City of Grand Terrace General Plan Land Use Designations* "permitted uses for properties designated as Light Industrial include those uses that can be made compatible with other surrounding uses within the City regarding noise, dust, odors, vibration, glare, air quality, traffic, aesthetics, and hazardous materials. According to the General Plan, typical uses may include light manufacturing and assembly, small scale distribution, research and development, and administrative and service types of uses. As proposed, the project is consistent with the General Plan and would not cause a significant environmental impact due to a conflict with General Plan land use regulations.

The project site has a zoning designation of Restricted Manufacturing (MR). As described in Grand Terrace Municipal Code Chapter 18.39, *MR Restricted Manufacturing District*, the purpose of the MR district is to provide for the development of low intensity and low impact light manufacturing and industrial uses. Per the Municipal Code, regulations of this district are intended to allow various manufacturing and industrial uses which operate free of

objectionable noise, dust, odor, or other nuisances to other (non-industrial uses) in planned, architecturally integrated building groups. Permitted uses in the MR district include, but are not limited to, agricultural and nursery supplies and services; automotive related services (including motorcycles, boats, recreational vehicles, trailers, and campers): parts and supplies; building maintenance services and supplies sales; communication services; laundry/cleaning services; light manufacturing; printing/reproduction services; public storage facilities; and research services. T

he project would be consistent with the zoning designation and would not cause a significant environmental impact due to a conflict with the Grand Terrace Municipal Code zoning regulations.

Therefore, the project would not result in 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. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

No Impact. According to the *Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California,* published by the California Department of Conservation's California Geological Survey, the project site is located within an urban area and has not been identified to be within any mineral resource zone. Further, according to the General Plan EIR, there are no known or identified mineral resources of regional or Statewide importance within the General Plan area. No mineral resource or mineral resource extraction or processing activity occurs on or adjacent to the project site. Therefore, no impacts associated with the loss of mineral resources would occur and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Response 4.12(a).

Mitigation Measures: No mitigation measures are required.

4.13 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b. Generation of excessive groundborne vibration or groundborne noise levels?		✓		
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 site to excessive noise levels?				✓

This section is primarily based upon the *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California* (Noise Study) prepared by LSA Associates, Inc., dated June 2023. The Noise Study is provided as Appendix H of this IS/MND.

FUNDAMENTALS OF NOISE AND VIBRATION

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity

to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

Two primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings; it is rarely perceived as a problem outdoors, where the motion may be discernible but, without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings, then throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile-driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, construction of the project could result in ground-borne vibration that may be perceptible and annoying.

REGULATORY FRAMEWORK

State

California Office of Planning and Research Noise Element Guidelines. The California Office of Planning and Research (OPR) *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL).[16] A noise environment of 50 CNEL to 60 CNEL is considered to be "normally acceptable" for residential uses. OPR recommendations also note that, under certain conditions, more restrictive standards than the maximum levels cited may be appropriate.

Local

City of Grand Terrace General Plan. The General Plan Noise Element includes recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise; refer to Table 15, *Interior & Exterior Noise Standards*. As indicated, interior noise standards for residential uses are 45

[16] CNEL is a rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 a.m. to 10:00 p.m., and +10 dBA for the night, 10:00 p.m. to 7:00 a.m.

decibels (dB) while exterior standards are 65 dB. More intense industrial, commercial, and recreational uses maintain a higher acceptable noise level.

Table 15: Interior & Exterior Noise Standards

Land Use Category	Community Noise Equivalent Level (CNEL)[1]	
	Interior[2]	Exterior[3]
Residential – Single family, Multi-family, Duplex, Mobile Home	45 dB	65 dB
Residential – Transient Lodging, Hotels, Motels, Nursing Homes	45 dB	65 dB
Private Offices, Church Sanctuaries, Libraries, Conference Rooms, Theaters, Auditoriums, Concert Halls, Meeting Halls	45 dB	--
School	45 dB	65 dB
General Offices, Reception/Clerical Areas	50 dB	--
Bank Lobbies, Retail Stores, Restaurants	55 dB	--
Manufacturing, Kitchens, Warehouses	65 dB	--
Parks, Playgrounds	--	65 dB
Golf Courses, Outdoor Spectator Sports, Amusement Parks	--	65 dB

Notes: CNEL = community noise equivalent level; dB = decibels

1. It is recognized that a given level of noise may be more or less tolerable depending on the duration of exposure and the time of day during which the noise is experienced. There are several measures of noise exposure that consider not only the variation of noise level but also include temporal characteristics. Of these, the State Department of Aeronautics and the California Commission of Housing and Community Development have adopted the CNEL.
2. Standard applies to all habitable interior areas. Standard to be achieved with windows and doors closed. Mechanical ventilation shall be provided as required by the Uniform Building Code.
3. Standard applies to all habitable exterior living areas including private yards, private patios and balconies, common recreation.

Sources: City of Grand Terrace, *General Plan*, April 27, 2010 and State of California Governor's Office of Planning and Research, *General Plan Guidelines*, July 2017.

The General Plan Noise Element also includes a land use compatibility table that describes the compatibility of land uses with different noise levels in terms of the CNEL; refer to Table 16, *Noise/Land Use Compatibility Matrix*. As indicated, noise levels in the 55 to 60 dB range are normally acceptable to all land use types, while higher levels in the 70 to 80 dB ranges are typically unacceptable to certain land use types.

Table 16: Noise/Land Use Compatibility Matrix

Land Use Category	Community Noise Equivalent Level (CNEL)						
	50	55	60	65	70	75	80
Residential – Single Family, Multi-family, Duplex	A	A	B	C	C	D	D
Residential – Mobile Homes	A	A	B	C	C	D	D
Transient Lodging – Hotels, Motels	A	A	B	B	C	C	D
Schools, Libraries, Churches, Hospitals, Nursing Homes	A	A	B	C	C	D	D
Auditoriums, Concert Halls, Amphitheaters	B	B	C	C	D	D	D
Sports Arenas, Outdoor Spectator Sports, Amusement Parks	A	A	A	B	B	D	D
Playgrounds, Neighborhood Parks	A	A	A	B	C	D	D
Golf Courses, Riding Stables, Cemeteries	A	A	A	A	B	C	C
Office and Professional Buildings	A	A	A	B	B	C	D
Retail Commercial, Banks, Restaurants	A	A	A	A	B	B	C
Industrial, Manufacturing, Utilities, Service Stations, Warehousing	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Land Use Category	Community Noise Equivalent Level (CNEL)						
	50	55	60	65	70	75	80
Notes: NA = Not Applicable; L_{dn} = Day/Night Average; CNEL = community noise equivalent level; dBA = A-weighted decibels A - Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. B - Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning would normally suffice. C - Normally Unacceptable: New Construction or development should generally be discouraged. If it does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. D - Clearly Unacceptable: New construction or development should generally not be undertaken.							
Source: City of Grand Terrace, *General Plan*, April 27, 2010.							

