NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

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

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

From: City of Baldwin Park
14403 E. Pacific Avenue
Baldwin Park, California
91706

Date: March 1, 2021

TO: Interested Agencies, Organizations, and Individuals

NOTICE IS HEREBY GIVEN that pursuant to Section 15072 of the State CEQA Guidelines, the City of Baldwin Park hereby gives notice that a Draft Mitigated Negative Declaration (MND) for the 12793 Garvey Avenue Industrial Commercial Project is available for review and comment.

PROJECT TITLE: 12793 Garvey Avenue Industrial Commercial Project

PROJECT LOCATION: The Project is located at 12793 Garvey Avenue in Baldwin Park, California 91706 (APN: 8550-005-003).

PROJECT DESCRIPTION: The Project proposes construction of a new 20,847-square foot (sq. ft.) industrial warehouse building. The proposed building consists of a 1,654 sq. ft. first floor office area, 1,654-sq. second floor office area, and 17,539 sq. ft. warehouse/storage. The project site consists of a vacant, 42,875 sq. ft. parcel at the northwest corner of Garvey Avenue and Wescott Avenue. An existing billboard on the property will remain with the proposed Project.

The property has a current General Plan land use designation of Commercial/Industrial (CI) and is located in an Industrial Commercial (I-C) Zone. According to the City's General Plan, this type of zoning provides areas for the development of industrial parks, office complexes and light manufacturing businesses. Surrounding land uses and zoning consists of Multi-Family Residential (R-3) and Garden Multi-Family Residential (R-G) to the north, roadway, Transmission Line Corridor (OS) and Industrial Commercial (I-C) on the east, roadways (Garvey Avenue and I-10) to the south, and trailer park (I-C zone) west of the subject property. The warehouse building would reach a maximum height of 35'-0", which is within the maximum height allowable for Industrial Commercial zones. The building would reach a height of 31'-11" along its west elevation.

Project parking allocation is intended to support a warehouse use. On-site parking and loading access would be provided from a driveway along Westcott Avenue at the rear of proposed warehouse building. The Project would provide 42 standard parking spaces (32 spaces required), including two accessible spaces. The rear parking lot would be accessed through an 24'-0" wide sliding security gate and a single 26'-0" wide back-up aisle. Multiple 12'-0" high roll-up doors would allow loading/unloading access to the building via the parking area. The Project proposes a 6'-0" high perimeter split-faced masonry block wall along the rear property line, separated from the parking lot by a proposed 36'-0"" wide landscape buffer.

PROJECT IMPACTS: The Initial Study/MND was completed in accordance with the Lead Agency's Guidelines implementing the California Environmental Quality Act. The Initial Study/MND found that the environmental effects from the project would be less than significant with the incorporation of standard conditions and mitigation measures.

HAZARDOUS WASTE SITES: The project site is not located on any known listed toxic sites pursuant to Government Code Section 65962.5.

PUBLIC REVIEW PERIOD: Begins: March 1, 2021 **Ends:** March 30, 2021

PUBLIC HEARING: PUBLIC HEARING: The City of Baldwin Park Planning Commission is scheduled to consider the Mitigated Negative Declaration and proposed project at its regular Planning Commission meeting on **April 14, 2021** at 7:00 P.M. *Due to COVID-19, this Planning Commission meeting will not be open to the general public. Live audio of the hearing will be provided via YouTube by clicking on the YouTube icon located on the upper right-hand corner of the City of Baldwin Park Webpage*. If you wish to comment, please email your name, City of residence, and a phone number to Esther Washington, Planning Commission Clerk at EWashington@baldwinpark.com by 6:45 pm on Wednesday, April 14, 2021. You will be contacted by a staff member and will be granted 3 (three) minutes to speak live

during the meeting. To confirm the date and time of the meeting and for additional information concerning the proposed project, please check the City's website: http://www.baldwinpark.com/.

The Initial Study/Mitigated Negative Declaration is being circulated for public review and comment for a period of 20 days. Any person may submit written comments to the Planning Division of the City's Development Services Department before the end of the review period. If you challenge the City's action in court you may be limited to raising only those issues you or someone else raised in written correspondence delivered to the Planning Division prior to the end of the review period. Comments may be sent by mail, or faxed to the following address:

Ron Garcia
City Planner
City of Baldwin Park
14403 E. Pacific Avenue
Baldwin Park, CA 91706

Phone: (626) 960-4011
Email: RGarcia@baldwinpark.com

LOCATION WHERE DOCUMENT CAN BE REVIEWED: The Initial Study, Draft Mitigated Negative Declaration (MND), and supporting documents are available for review by appointment at the City of Baldwin Park Planning Division, 14403 Pacific Avenue, Baldwin Park, California, 91706. These documents will also be available in electronic format on the City of Baldwin Park Website at: https://www.baldwinpark.com/online-documents/community-development/planning/environmental-documents .

March 1, 2021
Date

Ron Garcia, City Planner

DRAFT
Initial Study and Mitigated Negative Declaration

12793 Garvey Avenue Industrial Commercial Project

February 2021

Lead Agency:

City of Baldwin Park
14403 E. Pacific Avenue
Baldwin Park, CA 91706

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2861 Pullman Street
Santa Ana, CA 92705

THIS PAGE INTENTIONALLY LEFT BLANK

DRAFT MITIGATED NEGATIVE DECLARATION
12793 GARVEY AVENUE INDUSTRIAL COMMERCIAL PROJECT

Lead Agency: City of Baldwin Park
14403 E. Pacific Avenue
Baldwin Park, California 91706

Project Proponent: Baldwin Park Homes, LLC
1773 W. San Bernardino Road, Suite B-42
West Covina, CA 91790

Project Location: The Project is located at 12793 Garvey Avenue in Baldwin Park, California 91706 (APN: 8550-005-003).

Project Description:

The project site consists of a vacant, 42,875 sq. ft. parcel (APN: 8550-005-003) at the northwest corner of Garvey Avenue and Wescott Avenue. The project consists of an application for a Development Plan/Design Review for the construction of a new 20,847-square foot (sq. ft.) industrial warehouse building. The proposed building consists of a 1,654 sq. ft. first floor office area, 1,654-sq. second floor office area, and 17,539 sq. ft. warehouse/storage area. The proposed rear parking lot would include 42 spaces (32 spaces required). An existing billboard on the property will remain with the proposed project.

Project Data

Site Area	
Acreage	0.984 Acres
Square Footage	42,875 SF
Max Floor Area Ratio (FAR)	1.0 (42,875 SF)
Proposed Lot Coverage	44.8%
Proposed Building Area	
First Floor Office Area	1,654 SF
Second Floor Office Area	1,654 SF
Warehouse/Storage Area	17,539 SF
Total Proposed Building Area	20,847 SF
Parking Spaces Required	
Office= 1 : 250 SF	14 Spaces
Warehouse/Storage= 1:1,000 SF	18 Spaces
Total Parking Space Required	32 Spaces
Parking Spaces Provided	
Regular Spaces (9' x 18')	40
Handicapped Accessible Spaces	2
Total Parking Spaces Required	42
Total Parking Lot Area	18,297 SF
Parking Lot Landscape Provided	2,680 SF (14.6%)

The property has a current General Plan land use designation of Commercial/Industrial (CI) and is located in an Industrial Commercial (I-C) Zone. According to the City's General Plan, this type of zoning provides areas for the development of industrial parks, office complexes and light manufacturing businesses. Surrounding land uses and zoning consists of Multi-Family Residential (R-3) and Garden Multi-Family Residential (R-G) to the north, roadway, Utility Corridor (OS) and Industrial Commercial (I-C) on the east, roadways (Garvey Avenue and I-10) to the south, and trailer park (I-C zone) west of the subject property. The warehouse building would reach a maximum height of 35'-0", which is within the maximum height allowable for Industrial Commercial zones. The building would reach a height of 31'-11" along its west elevation.

Project parking allocation is intended to support a warehouse use. On-site parking and loading access would be provided from a driveway along Westcott Avenue at the rear of proposed warehouse building. The Project would provide 42 standard parking spaces, including two accessible spaces in the rear parking lot, which would be accessed through an 24'-0" wide sliding security gate and a single 26'-0" wide back-up aisle. Multiple 12'-0" roll-up doors would allow loading/unloading access to the rear of the building via the parking area.

The Project proposes a 6'-0" high perimeter split-faced masonry block wall along the rear property line, separated from the parking lot by a proposed 36'-0"" wide landscape buffer. The Project requests a variance from sideyard setback standards along the west property line to allow building up to the property line.

The Project proposes a 11-month construction timeframe starting approximately January 2021 through February 2022, with Project opening in early 2022.

Public Review Period: October 26, 2020 – November 16, 2020

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: Tree Report. Prior to construction, the Project Applicant shall submit to the City's Community Development Department a Tree Report from a certified arborist demonstrating compliance with the City's Tree Preservation Ordinance. The report will identify the type, size and health of trees on the site and recommend suitable replacement trees, as necessary.

BIO-2: Pre-Construction Nesting Bird Survey: If construction or other project activities are scheduled to occur during the bird breeding season (Typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests will not be disturbed or destroyed on the Project site. The survey shall be completed no more than three days prior to initial ground disturbance. If an active nest is identified, the biologist shall establish an appropriately sized disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

Geology and Soils

GEO-1: Unanticipated Discovery – Paleontological Resource. If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the City and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

THIS PAGE INTENTIONALLY LEFT BLANK

CONTENTS

Draft Mitigated Negative Declaration – 12793 Garvey Avenue Industrial Commercial Project 1
Mitigation Measures Incorporated into the Project to Avoid Significant Effects 2
SECTION 1.0 Background 1-1
1.1 Summary 1-1
1.2 Introduction 1-1
1.3 Surrounding Land Uses/Environmental Setting 1-2
SECTION 2.0 Project Description 2-1
2.1 Project Background 2-1
2.2 Project Characteristics 2-1
2.3 Project Timing 2-2
2.4 Regulatory Requirements, Permits, and Approvals 2-2
2.5 Consultation With California Native American Tribe(s) 2-7
SECTION 3.0 Environmental Factors Potentially Affected and Determination 3-1
3.1 Environmental Factors Potentially Affected 3-1
SECTION 4.0 Environmental Checklist and Discussion 4-1
4.1 Aesthetics 4-1
4.2 Agriculture and Forestry Resources 4-3
4.3 Air Quality 4-5
4.4 Biological Resources 4-19
4.5 Cultural Resources 4-21
4.6 Energy 4-25
4.7 Geology and Soils 4-28
4.8 Greenhouse Gas Emissions 4-33
4.9 Hazards and Hazardous Materials 4-39
4.10 Hydrology and Water Quality 4-44
4.11 Land Use and Planning 4-47
4.12 Mineral Resources 4-49
4.13 Noise 4-51
4.14 Population and Housing 4-51
4.15 Public Services 4-62
4.16 Recreation 4-64
4.17 Transportation 4-65
4.18 Tribal Cultural Resources 4-69
4.19 Utilities and Service Systems 4-72
4.20 Wildfire 4-77