In addition to the aforementioned noise standards, the Noise Element identifies the following goals and policies that are intended to address identified noise issues in the community:

Goal 6.1: Protect the citizens of Grand Terrace and sensitive land uses from annoying and excessive noise generated by non-transportation oriented uses and activities.

Policy 6.1.2: Construction noise on adjacent land uses shall be minimized by limiting the permitted hours of activity.

Goal 6.2: Prevent and mitigate the adverse impacts of excessive exposure to residential and commercial land uses.

Policy 6.2.1: The City shall evaluate potential noise impacts as part of the land use planning process to mitigate or avoid detrimental impacts and enforce the local noise ordinance.

Policy 6.2.5: New commercial/industrial operations located in proximity to existing or proposed residential areas shall incorporate noise mitigation into project design.

Policy 6.2.6: Impacts of construction noise on adjacent land uses shall be regulated through limiting the permitted hours of activity.

Policy 6.2.7: The City shall evaluate potential ground-borne vibration impacts as part of the land use planning process to mitigate or avoid detrimental impacts on adjacent land uses.

City of Grand Terrace Municipal Code. Grand Terrace Municipal Code Chapter 8.108, *Noise*, represents the City's noise ordinance that is intended to protect properties within the City and the health and safety of persons from environmental nuisances and hazards and provide a pleasing environment throughout the City. The following are applicable to the proposed project:

8.108.040 – Special activities.

In addition to the exemptions provided for in Section 8.108.030, the following activities shall be exempted from the provisions of this Chapter:

C. Noise sources associated with or vibration created by construction, repair or remodeling or grading of any real property or during authorized seismic surveys, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday.

8.108.050 – Prohibited noise.

The following noises are prohibited and declared to be nuisances:

F. Loading or Unloading of Trucks. No person shall create or cause to be created loud and excessive noise in connection with the loading or unloading of motor trucks and other vehicles, so as to disturb the peace and quiet of adjacent residential neighborhoods, between the hours of 10:00 p.m. and 7:00 a.m. The loading or unloading in such a manner as to be loud or excessive at a distance of 50 feet from the trucks or vehicles being unloaded shall be prima facie evidence of a violation of this Section.

G. Operation of Equipment. The operation or use between the hours of 10:00 p.m. and 7:00 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, forklifts, milling equipment, other tools or apparatus the use of which is attended by loud and excessive noise, or the movement of tractors, tractor trucks, or large trucks on property adjacent to residences is prohibited. The operation of such equipment between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to be loud or excessive at a distance of 50 feet from the equipment being operated shall be prima facie evidence of a violation of this Section. However, it is not the intent of this Section to prohibit the direct movement of trucks on or off property, at any time; provided, however, that such movement directly on or off the property shall not be within 50 feet of an occupied residence.

EXISTING CONDITIONS

Sensitive Receptors

The closest sensitive receptors to the project site are the existing single-family homes and Grand Terrace Mobile Home Park to the northeast, located approximately 115 feet from the project site across Barton Road and approximately 590 feet from the loading docks.

Long-Term Noise Measurements

In order to quantify existing ambient noise levels in the vicinity of the project site, three noise measurements were taken on March 29 and March 30, 2022; refer to Table 17, *Noise Measurements*. As shown in Table 17, the calculated CNEL levels range from 54.5 dBA CNEL to 66.4 dBA CNEL. Hourly noise levels at surrounding sensitive uses are as low as 44.4 dBA Leq during nighttime hours and 46.7 dBA Leq during daytime hours.

Table 17: Noise Measurements

Site No.	Location	Daytime Noise Levels[1] (dBA Leq)	Evening Noise Levels[2] (dBA Leq)	Nighttime Noise Levels[3] (dBA Leq)	Daily Noise Levels[4] (dBA CNEL)
LT-1	West of 21842 Palm Avenue, on a tree, approximately 65 feet north of Barton Road centerline.	60.5 – 66.8	59.7 – 60.3	54.7 – 63.0	66.4
LT-2	21801 Barton Road Unit B, near southeast corner of property, on a tree. Approximately 230 feet northwest of the centerline for I-215.	56.9 – 59.8	58.7 – 60.0	54.6 – 60.3	64.7
ST-1	21801 Barton Road, near southwest corner of project site. Approximately 10 feet east of the western fence and 20 feet north of the southern fence.	46.7 – 49.6	48.5 – 49.8	44.4 – 50.1	54.5

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table G, June 2023.
Note: Noise measurements were conducted from March 29 to March 30, 2022, starting at 11:00 a.m.
1 = Daytime Noise Levels = noise levels during the hours from 7:00 a.m. to 7:00 p.m.
2 = Evening Noise Levels = noise levels during the hours from 7:00 p.m. to 10:00 p.m.
3 = Nighttime Noise Levels = noise levels during the hours from 10:00 p.m. to 7:00 a.m.
4 = Short-term noise level measurement is estimated based on corresponding long-term measurement.
dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level
Leq = equivalent continuous sound level

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 Impacts

Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise-exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to 84 dBA L_{max}), the effect on longer-term ambient noise levels would be small when compared to existing daily traffic volumes on Barton Road. More specifically, during the demolition phase, it is expected that an average of 24 haul trips per day would occur and during the building construction phase there would be 220 daily trips from workers and vendors. When comparing a volume of 244 vehicles to the existing (2020) traffic volume of 7,292 on the adjacent segment of Barton Road, the expected noise increase would be less than 0.2 dBA CNEL.[17] A noise level increase of less than 1 dBA would not be perceptible to the human ear. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during construction which includes demolition of the existing structures, site preparation, grading, building construction, paving, and architectural coating on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently,

[17] A more in-depth discussion including calculations is included in the *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California* (Noise Study) prepared by LSA Associates, Inc., dated June 2023. The Noise Study is provided as Appendix H of this IS/MND

its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 18, *Typical Construction Equipment Noise Levels*, lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, taken from the Federal Highway Administration's *Roadway Construction Noise Model.* In addition to the reference maximum noise level, the usage factor provided in Table 18 is used to calculate the hourly noise level impact for each piece of equipment.

Table 18: Typical Construction Equipment Noise Levels

Equipment	Acoustical Usage Factor (%)[1]	Maximum Noise Level (Lmax) at 50 Feet[2]
Auger Drill Rig	20	84
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flat Bed Truck	40	84
Forklift	20	85
Front End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Paver	50	77
Pickup Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Trencher	50	80
Welder	40	73

Source: Federal Highway Administration Roadway Construction Noise Model User's Guide, Table 1, 2006.
Note: Noise levels reported in this table are rounded to the nearest whole number.
1 = Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
2 = Maximum noise levels were developed based on Specification 721.560 from the Central Artery/Tunnel program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
Lmax = maximum instantaneous sound level

Table 19, *Potential Construction Noise Impacts at Nearest Receptor*, shows the nearest sensitive uses to the project site, their distance from the center of construction activities, and composite noise levels expected during construction. These noise level projections do not take into account intervening topography or barriers.

Table 19: Potential Construction Noise Impacts at Nearest Receptor

Receptor (Location)	Composite Noise Level (dBA Leq) at 50 feet[1]	Distance (feet)	Composite Noise Level (dBA Leq)
Industrial Uses (east)	88	300	73
Industrial Uses (south)		335	72
Commercial Uses (north)		400	70
Residential Uses (northeast)		500	68

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table I, June 2023.
Notes: 1 = The composite construction noise level represents the site preparation phase, which is expected to result in the greatest noise level compared to other phases.
dBA Leq = average A-weighted hourly noise level

While construction noise would vary, it is expected that composite noise levels during construction at the nearest off-site uses directly east of the project would reach 73 dBA Leq. These predicted noise levels would only occur when all construction equipment is operating simultaneously, and are therefore assumed to be rather conservative in nature. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project site under existing conditions, the noise impacts would no longer occur once project construction is completed.

As stated above, noise impacts associated with construction activities are regulated by the City's noise ordinance. Pursuant to Grand Terrace Municipal Code Section 8.108.040, *Special Activities*, project construction activities would be prohibited between 8:00 p.m. and 7:00 a.m. Monday through Saturday, or at any time on Sunday or a national holiday. Further, Section 8.108.050, *Prohibited Noise*, prohibits the loading/unloading of motor trucks and other vehicles, the operation or use of the listed equipment or other tools or apparatus, and the movement of tractors, tractor trucks, or large trucks on properties adjacent to residences between the hours of 10:00 p.m. and 7:00 a.m. In addition, best construction practices presented in the Noise Study would be implemented to minimize noise impacts to surrounding receptors.

As it relates to off-site uses, construction-related noise impacts would remain below the 80 dBA Leq and 85 dBA Leq construction noise level criteria, as established by the Federal Transit Agency (FTA) for residential and commercial land uses, respectively, for the average daily condition as modeled from the center of the project site. Therefore, the project would result in a less than significant impact relative to short-term construction noise.

Operational Impacts

Off-Site Traffic Noise Impacts

Based on the *Trip Generation, Level of Service (LOS), and Vehicle Miles Traveled (VMT) Screening Analysis* that was prepared for the project, it was determined that a net additional 332 average daily trips (ADT) from vehicles ranging from passenger cars to heavy trucks would be generated by the proposed project. When converted to passenger car equivalent trips, the daily increase in traffic is 473. The existing (2020) traffic volume on the adjacent segment of Barton Road is 7,292 ADT. Calculations conducted for the Noise Study show that an increase of approximately 0.3 dBA CNEL is expected along the streets adjacent to the project site. A noise level increase of less than 1 dBA would not be perceptible to the human ear; therefore, the traffic noise increases in the vicinity of the project site resulting from the proposed project would be less than significant.

Off-Site Stationary Noise Impacts

Adjacent off-site land uses would be potentially exposed to stationary-source noise impacts from the proposed on-site heating, ventilation, and air conditioning (HVAC) equipment and truck deliveries and loading and unloading activities. The potential noise impacts to off-site sensitive land uses from the proposed HVAC equipment and truck delivery activities are discussed below. To provide a conservative analysis, it is assumed that operations would occur equally during all hours of the day and that half the 18 loading docks would be active at all times. To determine the future noise impacts from project operations to the noise-sensitive uses, a 3-D noise model, SoundPLAN, was used to incorporate the site topography, as well as the shielding from the proposed building on-site.

Heating, Ventilation, and Air Conditioning (HVAC) Equipment

The project is estimated to have four rooftop HVAC units on the proposed building to provide ventilation to the proposed office spaces. The HVAC equipment could operate 24 hours per day and would generate sound power levels (SPL) of up to 87 dBA SPL or 72 dBA Leq at 5 feet, based on manufacturer data (Trane).

Truck Deliveries and Truck Loading and Unloading Activities

Noise levels generated by delivery trucks would be similar to noise readings from truck loading and unloading activities, which generate a noise level of 75 dBA Leq at 20 feet. Delivery trucks would arrive on-site and maneuver their trailers so that trailers would be parked within the loading docks. During this process, noise levels are associated with the truck engine noise, air brakes, and backup alarms while the truck is backing into the dock. These noise levels would occur for a short period of time (less than 5 minutes). Anti-idling signs will be posted on-site to stipulate a 5 minute idling restriction pursuant to Title 13 of the California Code of Regulations Section 2485. After a truck enters the loading dock, the doors would be closed, and the remainder of the truck loading activities would be enclosed and therefore much less perceptible. To present a conservative assessment, it is assumed that unloading activities could occur at all 18 docks simultaneously for a period of more than 30 minutes in a given hour. Maximum noise levels that occur during the docking process were measured to be 86 dBA Lmax at a distance of 20 feet.

Table 20, *Daytime Exterior Noise Level Impacts*, and Table 21, *Nighttime Exterior Noise Level Impacts*, show the combined hourly noise levels generated by HVAC equipment and truck delivery activities at the closest off-site land uses. The project-related noise level impacts would range from 39.3 dBA Leq to 42.8 dBA Leq at the surrounding sensitive receptors. These levels would be below the City's exterior daytime and nighttime noise standards of 55 and 45 dBA Leq, respectively, at the residential land uses to the northeast. Furthermore, the project-related noise levels would be below the quietest existing noise levels during daytime and nighttime. Because project noise levels would not exceed the City's exterior noise standards, the impact would be less than significant.