4.21 Mandatory Findings of Significance....4-79
SECTION 5.0 List of Preparers....5-1
5.1 City of Baldwin Park....5-1
5.2 ECORP Consulting, Inc....5-1
5.3 KOA Corporation....5-1
SECTION 6.0 Bibliography....6-1
SECTION 7.0 List of Appendices....7-1

Appendix A – Air Quality/Greenhouse Gases/Energy
Appendix B – Cultural and Tribal Cultural Resources
Appendix C – Geotechnical Engineering Investigation
Appendix D – Noise Impact Assessment
Appendix E – Traffic Impact Assessment

LIST OF TABLES

Table 1. Project Site Characteristics....2-6
Table 2. SCAQMD Regional Significance Thresholds – Pounds per Day....4-10
Table 3. Construction-Related Emissions (Regional Significance Analysis)....4-11
Table 4. Construction-Related Emissions (Localized Significance Analysis)....4-12
Table 5. Operational-Related Emissions (Regional Significance Analysis)....4-13
Table 6. Previous Cultural Studies In or Within ¼ Mile of the Project Area....4-21
Table 7. Previously Identified Cultural Resources In or Within ¼ Mile of the Project Area....4-22
Table 8. Non-Residential Electricity Consumption in Los Angeles County 2014-2018....4-25
Table 9. Non-Residential Natural Gas Consumption in Los Angeles County 2014-2018....4-25
Table 10. Automotive Fuel Consumption in Los Angeles County 2015-2019....4-26
Table 11. Proposed Project Energy and Fuel Consumption....4-27
Table 12. Construction-Related Greenhouse Gas Emissions....4-34
Table 13. Operational-Related Greenhouse Gas Emissions....4-35
Table 14. Consistency with SCAG's RTP/SCS Goals....4-36
Table 15. Surrounding Zoning and Land Use Designations....4-48
Table 16. Existing (Baseline) Noise Measurements....4-54
Table 17. Existing (Baseline) Traffic Noise Levels....4-54
Table 18. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment – Unmitigated....4-54
Table 19. Baldwin Park Noise Standards....4-56

Table 20. Representative Vibration Source Levels for Construction Equipment....4-56
Table 21. Project Construction Vibration Levels at Sixty-Five Feet....4-59
Table 22. Project Trip Generation....4-70

LIST OF FIGURES

Figure 1. Regional Location....1-3
Figure 2. Project Location....1-4
Figure 3. Site Photos....2-3
Figure 4. Site Plan....2-3
Figure 5. Floor Plan....2-4
Figure 6. Floor Plan....2-5
Figure 7. Roof Plan....2-6

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CO Plan	Federal Attainment Plan for Carbon Monoxide
CRHR	California Register of Historic Places
CWA	California Water Act
DTSC	Department of Toxic Substances Control
EIC	Eastern Information Center
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map

GHGs	Greenhouse Gases
LSTs	Localized Significance Thresholds
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2eq$	Metric Tons of Carbon Dioxide Equivalent
NAHC	Native American Heritage Commission
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System
N_2O	Nitrous Oxide
NO_x	Nitrogen Oxides
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OHV	Off-Highway Vehicle
OPR	California Office of Planning and Research
PM_{10} and $PM_{2.5}$	Particulate Matter
RCPG	Regional Comprehensive Plan and Guide
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
USACE	United States Army Corps of Engineers
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SIP	State Implementation Plan
SP	Service Population
SoCAB	South Coast Air Basin
SR	State Route
SRA	Sensitive Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

SECTION 1.0 BACKGROUND

1.1 Summary

Project Title:	12793 Garvey Avenue Industrial Commercial Project
Lead Agency Name and Address:	City of Baldwin Park 14403 E. Pacific Avenue Baldwin Park, CA 91706
Contact Person and Phone Number:	Ron Garcia, City Planner (626) 960-4011
Project Location:	The Project is located at 12793 Garvey Avenue in Baldwin Park, California 91706 (APN: 8550-005-003). The City of Baldwin Park is located approximately 17 miles east of downtown Los Angeles and is bisected by the I-10 San Bernardino Freeway along the southern part of the City.
General Plan Designation:	Commercial Industrial (CI)
Zoning:	Industrial Commercial (I-C)

1.2 Introduction

The City of Baldwin Park is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the 12793 Garvey Avenue Industrial Commercial Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

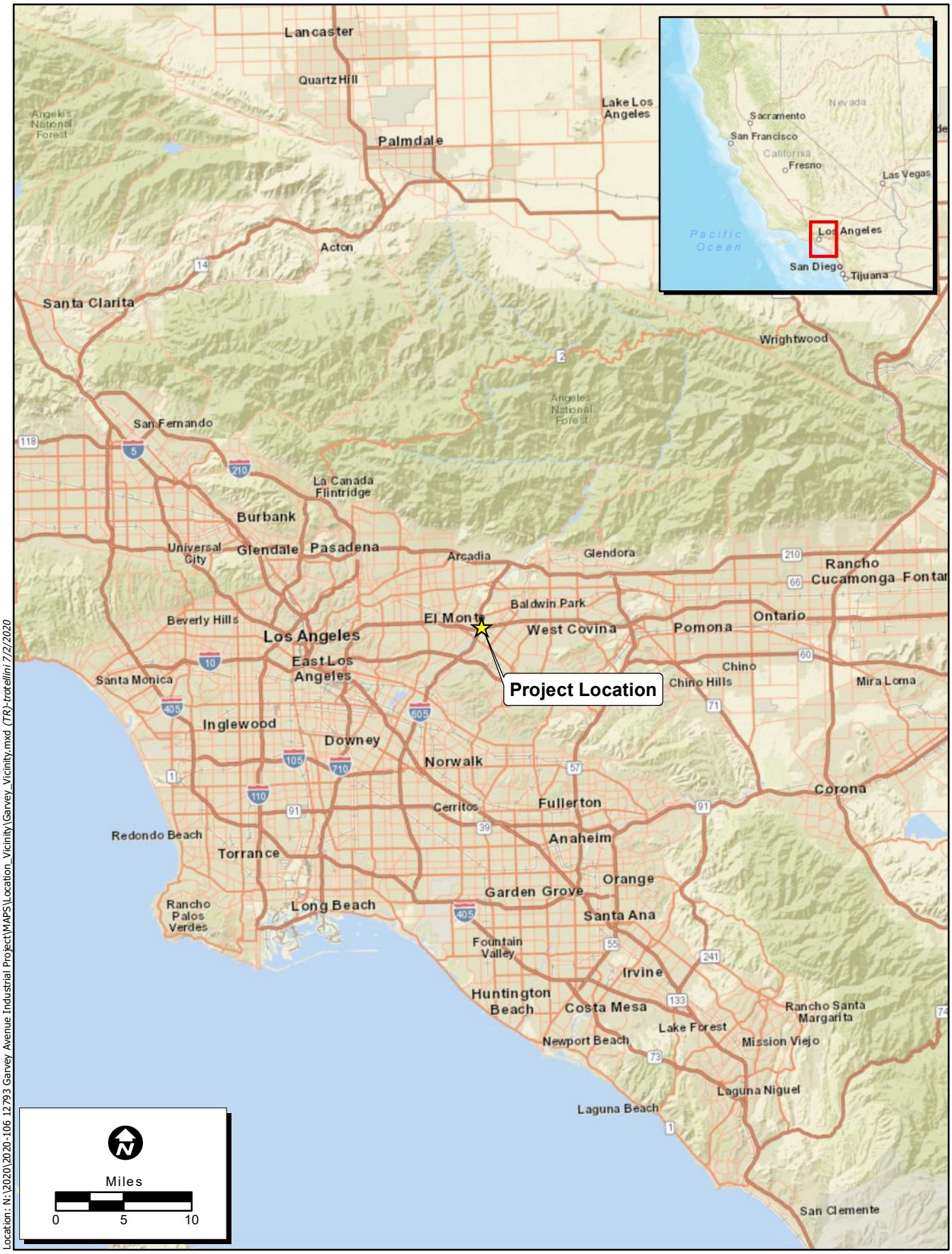
1.3 Environmental Setting/ Surrounding Land Uses

Baldwin Park is located in the San Gabriel Valley, approximately 15 miles east of downtown Los Angeles. The San Gabriel Foothills and Los Angeles National Forest lie in the distance to the north, with the Los Angeles Basin to the east, south, and west (Figure 1. Regional Location). The City is traversed by I-10 to the south and the I-605 to the west. Baldwin Park is highly urbanized and built out, with a suburban character. Cities surrounding Baldwin Park are also fully developed and with similar character.

The proposed Project site is generally located in the southwestern portion of the City. The site consists of a single parcel located at 12793 Garvey Avenue (APN: 8550-005-003) (Figure 2. Project Location). The subject property is located in an Industrial Commercial zone. The southerly half of the property is a vacant dirt lot and the northerly half is being used as a vehicle tow yard. A large billboard is located on the site near Westcott Avenue. East of Westcott Avenue is a commercial vehicle tow yard and SCE transmission line corridor. Property located north of the Project site is occupied by multi-family residential apartments. Property to the west is currently occupied by a trailer park. The I-10 is located directly south of Garvey Avenue, and the I-10/I-605 freeway interchange is located approximately 400 feet west of the Project site. (Figure 3. Site Photos).

	Zoning District	Land Use Designation	Existing Land Use
Project Site	IC – Industrial Commercial	Commercial/Industrial	Vacant/Vehicle Tow Yard
North	RG – Garden Multi-Family Residential	Garden Multi-Family Residential	Garden Multi-Family Apartments
East	OS - Open Space IC – Industrial Commercial	Public Facilities Commercial/Industrial	SCE Transmission Line Vehicle Tow Yard
South	Freeway	Freeway	I-10 San Bernardino Freeway
West	IC – Industrial Commercial	Commercial/Industrial	Mobile Home Park

Source: City of Baldwin Park 2019a, 2019b



Location: N:\2020\2020-106 12793 Garvey Avenue Industrial Project\MAPS\Location_Vicinity\Garvey_Vicinity.mxd *(TR)-trotellini 7/2/2020*