Table 20: Daytime Exterior Noise Level Impacts

Receptor	Direction	Daytime Noise Level Standard (dBA Leq)	Existing Quietest Daytime Noise Level (dBA Leq)	Project Generated Noise Levels (dBA Leq)	Potential Operational Noise Impact?[1]
Single-family residence	Northeast	55	46.7	42.8	No
Grand Terrace Mobile Home Park	Northeast	55	46.7	39.3	No

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table M, June 2023
Notes: 1 = A potential operational noise impact would occur if (1) the quietest daytime ambient hour is less than the applicable noise standard and project noise impacts are greater than the applicable noise standard, OR (2) the quietest daytime ambient hour is greater than the applicable noise standard and project noise impacts are 3 dBA greater than the quietest daytime ambient hour.
dBA = A-weighted decibels
Leq = equivalent noise level

Table 21: Nighttime Exterior Noise Level Impacts

Receptor	Direction	Nighttime Noise Level Standard (dBA Leq)	Existing Quietest Nighttime Noise Level (dBA Leq)	Project Generated Noise Levels (dBA Leq)	Potential Operational Noise Impact?[1]
Single-family residence	Northeast	45	44.4	42.8	No
Grand Terrace Mobile Home Park	Northeast	45	44.4	39.3	No

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table M, June 2023
Notes: 1 = A potential operational noise impact would occur if (1) the quietest nighttime ambient hour is less than the applicable noise standard and project noise impacts are greater than the applicable noise standard, OR (2) the quietest nighttime ambient hour is greater than the applicable noise standard and project noise impacts are 3 dBA greater than the quietest nighttime ambient hour.
dBA = A-weighted decibels
Leq = equivalent noise level

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. Operation of the project would not generate substantial levels of vibration due to the lack of vibration-generating sources and therefore is not analyzed. Conversely, project-specific construction activities could generate varying degrees of ground-borne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

This construction vibration impact analysis discusses the level of human annoyance using vibration levels in vibration velocity decibels (VdB) and assesses the potential for building damages using vibration levels in peak particle velocity (PPV) (in/sec).

The typical vibration produced by construction equipment at 25 feet from the construction vibration source is illustrated in Table 22, *Typical Vibration Levels for Construction Equipment*. As shown in Table 22, bulldozers and other heavy-tracked construction equipment (expected to be used for this project) generate approximately 0.089 PPV in/sec or 87 VdB of ground-borne vibration when measured at 25 feet, based on FTA guidance. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Table 22: Typical Vibration Levels for Construction Equipment

Equipment	Reference PPV/LV at 25 ft	
	PPV (in/sec)	LV (VdB)[1]
Pile Driver (impact)	0.644	104
Pile Driver (sonic)	0.170	93
Vibratory Compactor/roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	0.089	87
Caisson Drilling	0.089	87

Loaded Trucks[2]	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.
Notes:
1 = RMS vibration velocity in decibels (VdB) is 1 µin/sec.
2 = Equipment shown in **bold** is expected to be used on site.
µin/sec = microinches per second
ft = foot/feet
in/sec = inch/inches per second
LV = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

According to the FTA's 2018 *Transit Noise and Vibration Impact Assessment Manual*, the threshold at which vibration levels would result in annoyance would be 78 VdB for daytime residential uses. The FTA guidelines indicate that for a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 in/sec in PPV. Table 23, *Potential Construction Vibration Annoyance Impacts at Nearest Receptor*, and Table 24, *Potential Construction Vibration Damage Impacts at Nearest Receptor*, provide a summary of off-site construction vibration levels.

Table 23: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (VdB) at 25 feet[1]	Distance (feet)[2]	Vibration Level (VdB)
Industrial Uses (east)	87	300	55
Industrial Uses (south)		335	53
Commercial Uses (north)		400	51
Residential Uses (northeast)		500	48

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table K, June 2023.
Notes: 1 = The reference vibration level is associated with a large bulldozer which is expected to be representative of the heavy equipment.
used during construction.
2 = The reference distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses.
ft = foot/feet
VdB = vibration velocity decibels

Table 24: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (VdB) at 25 feet[1]	Distance (feet)[2]	Vibration Level (PPV)
Industrial Uses (east)	0.089	5	0.995
Industrial Uses (south)		5	0.995
Commercial Uses (north)		100	0.011
Residential Uses (northeast)		100	0.011

Source: LSA Associates, Inc., *Noise and Vibration Impact Analysis, Barton Road Industrial Project, Grand Terrace, California*, Table L, June 2023.
Notes: 1 = The reference vibration level is associated with a large bulldozer which is expected to be representative of the heavy equipment used during construction.
2 = The reference distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.
ft = foot/feet
in/sec = inch/inches per second
PPV = peak particle velocity

Based on the information provided in Table 23, vibration levels are expected to approach 55 VdB at the closest industrial uses located immediately east of the project site and 48 VdB at the closest residential use to the northeast,

which is below the 90 VdB and 78 VdB annoyance threshold for workshop or industrial types uses and for daytime residential uses, respectively.

The closest structures to the project site are the industrial uses to the east and south of the site, approximately 5 feet from the limits of construction activity. It is expected that vibration levels generated by dump trucks and other large equipment that would be as close as 5 feet from the property line would generate ground-borne vibration levels of up to 0.995 PPV (in/sec) at the closest structure to the project site. This vibration level would exceed the 0.2 PPV (in/sec) threshold considered safe for non-engineered timber and masonry buildings, which would result in a potentially significant impact. Therefore, the project is required to implement **Mitigation Measure NOI-1**, which stipulates that the use of heavy equipment shall be prohibited within 15 feet of existing structures to ensure that vibration levels are below the 0.2 PPV (in/sec) threshold. At 15 feet, dump trucks and other large equipment would generate ground-borne vibrations levels of up to 0.191 PPV (in/sec) at the closest structure to the project site, which would not exceed the 0.2 PPV (in/sec) threshold. If heavy equipment is necessary within 15 feet of the east and south boundary of the project site, construction specifications would be implemented to reduce potential impacts.