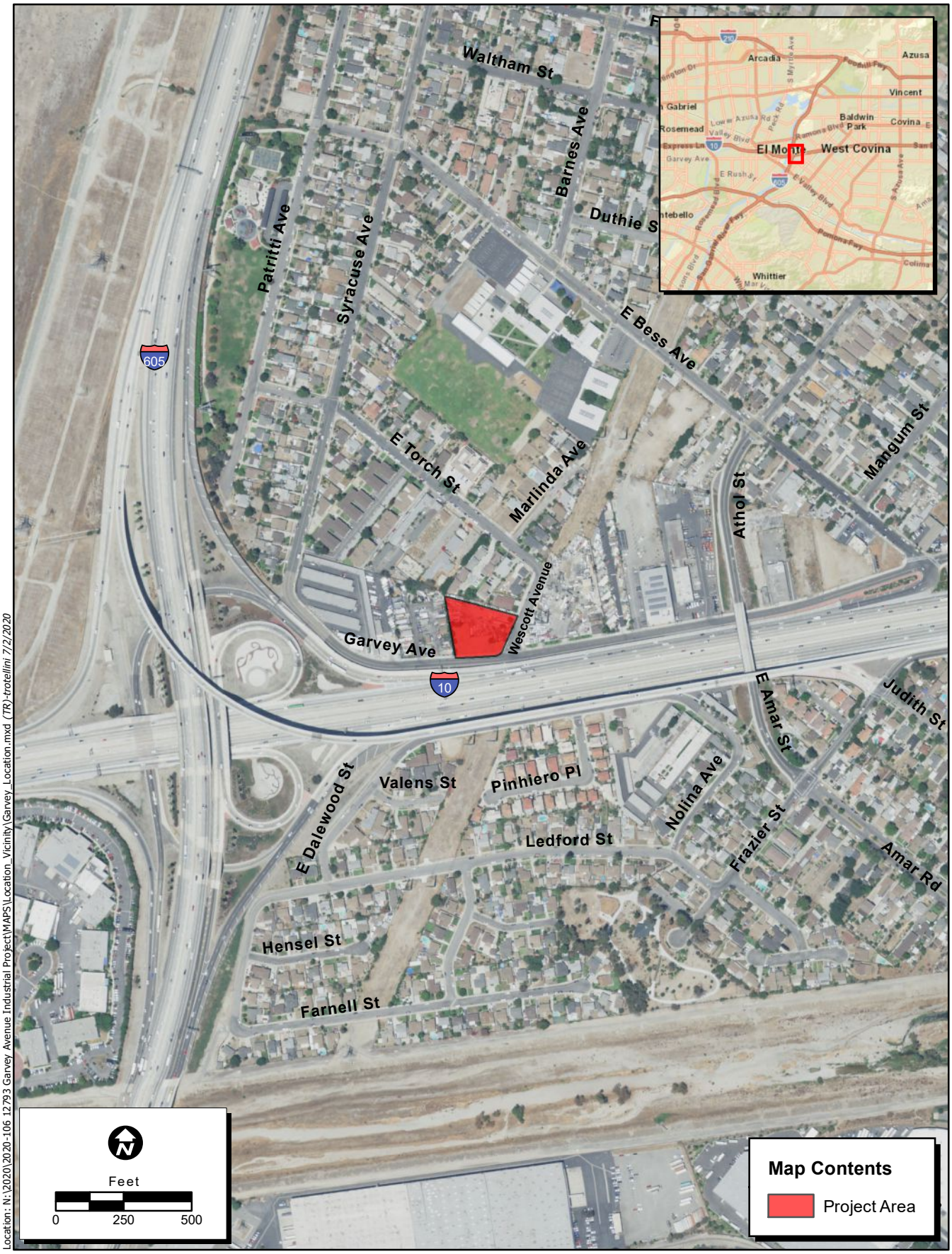
Map Date: 7/2/2020

Sources:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Regional Location

2020-106 12793 Garvey Avenue Industrial Project



Location: N:\2020\2020-106 12793 Garvey Avenue Industrial Project\MAPS\Location_Vicinity\Garvey_Location.mxd *(TR)-trotellini 7/2/2020*

Map Date: 7/2/2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2. Project Location

2020-106 12793 Garvey Avenue Industrial Project

Photo 1. View to Northern Property Boundary

Photo 2. Project Site Entrance

Photo 3. Vehicle Tow Yard

Photo 4. Vehicle Tow Yard at Rear Property Line

SECTION 2.0 PROJECT DESCRIPTION

2.1 Project Background

The subject site consists of a vacant lot with emergent weeds on the southerly half of the property, and a paved vehicle tow yard on the northerly half. A large billboard is located on the site near Westcott Avenue. The previous uses of the site included a single-family residence which was demolished and removed circa 2003.

2.2 Project Characteristics

The 12793 Garvey Avenue Industrial Commercial Project (Project) proposes construction of a new 20,847-square foot (sq. ft.) industrial warehouse building (Figure 4. Site Plan). The proposed building consists of a 1,654 sq. ft. first floor office area, 1,654-sq. second floor office area, and 17,539 sq. ft. warehouse/storage area (Figure 5. Floor Plan). The proposed rear parking lot would include 42 spaces (32 spaces required). The project site consists of a vacant, 42,875 sq. ft. parcel (APN: 8550-005-003) at the northwest corner of Garvey Avenue and Wescott Avenue. An existing billboard on the property will remain with the proposed project. Project statistical data is provided in Table 1.

Table 1 – Project Data

Site Area	
Acreage	0.984 Acres
Square Footage	42,875 SF
Max Floor Area Ratio (FAR)	1.0 (42,875 SF)
Proposed Lot Coverage	44.8%
Proposed Building Area	
First Floor Office Area	1,654 SF
Second Floor Office Area	1,654 SF
Warehouse/Storage Area	17,539 SF
Total Proposed Building Area	20,847 SF
Parking Spaces Required	
Office= 1 : 250 SF	14 Spaces
Warehouse/Storage= 1:1,000 SF	18 Spaces
Total Parking Space Required	32 Spaces
Parking Spaces Provided	
Regular Spaces (9' x 18')	40
Handicapped Accessible Spaces	2
Total Parking Spaces Required	42
Total Parking Lot Area	18,297 SF
Parking Lot Landscape Provided	2,680 SF (14.6%)

The property has a current General Plan land use designation of Commercial/Industrial (CI) and is located in an Industrial Commercial (I-C) Zone. According to the City's General Plan, this type of zoning provides

areas for the development of industrial parks, office complexes and light manufacturing businesses. Surrounding land uses and zoning consists of Multi-Family Residential (R-3) and Garden Multi-Family Residential (R-G) to the north, roadway, Transmission Line Corridor (OS) and Industrial Commercial (I-C) on the east, roadways (Garvey Avenue and I-10) to the south, and trailer park (I-C zone) west of the subject property. The warehouse building would reach a maximum height of 35'-0", which is within the maximum height allowable for Industrial Commercial zones. The building would reach a height of 31'-11" along its west elevation (Figure 6. Elevations).

Project parking allocation is intended to support a warehouse use. On-site parking and loading access would be provided from a driveway along Westcott Avenue at the rear of proposed warehouse building. The Project would provide 42 standard parking spaces, including two accessible spaces. The rear parking lot would be accessed through an 24'-0" wide sliding security gate and a single 26'-0" wide back-up aisle. Multiple 12'-0" high roll-up doors would allow loading/unloading access to the building via the parking area.

The Project proposes a 6'-0" high perimeter split-faced masonry block wall along the rear property line, separated from the parking lot by a proposed 36'-0"" wide landscape buffer.

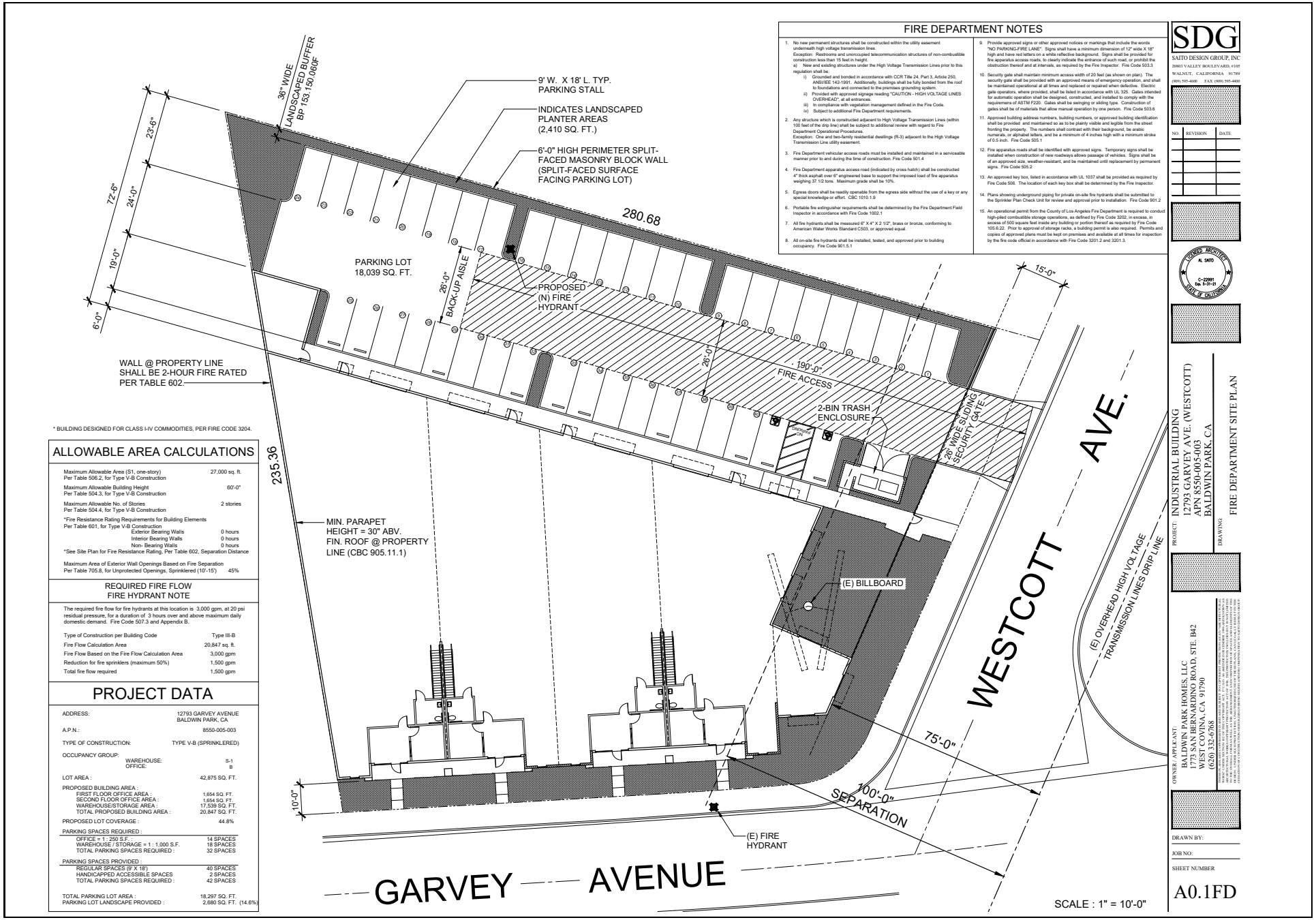
2.3 Project Timing

The Project proposes a 11-month construction timeframe from January 2021 to approximately February 2022. The approximate Project opening is winter/spring 2022.