Therefore, construction would not result in any vibration damage and impacts would be reduced to less than significant with the incorporation of **Mitigation Measure NOI-1** below.

Mitigation Measures:

NOI-1 Due to the close proximity to surrounding structures, the Director of Community Development, or designee, shall verify, prior to issuance of demolition or grading permits, that the approved plans require that the construction contractor shall implement the following specifications during project construction activities to ensure that damage does not occur at surrounding structures:

- If heavy equipment is necessary within 15 feet of existing structures, the following actions shall be implemented:
    - Identify structures that could be affected by ground-borne vibration and would be located within 15 feet of where heavy construction equipment would be used. This task shall be conducted by a qualified structural engineer as approved by the City's Director of Community Development or designee.
    - Develop a vibration monitoring and construction contingency plan for approval by the City's Director of Community Development, or designee, to identify structures where monitoring would be conducted; set up a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for when vibration levels approached the limits.
    - At a minimum, vibration shall be monitored during initial demolition activities. Monitoring results may indicate the need for more intensive measurements if vibration levels approach the 0.2 PPV (in/sec) threshold.
    - When vibration levels approach the 0.2 PPV (in/sec) limit, construction shall be suspended and contingencies shall be implemented as identified in the approved vibration monitoring and construction contingency plan to either lower vibration levels or secure the affected structures.

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 site to excessive noise levels?

No Impact. The closest public use airport, the San Bernardino International Airport, is located approximately 4 miles to the northeast of the project site at 1601 East Third Street, in the City of San Bernardino. Aircraft flyovers may be audible on the project site due to aircraft activity in the vicinity. Noise impacts related to aircraft operations may contribute to the aircraft noise in the project site; however, the project site is located well outside the San Bernardino International Airport Influence Area, according to the *2017 Existing CNEL Contours and Generalized Land Uses – San Bernardino International Airport*. Further, the project site is not located within the vicinity of a private airstrip. As such, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

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

Less Than Significant Impact. The project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the project site. The temporary workforce would be needed to construct the industrial building and associated improvements.

Based on information from the project applicant, operation of the project would generate approximately 175 new employees. According to the SCAG (2020) Demographics & Growth Forecast (a technical report for the 2020–2045 RTP/SCS), the number of jobs in Grand Terrace is anticipated to grow to 6,100 in 2045, an increase of approximately 2,600 jobs from the 2016 jobs figure of 3,500. The project site increase of approximately 175 permanent employees would be minimal in comparison to the increase anticipated in the SCAG Growth Forecast. As such, it is anticipated that the project would provide jobs to local city residents, helping to fill the employment need. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The project site is located in an industrial area of the City of Grand Terrace. At present, there are no residences on site. Therefore, the project would not displace submittal numbers of people or housing, nor would it necessitate the construction of replacement housing elsewhere. There would be no impact.

Mitigation Measures: No mitigation measures are required.

4.15 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?			✓	

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1) Fire protection?

Less Than Significant Impact. The City of Grand Terrace is within the service area of the San Bernardino County Fire Department (SBCFD) for fire and rescue services. Fire Station 23 is located at 22582 City Center Court, located approximately 0.9 miles to the east of the project site.

Construction Impacts

Construction associated with the project would be subject to compliance with applicable State and local regulations in place to reduce risk of fire, such as installation of a temporary construction fencing to restrict site access and maintenance of a clean construction site. Specifically, construction activities would be subject to Grand Terrace Municipal Code Chapter 15.09.010 (adopts by reference the 2022 CBC) and Chapter 15.18, *California Fire Code*, which includes site access requirements, incorporation of fire-resistive construction materials, and fire safety precautions. Construction-related impacts to fire protection services from the project would be less than significant.

Operational Impacts

Implementation of the project would result in additional demands on existing fire protection services once constructed. However, the project is not anticipated to directly or indirectly induce substantial unplanned population growth; refer to Section 4.14, *Population and Housing*.

Additionally, the City maintains mutual aid agreements with surrounding cities (i.e., Colton), which allow for the services of nearby fire departments to assist the City during major emergencies. Therefore, the project would not conflict with the City's response time standard. The project would facilitate emergency vehicle access via existing arterial roadways and local streets within the project site. Proposed project improvements would be constructed in accordance with City-adopted Fire and Building Codes, conditioned to pay required fire protection fees in accordance with Grand Terrace Municipal Code Chapter 4.80, *Developer Impact Fees*, and subject to review by the SBCFD. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

2) Police protection?

Less Than Significant Impact. The City of Grand Terrace contracts with the San Bernardino County Sheriff Department (SBCSD) for police protection services. The project site is located approximately 0.7 miles to the northwest of the City's crime prevention headquarters, located at 22491 De Berry Street.

Construction

Construction associated with the project would be subject to compliance with applicable State and local regulations in place to reduce impacts to police protection services, including Grand Terrace Municipal Code Chapter 15.09.010 (adopts by reference the 2022 CBC). Construction-related impacts concerning police protection services from the project would be less than significant.

Operations

Implementation of the project would result in additional demands on existing police protection services. However, the project is not anticipated to directly or indirectly induce substantial unplanned population growth; refer to Section 4.14.

It is the City's policy to work with the SBCSD to ensure that adequate police personnel, response times, and equipment are available to meet current and future demands of the City's residents and businesses (General Plan Policy 2.1.4). The project would be required to pay all SBCSD impact fees, property taxes, and other revenues generated by development that would be available to the City to offset any increased costs for law enforcement services with little or no net effect on the City's budget. Impacts concerning police protection services would be less than significant.

Mitigation Measures: No mitigation measures are required.

3) Schools?

Less Than Significant Impact. The project is located within the boundaries of Colton Joint Unified School District (CJUSD). The nearest school is Grand Terrace Elementary School at 12066 Vivienda Avenue, located approximately 0.4-mile northeast of the project site. However, because the project does not include a residential component, no direct increase in the local student population would occur. Employment opportunities resulting from the operation of the proposed uses are likely to be filled by existing local residents; therefore, no significant indirect increase in the local student population would occur.

It is the City's policy to work with the CJUSD to provide expanded public education facilities that meet the current and future needs of the City's residents (General Plan Policy 7.7.1). In addition, the collection of school impact mitigation fees would be required for all new development within the City (General Plan Policy 7.7.2), in accordance with Grand Terrace Municipal Code Chapter 4.80, *Developer Impact Fees,* and in compliance with SB 50 requirements, which

allow school districts to collect impact fees from developers of new projects, including from commercial/industrial construction projects, which would include the proposed project. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4) Parks?