2.4 Regulatory Requirements, Permits, and Approvals

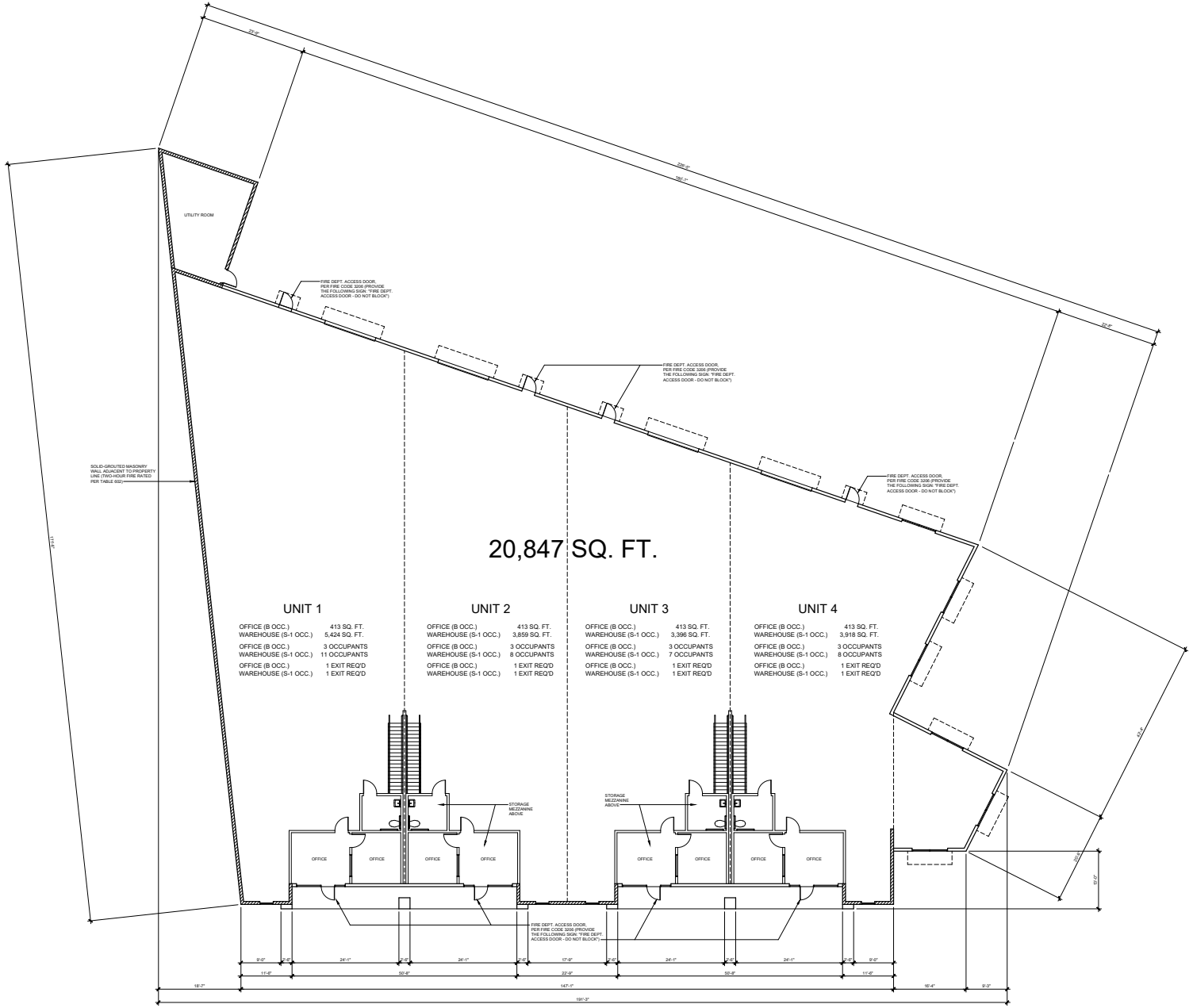
The City of Baldwin Park is the primary approval authority and the California Environmental Quality Act (CEQA) lead agency for the proposed Project. The following approvals would be required for implementation of the proposed Project:

- City Development Plan/Design Review for the site design and building architecture.
- Variance to deviate from west side yard setback standard (from 10 ft. to 0 ft. at property line).
- Compliance with Los Angeles County Fire Department operational permit as required.



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 4. Site Plan
2020-106 12793 Garvey Avenue Industrial Project



FLOOR PLAN

SCALE : 1/8 = 1'-0"

MAXIMUM AREA OF OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION, PER TABLE 705.8 FOR UNPROTECTED OPENINGS (SPRINKLERED): FIRE SEPARATION DISTANCE 10 FEET TO LESS THAN 15 FEET = 45%

SDG
SAITO DESIGN GROUP, INC
20883 VALLEY BOULEVARD, #105
WALNUT, CALIFORNIA 91789
(909) 595-4600 FAX (909) 595-4400

NO.	REVISION	DATE

LICENSED ARCHITECT
AL SAITO
C-22991
Exp. 9-31-21
STATE OF CALIFORNIA

PROJECT: INDUSTRIAL BUILDING
12793 GARVEY AVE. (WESTCOTT)
APN 8550-005-003
BALDWIN PARK, CA

DRAWING: FLOOR PLAN

OWNER / APPLICANT:
BALDWIN PARK HOMES, LLC
1773 SAN BERNARDINO ROAD, STE. B42
WEST COVINA, CA 91790
(626) 332-6768

THESE PLANS AND ASSOCIATED DESIGNS SHOWN ARE AND AT ALL TIMES REMAIN THE EXCLUSIVE PROPERTY OF SAITO DESIGN GROUP, INC. AND CANNOT BE USED ON ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF SAITO DESIGN GROUP, INC. ALL RIGHTS RESERVED. THESE PLANS ARE NOT TO BE CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF SAITO DESIGN GROUP, INC.

DRAWN BY:

JOB NO:

SHEET NUMBER

A0.2

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

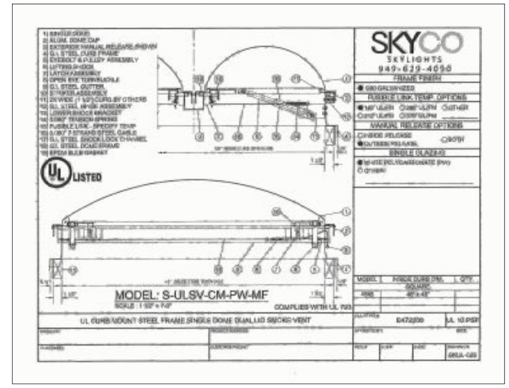
Figure 5. Floor Plan
2020-106 12793 Garvey Avenue Industrial Project

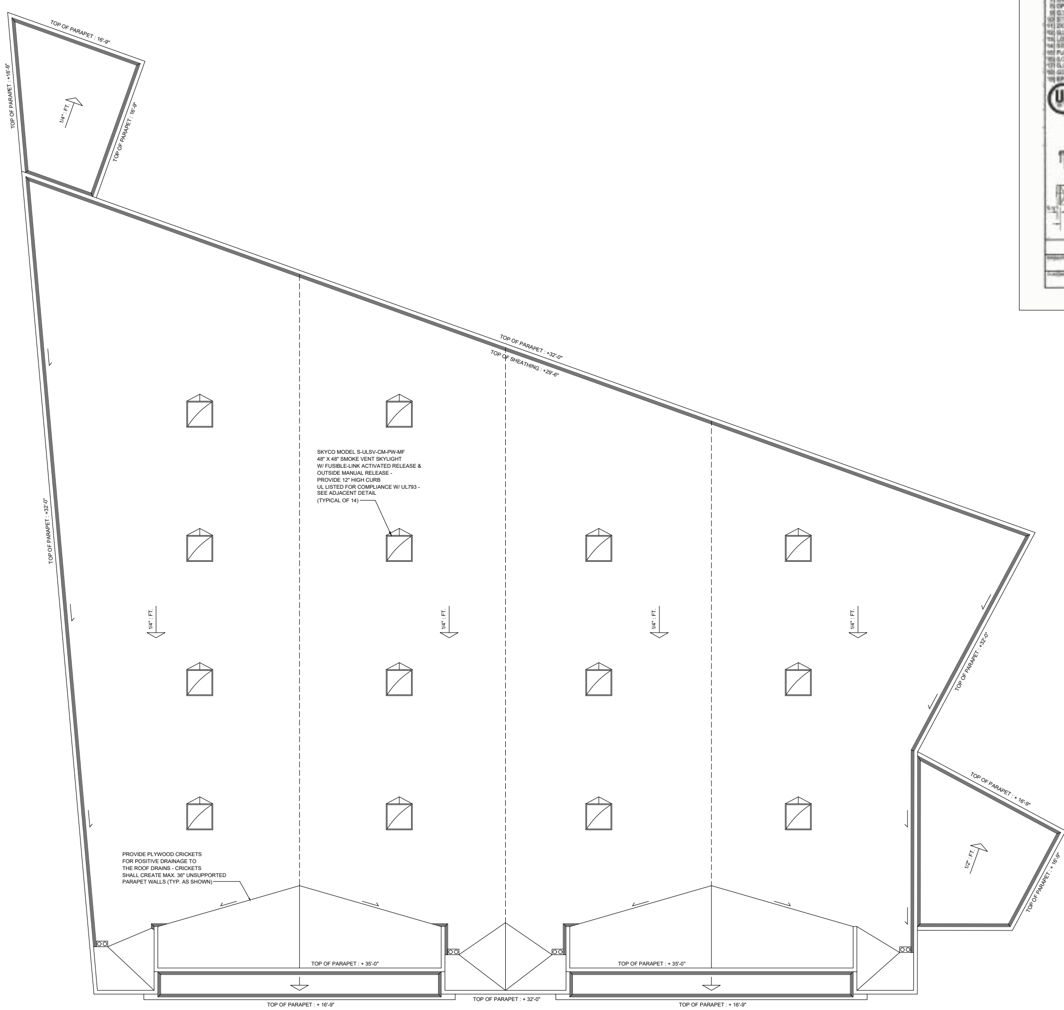
SOUTH ELEVATION
SCALE : 1/8" = 1'-0"
LINE OF TOP OF SHEATHING BEYOND
METAL PARAPET CAP (TYPICAL)
SPLIT-FACED MASONRY BLOCK (TYPICAL)
EXTERIOR STUCCO - LIGHT SAND FINISH (TYPICAL)
ADHERED FOAM WINDOW SHADES - STUCCO OVER (TYPICAL)
BUSINESS IDENTIFICATION SIGNAGE PER BALDWIN PARK STANDARDS (TYP OF 4 @ MULTI-TENANT CONDITION)
METAL STOREFRONT GLAZING SYSTEM (TYPICAL)
NORTH ELEVATION
SCALE : 1/8" = 1'-0"
ADHERED FOAM SHADES - STUCCO OVER (TYPICAL)
EXTERIOR STUCCO - LIGHT SAND FINISH (TYPICAL)
METAL MAN DOOR - FIRE ACCESS DOOR (TYPICAL OF 4)
12'-0" HIGH METAL SECTIONAL ROLL-UP DOOR (TYPICAL)
WEST ELEVATION
SCALE : 1/8" = 1'-0"
PRECISION MASONRY BLOCK (TYPICAL @ WEST ELEVATION @ PROPERTY LINE)
EAST ELEVATION
SCALE : 1/8" = 1'-0"
SDG
SAITO DESIGN GROUP, INC
20803 VALLEY BOULEVARD, #105
WALNUT, CALIFORNIA 91789
NO. REVISION DATE
LICENSED ARCHITECT
AL SAITO
C-22991
STATE OF CALIFORNIA
PROJECT: INDUSTRIAL BUILDING
12793 GARVEY AVE. (WESTCOTT)
APN 8550-005-061
BALDWIN PARK, CA
DRAWING: ELEVATIONS
OWNER / APPLICANT:
BALDWIN PARK HOMES, LLC
1773 SAN BERNARDINO ROAD, STE. B42
WEST COVINA, CA 91790
(626) 332-6768
DRAWN BY:
JOB NO:
SHEET NUMBER
A0.3

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 6. Elevations
2020-106 12793 Garvey Avenue Industrial Project

SDG
SAITO DESIGN GROUP, INC
20803 VALLEY BOULEVARD, #105
WALNUT, CALIFORNIA 91789
(909) 595-4600 FAX (909) 595-4400





ROOF PLAN

SCALE : 1/8" = 1'-0"

SMOKE VENTILATION REQUIREMENT

A_{VR} = AGGREGATE VENT AREA REQUIRED
A_{VR} = V / 9000
V = VOLUME (ft^3) OF THE AREA THAT REQUIRES SMOKE REMOVAL

UNIT 1
V = 148,916 $ft.^3$
A_{VR} = 148,916 $ft.^3$ / 9000
A_{VR} = 16.54 sq. ft.
64 sq. ft. OF SMOKE VENTILATION PROVIDED

UNIT 2
V = 114,660 $ft.^3$
A_{VR} = 114,660 $ft.^3$ / 9000
A_{VR} = 12.74 sq. ft.
64 sq. ft. OF SMOKE VENTILATION PROVIDED

UNIT 3
V = 101,954 $ft.^3$
A_{VR} = 101,954 $ft.^3$ / 9000
A_{VR} = 11.33 sq. ft.
48 sq. ft. OF SMOKE VENTILATION PROVIDED

UNIT 4
V = 109,300 $ft.^3$
A_{VR} = 109,300 $ft.^3$ / 9000
A_{VR} = 12.14 sq. ft.
48 sq. ft. OF SMOKE VENTILATION PROVIDED

NO.	REVISION	DATE

PROJECT: INDUSTRIAL BUILDING
12793 GARVEY AVE. (WESTCOTT)
APN 8550-005-003
BALDWIN PARK, CA

DRAWING: ROOF PLAN

OWNER / APPLICANT:
BALDWIN PARK HOMES, LLC
1773 SAN BERNARDINO ROAD, STE. B42
WEST COVINA, CA 91790
(626) 332-6768

DRAWN BY:
JOB NO:
SHEET NUMBER
A0.4

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 7. Roof Plan
2020-106 12793 Garvey Avenue Industrial Project

2.5 Consultation with California Native American Tribes

The following California Native American tribes traditionally and culturally affiliated with the project area have been notified of the project: Gabrielino Tongva Tribe, Gabrieleno Band of Mission Indians-Kizh Nation, and Soboba Band of Luiseno Indians. Following notification, no tribes responded within the prescribed statutory time frame with a request for consultation pursuant to Public Resources Code section 21080.3.1.

SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

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

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

Determination

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the 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 Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the 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 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 Project, nothing further is required.	☐

Ron Garcia
City Planner

Date

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Regional Setting

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. 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.

Because the City is largely built out, the visual character of the City is suburbanized. Portions of the City contain distant views of the Angeles National Forest, San Gabriel Mountains and San Bernardino Mountains. However, the City's 2020 General Plan does not identify any scenic vistas or other scenic resources (Baldwin Park 2002a).

State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view (Caltrans 2011). Two state scenic highways are located within Los Angeles County: State Route (SR)-2 and SR-110. SR-2, the closest scenic highway to the proposed Project site, is located over 14 miles north of the proposed Project site.

Visual Character of the Project Site

The subject site is currently a vacant parcel with emergent weeds and ornamental trees, a paved vehicle tow lot and a large multi-panel billboard. The site is generally surrounded by existing urban development that includes garden residential apartments, a trailer park, and roadways. There are no scenic views from the site. The onsite billboard, a 16' barrier sound wall and elevated I-10 ramp approach to the 1-10/II-605 interchange to the south, and SCE transmission line towers east of the site along Westcott Avenue, are the dominant visual elements on or near the site.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

The Project would be constructed on land that has been highly disturbed. The site is generally surrounded by existing urban development that includes residential and industrial uses, and the proposed development would not visually conflict with such uses. Additionally, the proposed Project would not result in the removal of open space, recreational areas, or other undeveloped lands of scenic value.

In the vicinity of the Project site, upper elevations of the San Gabriel Mountains are sporadically visible along Garvey Avenue between developed commercial and residential properties. However, The Baldwin Park General Plan does not designate any scenic vistas that are adjacent to or within close proximity to the site. The Project would not have a substantial adverse impact on a scenic vista. As such, impacts would be less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐

SR-2, the Angeles Crest Scenic Byway, is the closest state scenic highway to the proposed Project site and is located over 14 miles north of the site. The majority of the site is currently vacant and does not contain any scenic resources, rock outcroppings, or historic buildings. Several ornamental trees that will be removed along the west property boundary have no particular scenic resource value. As such, impacts would be less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

The Project is in a highly urbanized on land that has been highly disturbed. The Project proposes industrial commercial development similar to that of other properties along Garvey Avenue. The proposed facility would be constructed in accordance with applicable City design regulations and will be subject to City review, prior to approval and construction. With such measures, the project would not substantially degrade the existing visual character or quality of the site or its surrounding. Project impacts would be less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

The proposed Project site currently consists of a vacant lot and vehicle tow yard. The proposed Project would construct a 20,847 square foot industrial warehouse building on a site zoned for industrial commercial use. The Project would include light fixtures for the parking area, pedestrian pathways, building entries, and landscaping. These light fixtures would provide increased visibility and security to the project site. The lighting or glare intensity caused by the proposed development would be similar to that which occurs in the project vicinity, as produced by the existing residential buildings and industrial uses near the site. Furthermore, future project development would be required to comply with the City's Municipal Code regulations regarding exterior lighting, security lighting, and shielded lighting, which would minimize lighting/glare impacts. Therefore, impacts from light and glare would be less than significant.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

The California Department of Conservation (DOC) provides online mapping of important agricultural and forestry resources, including Prime Farmland, Unique Farmland, Farmland of Statewide Importance, properties zoned for agriculture or forestry uses, and properties under Williamson Act contract. The City of Baldwin Park does not contain any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance per maps prepared by the California Department of Conservation, Division of Land Resource Protection.

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☐	☒

According to the City of Baldwin Park 2020 General Plan, the project site has a land use designation of Commercial Industrial and is therefore not intended for agricultural use. The California Mapping and Monitoring Program, Important Farmlands Map of Los Angeles County does not list the soils on the project site as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2016). Therefore, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

The project site is zoned (I-C) Industrial Commercial and is not located in an agricultural use zone. Therefore, the proposed Project would not result in a conflict with an agricultural use zoning designation or a Williamson Act Contract. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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))?	☐	☐	☐	☒

The City of Baldwin Park has no designated forest land or timberland within its boundaries. The project site and associated parcels are not zoned for Timberland Production, nor are the affected parcels located within proximity to any lands zoned as forest land. The land area affected by the proposed Project is located within an urbanized area of the City and does not support forest land or timberland resources or operations. Therefore, no impact will occur from project implementation with regard to conflict with existing zoning for, or cause rezoning of, forest land or timberland.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

As discussed in Response (c), the City of Baldwin Park has no designated forest land or timberland within its boundaries. The project site and associated parcels are not zoned as forest land. The land area affected by the proposed Project is located within an urbanized area of the City and does not support forest land.

Therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

The project site and the surrounding properties are not currently used for agriculture. Therefore, the proposed Project would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 Air Quality

4.3.1 Environmental Setting

The Project area is located within Los Angeles County. The California Air Resource Board (CARB) has divided California into regional air basins according to topographic features. Los Angeles County and the Project area are located in a region identified as the South Coast Air Basin (SoCAB). The SoCAB occupies the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter. The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

Both the U.S. Environmental Protection Agency (USEPA) and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O_3) (O_3 precursor emissions include nitrogen oxide (NOx) and reactive organic gases (ROG)), carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The Los Angeles County portion of the SoCAB region is designated as a nonattainment area for the federal O_3, fine particulate matter ($PM_{2.5)}$, and lead standards

and is also a nonattainment area for the state standards for O_3, coarse particulate matter (PM_{10}), and $PM_{2.5}$. (It is noted that lead is not emitted from standard land use developments such as that proposed by the Project.)

The local air quality agency affecting the SoCAB is the South Coast Air Quality Management District (SCAQMD), which is charged with the responsibility of implementing air quality programs and ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SoCAB. In an attempt to achieve national and state ambient air quality standards and maintain air quality, the air district has completed several air quality attainment plans and reports, which together constitute the State Implementation Plan (SIP) for the portion of the SoCAB encompassing the Project.

The SCAQMD has also adopted various rules and regulations for the control of stationary and area sources of emissions. Provisions applicable to the Proposed Project are summarized as follows:

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below:

    a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

    b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

    c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

    e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gas (ROG)

emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

- **Rule 1401 (New Source Review of Toxic Air Contaminants)** – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

4.3.2 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 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 Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

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 or cause or contribute to new air quality violations?

As shown in Table 2-6, 2-7, and 2-8 above, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

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

As shown in Table 2-6and 2-8 above, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or 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 SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Baldwin Park. Specifically, SCAG's *Growth Management* Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's *2016 RTP/SCS* provides socioeconomic forecast projections of regional population growth. The City of Baldwin Park General Plan is referenced by SCAG in order to assist forecasting future growth in Baldwin Park.

The Proposed Project is consistent with the land use designation and development density presented in the City of Baldwin Park General Plan. As previously stated, the Project site is designated by the City of Baldwin Park General Plan as *CI – Commercial Industrial*. According to the General Plan, the *CI* designation allows for commercial, light manufacturing, and office uses in both business park settings and individual lots. Furthermore, the Project does not involve any uses that would increase population beyond what is

considered in the General Plan and, therefore, would not affect city-wide plans for population growth at the Project site. Thus, the Proposed Project is consistent with the types, intensity, and patterns of land use envisioned for the Project site in the General Plan and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2016 AQMP. The City of Baldwin Park's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

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

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the Proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. As shown in Table 2-6, 2-7, and 2-8 below, the Proposed Project would not exceed applicable SCAQMD thresholds of significance during construction and operation. The Proposed Project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. The Proposed Project's long-term influence would also be consistent with the goals, objectives, and strategies of the SCAQMD's 2016 AQMP.

The Project would be consistent with the emission-reduction goals of the 2016 AQMP. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

SCAQMD Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 2.

Table 2. SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

A portion of the Proposed Project's air quality impacts are attributable to construction activities. The majority of the long-term air quality impacts will be due to the operation of motor vehicles traveling to and from the site. For purposes of impact assessment, air quality impacts have been separated into construction impacts and operational impacts.