Less Than Significant Impact. The City contains five parks that are managed by the City's Parks and Recreation Department. The nearest park is the Grand Terrace Fitness Park located at 21937 Grand Terrace Road, approximately 0.25-mile northeast of the project site. However, the project would be an industrial use and does not include a residential component. Therefore, the project would not be expected to directly affect community recreational facilities. Thus, the proposed project would not result in the need for additional park facilities to be constructed or result in substantial adverse physical impacts to any existing parks or recreational facilities in the City. This impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

5) Other public facilities?

Less Than Significant Impact. Other public facilities that could potentially be impacted by the project include library services. The nearest library to the project site, Grand Terrace Branch Library, is operated by the San Bernardino County Library System. The library is located at 22795 Barton Road, approximately 1.2 miles east of the project site. Because the project is industrial and does not include a residential component, it is not anticipated to result in a significant impact on library services. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. Refer to Response 4.15(a)(4).

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Refer to Response 4.15(a)(4).

Mitigation Measures: No mitigation measures are required.

4.17 TRANSPORTATION

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

This section is primarily based upon the *Trip Generation, Level of Service (LOS), and Vehicle Miles Traveled (VMT) Screening Analysis* prepared by EPD Solutions, Inc., dated July 25, 2023.

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

Less Than Significant Impact. On September 27, 2013, Governor Jerry Brown signed SB 743 into law, which initiated a process to change transportation impact analyses completed in support of CEQA documentation. SB 743 eliminates level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, vehicle miles traveled (VMT). A VMT-based analysis is thus provided below, in Response 4.17(b).

Based on the City of Grand Terrace's Traffic Impact Analysis Guidelines, development projects that meet the following criteria are required to prepare a Traffic Impact Analysis (TIA) that includes an LOS analysis:

- When either the AM or PM peak hour trip generation is expected to exceed 100 vehicle trips from the proposed development.
- Projects that would add 51 or more trips during either the AM or PM peak hours to any intersection.
- Any project where variations from the standards and guidelines provided in this manual are being proposed.
- When determined by the City Traffic Engineer that existing or proposed traffic conditions in the project vicinity have unique characteristics that warrant evaluation.[18]

Preparation of a TIA, as required, would ensure future development activities that meet the abovementioned criteria are consistent with the countywide goals toward the Congestion Management Program (CMP) in San Bernardino County.

[18] Fehr and Peers, City of Grand Terrace Traffic Impact Analysis Guidelines, July 2020.

As shown in the project's *Trip Generation, Level of Service (LOS), and Vehicle Miles Traveled (VMT) Screening Analysis*, the project would generate net 332 daily vehicle trips, net 36 AM peak hour, and net 37 PM peak hour vehicle trips accounting for the prior usage of the project site. Truck trips generated by the project were converted to Passenger Car Equivalents (PCE), utilizing the factors located in the County of San Bernardino *Transportation Impact Study Guidelines*. As trucks take up more space and have slower start up times then passenger vehicles, a PCE factor was utilized to more accurately estimate the effect on roadway capacity and delay, When PCE factors are considered, the project would generate net 473 daily vehicle trips, net 50 AM peak hour, and net 49 PM peak hour trips. As stated in the County of San Bernardino TIA Guidelines, projects that generate less than 100 peak hour trips typically do require a level of service (LOS) study. The project is estimated to generate 50 net AM peak hour and 49 net PM peak hour trips; therefore, the project would not be required to prepare a LOS TIA.

In addition, development associated with the project would not conflict with or interfere with any of the City or County's adopted policies, plans, or programs related to public transit, bicycle, or pedestrian facilities. The project proposes a sidewalk along its Barton Road frontage, consistent with the City's Circulation Element Policy 3.5.3: "the City shall encourage and facilitate pedestrian movement by creating environments that are conducive to walking." Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. As discussed, SB 743 eliminates LOS as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, VMT. As a result, the State is shifting from measuring a project's impact to drivers (LOS) to measuring the impact of driving (VMT) as it relates to achieving State goals of reducing greenhouse gas (GHG) emissions, encouraging infill development, and improving public health through active transportation.

The VMT analysis prepared for the project follows the CEQA guidance for determining transportation impacts in accordance with SB 743. The City adopted VMT as a metric to evaluate transportation impacts on August 24, 2020. Per the City Guidelines, the VMT thresholds would be applied to determine potential VMT impacts based on the baseline VMT performance in the City. A project would result in a significant project-generated VMT impact if either of the following conditions is forecast based on the analysis:

1. The baseline project-generated VMT per service population exceeds the County of San Bernardino baseline VMT per service population, or

2. The cumulative project-generated VMT per service population exceeds County of San Bernardino baseline VMT per service population.

Project VMT Evaluation

This comparison is made between the project-generated VMT per service population and the County of San Bernardino average VMT per service population based on the 2016 model. As shown in Table 25, *VMT Analysis of Project Impact per City Guidelines*, the baseline project-generated VMT is 6.43 percent greater than the impact threshold. Thus, the project would exceed the VMT per service population thresholds, necessitating mitigation. With incorporation of **Mitigation Measure TRA-1**, impacts would be reduced to a less-than-significant level.

Table 25: VMT Analysis of Project Impact per City Guidelines

	2016	2040	2023
Project Zone VMT	31,163	48,341	36,173
TAZ 53769201 Employment	749	799	764
TAZ 53769201 Population	43	1,437	450
Project VMT/Service Population	39.3	21.6	29.8
"County of San Bernardino VMT"	80,087,579	110,213,584	88,874,330
County Employment	790,575	1,028,047	859,838
County Population	2,140,539	2,721,775	2,310,066
Baseline Threshold	**Baseline VMT/SP**	**% Above/Below Threshold**	**Baseline VMT Impact?**
28.0	**29.8**	**6.43%**	**Yes**
Source: Appendix L, Trip Generation, Level of Service (LOS), and Vehicle Miles Traveled (VMT) Screening Analysis 21801 Barton Road			

Mitigation Measure:

TRA-1 **Commute Trip Reduction Program.** Prior to occupancy, the tenant shall implement a mandatory Commute Trip Reduction (CTR) program to encourage employees to carpool, take transit, and walk and bike to work. Calculations assume that 100 percent of employees are eligible. The CTR program shall include the following elements:

1. Transit subsidies (effectiveness is calculated based on the ratio of transit subsidy to total cost of transit; therefore, the subsidy should cover most if not all of the cost of riding mass transit).