Project Construction-Generated Criteria Air Quality Emissions

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 3. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 3. Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction in 2021	38.88	15.88	8.92	0.03	0.99	0.46
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.
Emissions estimates account for the site preparation and grading of 42,875 SF. Building construction, paving, and painting are assumed to occur in overlapping phases. The duration of each construction phase is based on construction information provided by the Project Applicant. The CalEEMod model accounts for 1,000 CY of soil import.
Emissions were taken from summer or winter, whichever is greater.

As shown in Table 3, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project

construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Localized Construction Significance Analysis

As previously stated, nearest sensitive receptors to the Project site are residences directly adjacent to the Project site boundary to the west. In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the East San Gabriel Valley, SRA 9. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. As previously described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. The Project site is 42,875 SF, or approximately 0.98 acre. Thus, the LST threshold value for a one-acre site was employed from the LST lookup tables.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptors to the Project site are the residences located immediately adjacent to the western side of the Project site. Notwithstanding, the SCAQMD Methodology explicitly states: "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in this analysis. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. Table 4 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project site daily during site preparation activities and grading activities at 25 meters or less from sensitive receptors.

Table 4. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Project Site Preparation	3.86	1.59	0.49	0.15
Project Site Grading	7.43	6.56	0.50	0.50
SCAQMD Localized Significance Threshold (1.0 acre of disturbance)	*89.00*	*623.00*	*5.00*	*3.00*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.

Table 4. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Emissions estimates account for the site preparation and grading of 42,875 SF. Building construction, paving, and painting are assumed to occur in overlapping phases. The duration of each construction phase is based on construction information provided by the Project Applicant. The CalEEMod model accounts for 1,000 CY of soil import. Emissions were taken from summer or winter, whichever is greater.

Table 4 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would likely not adversely impact the neighboring receptors to the west.

Project Operations Criteria Air Quality Emissions

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as ozone precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use. As previously described, operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates from KOA (2020).

Long-term operational emissions attributable to the Project are identified in Table 5 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 5. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	0.46	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	0.11	0.53	1.50	0.00	0.44	0.12

Table 5. Operational-Related Emissions (Regional Significance Analysis)						
Emission Source	**Pollutant (pounds per day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Total:	**0.57**	**0.54**	**1.51**	**0.00**	**0.44**	**0.12**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	0.46	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	0.10	0.54	1.42	0.00	0.44	0.12
Total:	**0.57**	**0.55**	**1.44**	**0.00**	**0.44**	**0.12**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.
Notes: Emissions projections account for a trip generation rate and fleet mix identified by KOA 2020.Specifically, KOA estimates the Project generation 63 average vehicle trips daily.

As shown in Table 5, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

The Los Angeles County portion of the SoCAB is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$. O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-8, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operations of a project only if the project includes stationary sources or attracts substantial amounts of heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Proposed Project does not include such uses. Therefore, in the case of the Proposed Project, the operational LST protocol is not applied. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

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

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Table 2-6 and Table 2-7, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions. The portion of the SoCAB which encompasses the Project area is designated as a nonattainment area for federal O_3 and fine particulate matter ($PM_{2.5}$) standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} standards (CARB 2018). Thus, existing O_3 and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods.

The health effects associated with O_3 are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NOx) in excess of the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result

in CO emissions in excess of the SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust $PM_{2.5}$, considered a surrogate for DPM, would be 0.41 pounds/day (see Attachment A). ($PM_{2.5}$ exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., $PM_{2.5}$). Most $PM_{2.5}$ derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Additionally, the Project would be required to comply with SCAQMD Rule 403 described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the Project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. As shown in Table 2-9, the maximum operation-related emissions of exhaust $PM_{2.5}$, considered a surrogate for DPM, would be 0.004 pounds per day. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project will not have a high carcinogenic or non-carcinogenic risk during operation.

Naturally Occurring Asbestos

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain

naturally-occurring asbestos (Department of Conservation [DOC] 2000). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, the SoCAB was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is now designated as attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD's *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The busiest intersection evaluated had a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

According to the Traffic Study prepared for the Project (KOA 2020), the Project is anticipated to generate 63 daily trips on average. Because the Proposed Project would not increase traffic volumes at any intersection to more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values. Therefore, CO "hot spots" are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile source emissions would not be a concern. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Construction Impacts

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would result in a less than significant impact related to odor emissions.

Operational Impacts

The land uses generally identified as sources of odors include wastewater treatment plants, wastewater pumping facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, painting/coating operations, rendering plants, coffee roasters, food processing facilities, confined animal facilities, feedlots, dairies, green waste and recycling operations, and metal smelting plants. If a source of odors is proposed to be located near existing or planned sensitive receptors, this could have the potential to cause operational-related odor impacts. The Project does not include or propose any of these land uses or similar land uses. The operational impact is less than significant.

4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.4 Biological Resources

4.4.1 Environmental Setting

The Project site lies within the City of Baldwin Park, an urbanized community that is largely built out, with limited to no natural habitat for special status species (Baldwin Park 2002a). The Project site has been highly disturbed; vegetation includes invasive grasses, weeds and a row of trees along the west property boundary, as well as several trees along the frontage with Westcott Avenue. There are no natural drainages or surface water features.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

The Project site lies within the City of Baldwin Park, an urbanized community that is largely built out, with limited to no natural habitat for special status species (Baldwin Park 2002a). The Project site is highly disturbed and no sensitive habitat is present on the property. Project implementation is not anticipated to directly impact any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Refer to Response 4.4(a), above. The Walnut Creek Nature Park is located approximately 0.25 miles southeast of the Project site within the City of Baldwin Park. The Project does not propose any development that would cause a direct or indirect disturbance to the Nature Park, nor would the Project 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 would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

Refer to Response 4.4(a) above. The Project site is generally flat and does not feature any discernible natural drainage or surface water features. According to the General Plan Final Program EIR (Appendix A Initial Study), there are no know biological resources or federally-protected wetlands within the City of Baldwin Park. Therefore, the Project would not have a substantial effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act. No impacts would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

The Project site has experienced substantial prior development and disturbance. The site is not located within a Multi-Species Habitat Conservation Plan, and no designated wildlife corridors are present in the vicinity. Due to the disturbed nature of the Project site and developed nature of its surroundings, the site is not anticipated to be utilized by wildlife as a movement or migratory corridor. Neither the Project site nor surrounding lands are expected to support native wildlife nursery site. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐

Refer to Response 4.4(a) above regarding onsite conditions and biological resources. There are several mature trees on the site along the west property boundary and along Westcott Avenue. These include an invasive non-native tree, the Tree-of-Heaven (*Ailanthus altissima),* Carrotwood *(Cupaniopsis anacardioides),* and California Palm *(Washingtonia filifera).* The Project proposes removal of these trees for construction of the proposed warehouse building. Mitigation Measure **BIO-1** is recommended to assure compliance with the City's Tree Preservation Ordinance and Protection (Code Section 153.165). Removal of the mature trees also has the potential to impact nesting bird habitat. Mitigation Measure **BIO-2** is

identified to assure compliance with the Migratory Bird Treaty Act. Compliance with measures **BIO-1** and **BIO-2** would reduce potential tree removal impacts to less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

Baldwin Park is not located within a habitat conservation plan, natural community conservation plan, or any other approved local, regional or State habitat conservation plan area. The nearest designated habitat conservation area is a County of Los Angeles Significant Ecological Area (SEA) (Area #19, San Gabriel Canyon) located approximately 8.0 miles northeast of the Project site. Therefore, the Project would not result in an impact with regard to conflict with an adopted conservation plan. No impact would occur.

4.4.3 Mitigation Measures

BIO-1: Tree Report. Prior to construction, the Project Applicant shall submit to the City's Community Development Department a Tree Report from a certified arborist demonstrating compliance with the City's Tree Preservation Ordinance. The report will identify the type, size and health of trees on the site and recommend suitable replacement trees, as necessary.

BIO-2: Pre-Construction Nesting Bird Survey: If construction or other project activities are scheduled to occur during the bird breeding season (Typically February 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests will not be disturbed or destroyed on the Project site. The survey shall be completed no more than three days prior to initial ground disturbance. If an active nest is identified, the biologist shall establish an appropriately sized disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

4.5 Cultural Resources

4.5.1 Environmental Setting

Records Search

A records search for the property was completed by South Central Coastal Information Center (SCCIC) staff with the results supplied to ECORP on August 19, 2020 (Appendix B). The purpose of the records search was to determine the extent of previous surveys within a ¼ mile radius of the proposed Project location, and whether previously documented pre-contact or historic-period archaeological sites or architectural resources exist within this area.

Previous Research

Nine previous cultural resource investigations have been conducted within ¼ mile of the Project Area. Of these, one a survey conducted in 2002, overlaps the entire Project Area (Table 6). The previous studies were conducted between 1968 and 2012 and vary in size from 100 acres to 2,016 acres.

Table 6. Previous Cultural Studies In or Within 1/4 Mile of the Project Area

SCCIC Report Number	Author(s)	Report Title	Year	Includes Portion of the APE?
LA-02412	Singer, Clay A.	UCLA Archaeological Survey Field Project Number Ucas-086.	1968	No
LA-03056	Wlodarski, Robert J.	Negative Archaeological Survey Report Minor Widening for I-10 Malibu, California.	1994	No
LA-04880	Smith, Philomene and Sriro, Adam	Pavement Rehabilitation Along Route 605 Within the Cities of Long Beach, Lakewood, Cerritos, Downey, Pico Rivera, Santa Fe Springs, Whittier, City of Industry, Baldwin Park and Irwindale.	2000	No
LA-06282	Duke, Curt	Cultural Resource Assessment for AT & T Fixed Wireless Services Facility Number La_156_a, County of Los Angeles, California	2001	No
LA-10151	Cotterman, Cary D. and Evelyn N. Chandler	Cultural Resources Inventory of Proposed Pole Replacement in the City of Baldwin Park, Los Angeles County, CA	2008	No
LA-10189	Gust, Sherri and Sara Alarcon	Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Interstate 605 Soundwall Project, from Whittier to Baldwin Park, Los Angeles County, CA	2003	No
LA-10190	Harbert, Claudia	Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA	2002	Yes
LA-10883	Stewart, Noah M.	Finding of no adverse effect - Interstate Route 10-605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA:245400	2008	No
LA-11784	Stewart, Noah	Supplemental Finding of No Adverse Effect, Interstate Route 10-605 Interchange Improvement	2012	No

The records search also determined that eight previously recorded historic-era cultural resources are located within ¼ mile of the Project Area (Table 7). Of these, six are historic residential properties, one is mixed-use residential/commercial property, and one is a public utility engineering structure (transmission line). No previously recorded resources are located within the Project Area. However, a portion of the transmission line is located across Wescott Street from the Project Area.

Table 7. Previously Recorded Cultural Resources In or Within 1/4 Mile of the Project Area				
Site Number (Trinomial/Primary)	**Recorder and Year**	**Age/ Period**	**Site Description**	**Within Project Area?**
P-19-188913	2002 (Claudia A. Harbert, Caltrans)	Historic	12836 Dalewood St Baldwin Park (APN 8564-003-009)	No
P-19-188914	2002 (Claudia A. Harbert, Caltrans)	Historic	12901 Dalewood St Baldwin Park (APN 8564-003-016)	No
P-19-188915	2002 (Claudia A. Harbert, Caltrans)	Historic	819 Frazier St Baldwin Park (APN 8559-011-002)	No
P-19-188916	2002 (Claudia A. Harbert, Caltrans)	Historic	807-811 Frazier St Baldwin Park (APN 8559-011-003)	No
P-19-188917	2002 (Claudia A. Harbert, Caltrans)	Historic	805 Frazier St Baldwin Park (APN 8559-011-004)	No
P-19-188918	2002 (Kelly F. Ewing, Caltrans)	Historic	12957 Garvey Ave Baldwin Park (APN 8556-023-005)	No
P-19-188919	2002 (Kelly F. Ewing, Caltrans)	Historic	12961 Garvey Ave Baldwin Park (APN 8556-023-004)	No
P-19-188983	1999 (Stephen Van Wormer, KEA); Updated 2008 (Noah M. Stewart, Caltrans District 7); Updated 2013 (Heather Gibson and Marc Beherec, AECOM); Updated 2018 (Jessica B. Feldman, ICF)	Historic	Boulder Dam – Los Angeles 287.5 kV Transmission Line	No

Records

12793 Garvey Avenue is listed on the California Built Environment Resources Directory (BERD). The BERD notes that the property was developed in 1940. The BERD also states that the structures present were determined ineligible in 1995 for National Register by consensus through Section 106 process – not evaluated for California Register or Local Listing (NRHP Status Code 6Y).

A review of historic-period aerial photographs indicate that one or more historic-period structures were present on the property in 1948 (earliest available photograph). However, by 2003, these buildings had been torn down and the property currently contains several mobile trailers and appears to be used as a tow yard.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐

The site has been previously disturbed and is currently vacant on the southerly portion and paved on the northerly portion. There are no known historic resources present on the site. The Project does not propose to change the historic designations of any recognized historical sites or structures and would not change or have any effect upon the City's existing preservation objectives or policies. Further, the proposed Project would not result in any adverse impacts to any of the historical resources within 0.25-mile of the Project site. Therefore, impacts to historic resources would be less than significant with the project.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐

According to the General Plan FEIR, the City is largely built out and does not contain any known archaeological resources. Therefore, the potential for uncovering such resources within the City is considered to be low. As such, the General Plan FEIR determined that no impacts on historical and cultural resources would occur with future buildout of the General Plan. Because Project construction and demolition activities would occur on a previously disturbed and developed site, it is unlikely the Project would cause a substantial adverse change in the significance of an archaeological resource. Impacts are less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

The Project is not expected to disturb any human remains including those outside of formal cemeteries. The City of Baldwin Park does not have any cemeteries and the project site has not been used as a cemetery in the past. In addition, the site has not been used for any activities that have resulted in human remains being present on the property. The potential for uncovering such significant resources during project grading or excavation activities is therefore considered to be low. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code (PRC)

would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission (NAHC) and consultation with the individual identified to be the "most likely descendant." With adherence to applicable laws and regulations, impacts to human remains are anticipated to be less than significant.

4.5.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.6 Energy

4.6.1 Environmental Setting

Electricity/Natural Gas Services

Southern California Edison provides electrical services to Baldwin Park through State-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The Southern California Gas Company provides natural gas services to the Project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential uses in Los Angeles County from 2014 to 2018 is shown in Table 8. As indicated, the demand has decreased since 2014.

Table 8. Non-Residential Electricity Consumption in Los Angeles County 2014-2018

Year	Non-Residential Electricity Consumption (kilowatt hours)
2018	47,441,213,221
2017	48,029,979,504
2016	49,118,518,074
2015	49,129,938,270
2014	49,193,414,617

Source: CEC 2019

The natural gas consumption associated with all non-residential uses in Los Angeles County from 2014 to 2018 is shown in Table 9. As indicated, the demand has increased since 2014.

Table 9. Non-Residential Natural Gas Consumption in Los Angeles County 2014-2018

Year	Non-Residential Natural Gas Consumption (therms)
2018	1,813,661,643
2017	1,840,593,319
2016	1,767,522,497
2015	1,677,088,197
2014	1,715,328,124

Source: CEC 2019

Automotive fuel consumption in Los Angeles County from 2015 to 2019 is shown in Table 10. As shown, automotive fuel consumption increased between 2015 and 2017 and subsequently decreased since 2017.

Table 10. Automotive Fuel Consumption in Los Angeles County 2015-2019

Year	Countywide Fuel Consumption (gallons)
2019	4,451,867,873
2018	4,551,051,324
2017	4,635,589,205
2016	4,621,500,309
2015	4,488,635,974

Source: CARB 2017

4.6.2 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

The impact analysis focuses on the four sources of energy that are relevant to the Proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations. Addressing energy impacts requires that an agency make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by non-residential land uses in Los Angeles County. Similarly, the amount of fuel necessary for Project

construction and operations is calculated and compared to that consumed in Los Angeles County on an annual basis.

The analysis of electricity gas usage is based on California Emissions Estimator Model (CalEEMod) modeling conducted by ECORP Consulting (see Attachment B of Appendix A), which quantifies energy use for Project operations. The amount of operational automotive fuel use was estimated using the CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in Los Angeles County. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the Proposed Project is summarized in Table 11.

Table 11. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption[1]	110,781 kilowatt-hours	0.0002 percent
Natural Gas[1]	353 therms	0.0000 percent
Automotive Fuel Consumption		
Project Construction[2]	6,601 gallons	0.0001 percent
Project Operations[3]	82,526 gallons	0.0018 percent

Source: [1]ECORP 2020; [2]Climate Registry 2016; [3]EMFAC2017 (CARB 2017)
Notes: The Project increases in electricity and natural gas consumption are compared with all of the non-residential buildings in Los Angeles County in 2018, the latest data available. The Project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2019.

As shown in Table 11, the increase in electricity usage as a result of the Project would constitute an approximate 0.0002 percent increase in the typical annual electricity consumption attributable to non-residential uses in Los Angeles County. Project increases in natural gas usage across Los Angeles County would also be negligible. The Project would adhere to all federal, state, and local requirements for energy efficiency, including the Title 24 standards. The Project would be required to comply with Title 24 building energy efficiency standards, which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage.

As further indicated in Table 11, the Project's gasoline fuel consumption during the one-time construction period is estimated to be 6,601 gallons of fuel, which would increase the annual countywide gasoline fuel use in the county by 0.0001 percent during the year construction occurred. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of equipment fuel demand during Project construction. For these reasons, it is

expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

As indicated in Table 11, Project operation is estimated to consume approximately 82,526 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.0018 percent. The amount of operational fuel use was estimated using CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in Los Angeles County. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to Los Angeles County. Project trip generation estimates are provided by the Traffic Impact Study completed by KOA (2020). The Project is estimated to generate 63 trips per day to support Project operations and would not result in excessive long-term operational automotive fuel consumption. Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. For these reasons, this impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. Relevant energy conservation plans specific to Baldwin Park include the City's General Plan Health and Sustainability Element, specifically Goal HS-7 of this Element. An overarching goal of these implementation elements is to encourage energy conservation activities and programs throughout the City. The Project would not conflict or obstruct any local or state plans for renewable energy or energy efficiency. For these reasons, this impact would be less than significant.

4.6.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

Geomorphic Setting

The City of Baldwin Park is located in the Baldwin Park Quadrangle, which covers an area of about 62 square miles in eastern Los Angeles County. The area lies in densely populated central San Gabriel Valley and includes parts of the cities of Azusa, Baldwin Park, Covina, Duarte, El Monte, Glendora, Industry, Irwindale, La Puente, Monrovia, Walnut, West Covina, as well as unincorporated areas of Los Angeles County (DOC 1998).

The San Gabriel Valley is a sediment-filled, east-trending structural trough situated along the southern flank of the San Gabriel Mountains. The San Gabriel Mountains are a major component of the Transverse Ranges geomorphic province of California and are comprised largely of plutonic and metamorphic rocks. In the Baldwin Park Quadrangle, the southern boundary of San Gabriel Valley is defined by the Puente Hills and San Jose Hills, which are comprised of Tertiary marine and non-marine sedimentary rocks (DOC 1998).

Regional Seismicity and Fault Zones

An "active fault," according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive."

No active faults traverse the City. However, several major faults have been identified in the region with the potential to cause damage. The most significant known active fault are the Whittier-Elsinore Fault Zone, Newport-Inglewood Fault Zone, San Andreas Fault Zone, and San Gabriel Fault Zone, as well as the lesser San Fernando/Sierra Madre-Cucamonga Fault Zone, Raymond Hill Fault Zone, Verdugo Fault Zone, and Chino Fault Zone, according to Figure PS-1 in the Public Safety Element of the General Plan. The Safety Element contains policies designed to substantially lessen seismic impacts and to provide local residents with an adequate level of protection from seismic-related activity.

Soils

A geotechnical engineering investigation for the proposed Project at 12793 Garvey Avenue was conducted by Quartech Consultants (Appendix C). The onsite near surface soils consist predominantly of silty sand (SM). In general, these soils exist in loose to medium dense and slightly moist condition. Underlying the surface soils, gravelly silty sand (SM), mixture of sand and silty sand (SM), mixture of sand and silty/sand (SP/SM) and poorly graded sand were disclosed in borings to the depths explored (51.5 feet below ground surface). Ground water level was not encountered in borings to this depth. These soils exist in the medium dense to very dense, and slightly moist conditions. The soils become more dense as depth increases (Quartech 2020).

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

i) The City of Baldwin Park, like the rest of southern California, is located within a seismically-active region as the result of being located near the active margin between the North American and Pacific tectonic plates. There are no known active faults crossing the Project site (Quartech 2020). Moreover, as stated in the Public Safety Element of the General Plan, there are no active known faults within the City of Baldwin Park; however, several major faults do exist within the region and have the potential to cause damage within the City. The most significant known active fault zones that are capable of seismic ground shaking and can impact the City are the Whittier-Elsinore Fault Zone, Newport-Inglewood Fault Zone, San Andreas Fault Zone, and San Gabriel Fault Zone, according to the Public Safety Element of the General Plan.