2. Incentives for walking and bicycling to work. This could include a daily cash incentive or other incentive such as ability to earn credit towards prizes or gift cards. It should be noted that few pedestrian or bicycle facilities exist within the project site, and likely this option would be utilized by a low number of employees.

3. Incentives for carpooling or vanpooling, such as priority parking spaces and/or a daily or monthly stipend for participants. Additional incentives for carpool and/or vanpool drivers could also be provided.

4. Preferred parking for carpool or vanpool vehicles.

5. Guaranteed ride home program to ensure employees who commute by public transportation, carpool, or vanpool can return home if needed. This could be implemented through an on-site carshare program or subsidies for taxi or Uber/Lyft services.

6. An on-site CTR marketing strategy that includes information sharing and marketing to promote and educate employees about their travel choices to the employment location. This measure would require an on-site employee transportation coordinator and commuter information services, and on-site or online transit pass sales.

To comply with components 2, 3, 5, and 6 of Mitigation Measure TRA-1, tenants of the facility could participate in the IE Commuter program (iecommuter.org). IE Commuter is a program of the Riverside County

Transportation Commission (RCTC) and the San Bernardino County Transportation Authority (SBCTA). The IE Commuter program includes rideshare matching, reimbursed guaranteed ride home, commuter incentives for participation, and vanpool subsidies. IE Commuter also provides a website for employee participants to track their participation and reporting tools for employers. The program and reporting tools comply with SCAQMD Rule 2202, which applies to employers over 500 employees.

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 does not propose changes to the City's circulation system, such as sharp curves or dangerous intersections, and would not introduce incompatible uses to area roadways. The project is subject to discretionary review by the Public Works Director and City Traffic Engineer to determine whether the development provides adequate on-site and off-site roadway improvements for the safety of motorists, pedestrians, and bicyclists. A Circulation Site Plan has been developed for the project to ensure safe access to and from the development and to provide recommended roadway and/or traffic signal improvements to the satisfaction of City Traffic Engineer recommendations. Therefore, project impacts regarding increased hazards due to geometric design features (i.e., sharp curves) would be less than significant.

Mitigation Measures: No mitigation measures are required.

d) Result in inadequate emergency access?

Less Than Significant Impact. According to the General Plan, potential evacuation routes in and around the City include I-10, I-215, and I-15. Major evacuation routes within the City include Barton Road, La Cadena Avenue, and Mt. Vernon Avenue, all of which would continue to serve as evacuation routes upon project implementation. The access and circulation features on the project site would accommodate emergency ingress and egress and would ensure that access is maintained for fire trucks, police units, and ambulance/paramedic vehicles. The project is subject to the City's design review to ensure that the project as designed does not temporarily or permanently interfere with the provision of emergency access or with evacuation routes. All emergency access features are subject to and must satisfy the City's design requirements and be approved by the SBCFD. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4.18 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			✓	
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		✓		

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and are either listed on or eligible for the California Register of Historical Resources (CRHR) or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On March 3, 2023, the City initiated AB 52 consultation with the Yuhaaviatam of San Manuel Nation, the Gabrieleno Band of Mission Indians – Kizh Nation, and the Morongo Band of Mission Indians. Of these tribes, the Yuhaaviatam of San Manuel Nation provided the only response to the consultation, requesting that three mitigation measures be included as part of the project's conditions.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less Than Significant Impact. Refer to Response 4.5(a).

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact with Mitigation Incorporated. On March 3, 2023, the City distributed letters to Native American tribes having previously requested to consult on projects. The City received one response letter requesting that three mitigation measures related to cultural and tribal cultural resources be included as part of the project's conditions. These have been incorporated with **Mitigation Measures CR-1**, **TCR-1**, and **TCR-2**.

Although tribal cultural resources were not identified for the project site as part of the AB 52 consultation, in the event that previously unidentified cultural resources are encountered during ground-disturbing activities, **Mitigation Measure CR-1** would require work to immediately halt until a qualified archaeologist evaluates the find, while **Mitigation Measure TCR-1** would require that the Yuhaaviatam of San Manuel Nation Cultural Resources Department be contacted in such an event. If the discovery proves to be significant under CEQA, additional work such as data recovery and Native American consultation may be warranted to mitigate any significant impacts. In addition, **Mitigation Measure TCR-2** requires that any and all archaeological/cultural documents created as a part of the project be supplied for dissemination to the Yuhaaviatam of San Manuel Nation.

Mitigation Measures:

TCR-1 The Yuhaaviatam of San Manuel Nation Cultural Resources Department (San Manual Tribe or YSMN) shall be contacted regarding 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 regard to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the YSMN, and all subsequent finds shall be subject to this plan. This plan shall allow for a monitor to be present that represents the YSMN for the remainder of the project, should the YSMN elect to place a monitor on-site.

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 the San Manuel Tribe. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✓	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			✓	
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?			✓	

a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact.

Water

The Riverside Highland Water Company (RHWC) provides local water service to the project site. Since the project site has been previously developed, water connections already exist on-site. Payment of standard RHWC water connection fees and ongoing user fees would ensure the project's impacts on existing water facilities are adequately offset. Thus, it is not anticipated that the project would require construction of new water facilities or the expansion of existing water facilities. Less-than-significant impacts would occur in this regard.

Wastewater Treatment

The City provides sewer service to the project site. The City contracts with the City of Colton for wastewater treatment provided by the Colton Regional Wastewater Treatment Facility, located at 1201 South Rancho Avenue.

According to Santa Ana RWQCB Order No. R8-2006-0052 (NPDES No. CA8000304), the treatment facility has a capacity of 40 million gallons per day (mgd) and currently processes 5.6 mgd. Payment of standard sewer connection fees in accordance with Grand Terrace Municipal Code Chapter 4.80, *Developer Impact Fees,* and collection of ongoing user fees would ensure the project's impacts on existing wastewater treatment facilities are adequately offset. Since the project site has been previously developed, wastewater connections already exist on-site. Regardless, the project

is required to obtain a Will Serve Letter from the City of Colton to verify whether the City has full capability to provide adequate wastewater services for the proposed project uses. Thus, it is not anticipated that the project would require construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. Less than significant impacts would occur in this regard.

Stormwater

The project's stormwater needs are met by the City. As discussed in Section 4.10, *Hydrology and Water Quality*, project implementation would preserve the existing street network and storm drain system. Proposed project storm drains would convey stormwater through a couple of Modular Wetlands System biofiltration units and then to an underground detention system near the southwest corner of the site. The detention system would be sized to mitigate the 100-year post-development peak flow rate to less than or equal that of the 25-year predevelopment peak flow rate. Stormwater that exceeds the capacity of the detention system would be conveyed via a proposed 24-inch storm drainpipe to the existing catch basin on De Berry Street. Stormwater that is below the detention system outflow pipe would be pumped out to the outflow pipe. Therefore, impacts would be less than significant.

Dry Utilities

Since the project site has been previously developed, utility connections already exist on-site. However, payment of standard utility connection fees and ongoing user fees would ensure impacts to these utility services are adequately offset. Construction of the project's dry utilities would be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations. Therefore, impacts associated with dry utilities would be less than significant.

Mitigation Measures: No mitigation measures are 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 stated in Response 4.19(a), the project site is served by the RHWC. According to the *Upper Santa Ana River Watershed 2020 Integrated Regional Urban Water Management Plan*, the RHWC's water supply is composed entirely of local groundwater. According to the plan, the RHWC would be capable of providing adequate water supply to its service area under a normal supply and demand scenario, single dry-year supply and demand scenario, and multiple dry-year supply and demand scenarios through 2045. The Urban Water Management Plan water supply predictions are based on existing General Plan designations and accounts for increased demand as growth within the City occurs. The proposed project is consistent with the site's existing land use designation of Light Industrial; refer to Section 4.11, *Land Use and Planning*. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are 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. Refer to Response 4.19(a). The project is subject to payment of standard sewer connection fees in accordance with Grand Terrace Municipal Code Chapter 4.80, *Developer Impact Fees,* and collection of ongoing user fees and would be required to obtain a Will Serve Letter from the City of Colton to verify whether the City has full capability to provide adequate wastewater services for the proposed project uses. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. According to the General Plan, all municipal solid waste collected in the City is taken to the San Bernardino County landfill system for disposal. The City also currently uses the San Timoteo Landfill for waste disposal. According to the California Department of Resources Recycling and Recovery (CalRecycle), the landfill has a maximum throughput of 2,000 tons per day. This landfill has a maximum permitted capacity of approximately 23,685,785 million cubic yards, and the landfill has a remaining capacity of approximately 12,360,396 million cubic yards. The landfill has an expected operational life through 2039.

Construction Impacts

All construction activities would be subject to conformance with relevant Federal, State, and local requirements related to solid waste disposal. Specifically, the project would be required to demonstrate compliance with the California Integrated Waste Management Act of 1989 (AB 939), which requires all California cities to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible." The California Integrated Waste Management Act of 1989 requires that at least 50 percent of waste produced be recycled, reduced, or composted. The project would also be required to demonstrate compliance with the 2022 (or most recent) Green Building Code, which includes design and construction measures that act to reduce construction-related waste though material conservation measures and other construction-related efficiency measures.

Compliance with these programs would ensure the project's construction-related solid waste impacts would be less than significant.

Operational Impacts

Based on CalRecycle's *Estimated Solid Waste Generation Rates* for manufacturing/warehouse uses (1.42 pounds per 100 square feet per day), project operations are expected to generate approximately 448.3 tons of waste per year, or approximately 1.23 tons per day. This represents less than 0.01 percent of San Timoteo Sanitary Landfill's remaining capacity of 12,360,396 cubic yards. As such, the project is not anticipated to 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. The project's operational solid waste impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Refer to Response 4.19(d). The project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act of 1989 and City recycling programs. Specifically, pursuant to Grand Terrace Municipal Code Chapter 15.58, *Recycling and Diversion of Construction And Demolition (C&D) Waste*, construction and demolition waste generated shall be diverted from landfilling by using recycling, reuse, or other diversion programs. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

4.20 WILDFIRE

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✓
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. According to the California Department of Forestry and Fire Protection's *FHSZ Viewer*, the project site is not located within or near a State responsibility area nor is the area classified as a very high fire hazard severity zone. As such, project implementation would have no impact in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Response 4.20(a).

***Mitigation Measures*:** No mitigation measures are required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. Refer to Response 4.20(a).

***Mitigation Measures*:** No mitigation measures are 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 4.20(a).

***Mitigation Measures*:** No mitigation measures are required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓		
c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation Incorporated. As discussed in Section 4.4, *Biological Resources*, after implementation of **Mitigation Measures BIO-1** and **BIO-2**, the proposed project would result in less than significant impacts to biological resources. Similarly, as discussed in Sections 4.5, *Cultural Resources*, and Section 4.18, *Tribal Cultural Resources*, after implementation of **Mitigation Measures CR-1** through **CR-3** and **TCR-1** and **TCR-2,** the proposed project would result in less than significant impacts to human remains, archaeological resources, and tribal cultural resources. In addition, as discussed in Section 4.7, *Geology and Soils*, after implementation of **Mitigation Measure GEO-2**, the proposed project would result in less than significant impacts to paleontological resources.

Therefore, the proposed project would not potentially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant with mitigation incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact With Mitigation Incorporated. A significant impact may occur if the project, in conjunction with related projects proposed for development in the City, would result in impacts that are less than significant when viewed separately but would be significant when viewed together. When considering the proposed project in combination with other past, present, and reasonably foreseeable future projects in the vicinity of the project site, the proposed project does not have the potential to cause impacts that are cumulatively considerable. As detailed in the above discussions, the proposed project would not result in any significant and unmitigable impacts in any environmental categories. In all cases, the impacts associated with the project are limited to the project site or are of such a negligible degree that they would not result in a significant contribution to any cumulative impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated. The proposed project does not have the potential to cause substantial adverse effects to humans, either directly or indirectly, once mitigation measures are implemented. While a number of the proposed project's impacts were identified as having the potential to significantly impact humans, with implementation of the identified mitigation measures herein, and standard requirements, these impacts would be less than significant. Therefore, the proposed project would not cause significant adverse direct or indirect impacts to humans.

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