The proposed Project would not expose people or structures to potential substantial adverse effects involving the rupture of a known earthquake fault. According to the City's General Plan, there are no active faults within the City of Baldwin Park, therefore no Alquist-Priolo Special Study Zones are within the City. No impact would occur.

ii) Just like most of southern California, in the event of an earthquake strong ground shaking is expected to occur on the project site. The proposed Project would not expose people or structures to strong seismic ground shaking greater than what currently exists. The City has implemented the Uniform Building Code seismic safety standards for structural construction. The City will continue to enact these and other seismic safety programs to minimize hazards from earthquakes and other seismic hazards. Design and construction would comply with current building codes and standards which would reduce the risk of loss, injury, or death resulting from strong ground-shaking. Impacts would be less than significant.

iii) Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements. According to the California Geological Survey (CGS), the project site is located within the liquefaction potential zone as shown on the Earthquake Zones of Required Investigation: Baldwin Park Quadrangle (CGS 1999). Based on

evaluation procedures in the project geotechnical engineering report (Quartech 2020), a surface manifestation of liquefaction at the site under the design earthquake event is considered unlikely. Existing City development project review practices include review of soils and geotechnical reports which document in-field conditions. As such, the City Engineer would recommend measures for incorporation into the design and construction of the project to reduce liquefaction impacts. Additionally, the proposed Project would comply with the California Building Code and is not anticipated to directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving seismic related ground failure including liquefaction. Impacts would be less than significant.

iv) According to the California Geological Survey (CGS), the Project site is not located in an area subject to landslides (CGS 1999). Due to the relatively flat nature of the site, the potential for landslide is considered remote (Quartech 2020). No impacts would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Implementation of the proposed Project would require ground-disturbing activities, such as grading, that could potentially result in soil erosion or loss of topsoil. Construction of the proposed Project would be required to comply with the Construction General Permit, either through a waiver or through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) included in the SWPPP would minimize soil erosion during construction. The proposed Project's grading plan would also ensure that the proposed earthwork and storm water structures are designed to avoid soil erosion. As such, soil erosion impacts would be reduced to a less than significant impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Strong ground shaking can cause settlement, lateral spreading, or subsidence by allowing sediment particles to become more tightly packed, thereby reducing pore space. The potential for a landslide, lateral spreading, liquefaction, or collapse at the project site is very low. The site is relatively flat and would not be at risk of landslides. Additionally, the proposed Project would construct an industrial commercial facility on a previously occupied site. The City has implemented the Uniform Building Code seismic safety standards for structural construction. The City will continue to enact these and other seismic safety programs to minimize hazards from earthquakes and other seismic hazards. The Project shall

comply with recommendations of the geotechnical engineering report for the design and construction phases. This includes recommended surficial soil removals to a minimum depth of four feet below existing grade and extending at least four feet beyond building lines. Therefore, with compliance with these recommendations the proposed Project would not contribute to a new exposure of people or structures to substantial adverse effects associated with onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. As previously noted, soils within the project area are generally sandy soils. According to the Natural Resources Conservation Service Web Soil Survey, the project site consists almost entirely of Urban land-Tujunga-Typic Xerorthents, sandy substratum complex, 0 to 2 percent slopes (NRCS 2019). This type of soil has a low shrink-swell potential, and this is considered to have low expansive qualities. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

The proposed Project does not include the installation of a septic system or alternative waste water disposal system. No impacts would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

As stated above, the City of Baldwin Park is largely built out. The General Plan Final Program EIR indicates that the City does not contain any known paleontological resources. Previous land development and other human activities have likely disturbed or destroyed any paleontological resources that may have been

present onsite in the past. The potential for uncovering significant paleontological resources during new construction or redevelopment projects is therefore considered to be unlikely (Baldwin Park 2002b).

Although no paleontological resources are known to exist on site, there is a possibility that paleontological resources exist at sub-surface levels on the project site and may be uncovered during grading and excavation activities. Implementation of mitigation measure **GEO-1** will ensure that if any such resources are found during construction of the Project, they would be handled according to the proper regulations and any potential impacts would be reduced to less than significant levels.

4.7.3 Mitigation Measures

GEO-1: Unanticipated Discovery – Paleontological Resource. If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the City and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Greenhouse Gas (GHG) emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

The local air quality agency regulating the SoCAB is the SCAQMD, the regional air pollution control officer for the basin. To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold Working Group. Members of the working group included government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance

Thresholds. On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including a numeric "bright-line" threshold of 3,000 metric tons of CO_2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (defined as the people that work, study, live, patronize and/or congregate on the Project site) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

Construction-Generated Greenhouse Gas Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 12 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

As shown in Table 12, Project construction would result in the generation of approximately 67 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

Table 12. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
2021 Construction	**67**
Total Emissions	**67**

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 13 and compared to SCAQMD's numeric bright-line threshold of 3,000 metric tons of CO_2e annually.

Table 13. Operational-Related GHG Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	2
Area Source Emissions	0
Energy Source Emissions	29
Mobile Source Emissions	88
Solid Waste Emissions	9
Water Emissions	52
Total Emissions	**180**
SCAQMD Screening Threshold	*3,000*
Exceed SCAQMD Threshold?	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 13, Project operations would result in the generation of approximately 180 metric tons of CO_2e annually and thus would not exceed the SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually. This threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to the statewide GHG emissions reduction goals for the year 2020 promulgated under AB 32 and the post-2020 reduction goals promulgated under SB 32. Thus, both cumulatively and individually, projects that generate less than 3,000 metric tons CO_2e per year have a negligible contribution to overall emissions.

As such, a less than significant impact would occur. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

The City of Baldwin Park does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. However, Baldwin Park is a member city of the SCAG. SCAG's 2016–2040 RTP/SCS, adopted April 7, 2016, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 and establishes an overall GHG target for the region consistent with both the statewide GHG-reduction targets for 2020 and the post-2020 statewide GHG reduction goals. The 2016 RTP/SCS contains over 4,000 transportation projects,

including highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six-county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently. The Proposed Project's consistency with the RTP/SCS goals is analyzed in detail in Table 14.

Table 14. Consistency with SCAG's RTP/SCS Goals

SCAG Goals	Compliance with Goal
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Not Applicable**: This is not a project-specific policy and is therefore not applicable.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consisten**t: Improvements to the transportation network in Baldwin Park are developed and maintained to meet the needs of local and regional transportation and to ensure efficient mobility. A number of regional and local plans and programs are used to guide development and maintenance of transportation networks, including but not limited to: • Caltrans Traffic Impact Studies Guidelines • Caltrans Highway Capacity Manual • SCAG RTP/SCS The Project is proposing light industrial/commercial warehouse and office space in close proximity to I-10 and I-605, which are major regional freeway corridors. I-10 has been identified as a "Major International Trade Highway Routes" in the California State Goods Movement Action Plan (EPA 2007). Both the I-10 and I-605 serve to accommodate existing truck trips along the interstate. The Goods Movement Action Plan is a statewide initiative to improve and expand California's goods movement industry and infrastructure in a manner which will increase mobility and relieve traffic congestion as well as reduce GHG emissions. The Plan further identifies I-10 (located just south of the Project site) as a "Priority Corridor" for development towards more efficient goods movement and anticipates that the development of good movement-supporting facilities, such as industrial warehouses like that proposed by the Project, will improve the efficiency of overall goods movement throughout the state, and thus reduce truck-related GHG emissions.

SCAG Goals		Compliance with Goal
Goal 3:	Ensure travel safety and reliability for all people and goods in the region.	**Consistent**: All modes of transit in Baldwin Park are required to follow safety standards set by corresponding regulatory documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Baldwin Park, County of Los Angeles) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans. The Project is proposing light industrial and/or warehouse space in close proximity to the I-10, which is a major regional freeway corridors. Industrial and warehouse uses positioned in close proximity to major freeway corridors are considered goods-movement-supporting facilities, and will improve the efficiency of overall goods movement throughout the state, and thus reduce truck-related GHG emissions.
Goal 4:	Preserve and ensure a sustainable regional transportation system.	**Consistent**: All new roadway developments and improvements to the existing transportation network must be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the needs for improving future traffic capacities.
Goal 5:	Maximize the productivity of our transportation system.	**Consistent**: The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The City of Baldwin Park's Public Works Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. The City also strives to maximize productivity of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Baldwin Park.
Goal 6:	Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent**: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. For example, development projects are required to comply with the provisions of the California Building and Energy Efficiency Standards and the Green Building Standards Code (CALGreen). The City also strives to maximize the protection of the environment and improvement of air quality by encouraging and improving the use of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Baldwin Park.
Goal 7:	Actively encourage and create incentives for energy efficiency, where possible.	**Not Applicable**: This is not a project-specific policy and is therefore not applicable
Goal 8:	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consisten**t: See response to RTP/SCS Goal 6.

SCAG Goals	Compliance with Goal
Goal 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent**: The City of Baldwin Park monitors existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies (e.g., Los Angeles County Transportation Department, Caltrans, SCAG) work with the City to manage these systems. Security situations involving roadways and evacuations would be addressed in the County of Los Angles emergency management protocols (e.g., Los Angeles County Operational Area Emergency Operations Plan) developed in accordance with the state and federal mandated emergency management regulations.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. As shown, the Proposed Project would in no way conflict with the stated goals of the RTP/SCS; therefore, the Proposed Project would not interfere with SCAG's ability to achieve the region's year 2020 and post-2020 mobile source GHG reduction targets outlined in the 2016 RTP/SCS, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. The Proposed Project is consistent with the land use designation and development intensity for the site in the City of Baldwin Park General Plan, which is referenced by SCAG in order to assist planning for integrated land use and transportation planning in the region. The Project proposes a light industrial/commercial warehouse use in close proximity to I-605 and I-10, which are major regional freeway corridors. Further, the I-10 corridor has been identified as a "Major International Trade Highway Route" in the California State Goods Movement Action Plan, and therefore serves to accommodate existing truck trips along the interstate. The Goods Movement Action Plan is a statewide initiative to improve and expand California's goods movement industry and infrastructure in a manner which will increase mobility and relieve traffic congestion as well as reduce GHG emissions. The Plan further identifies I-10 (located just south of the Project site) as a "Priority Corridor" for development towards more efficient goods movement and anticipates that the development of good movement-supporting facilities, such as the industrial/commercial warehouse proposed by the Project, will improve the efficiency of overall goods movement throughout the state, and thus, reduce truck-related GHG emissions. Furthermore, the Proposed Project is not regionally significant per CEQA Guidelines Section 15206 and as such, it would not conflict with the SCAG RTP/SCS targets, since those targets were established and are applicable on a regional level. The Proposed Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs. No impact would occur.

4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

Project Construction

The Project would involve the typical construction of a tilt-up building, including the use of various products that contain materials classified as hazardous (e.g., solvents, adhesives and cements, certain paints, cleaning agents, and degreasers). Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the subject property during construction of the Project. This heavy equipment may be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled.

Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the proposed Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the USEPA, DTSC, and RWQCB. The California Code of Regulations (CCR) Title 8 addresses workplace regulations involving the use, storage, and disposal of hazardous materials, and specific applications for construction workers. CCR Titles 22 and 26 set forth environmental health standards for hazardous materials management. California Health and Safety Code Chapter 6.95 sets forth enabling legislation for the application of CCR Titles 8, 22, and 26. Safety precautions for the prevention of fire hazards associated with the use and storage of hazardous materials are addressed in the Uniform Fire Code. Compliance with applicable federal, state, and local regulations including, but not limited to, CCR Titles 8, 22 and 26, the Uniform Fire Code, and California Health and Safety Code Chapter 6.95 would ensure that the Project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials.

Project Operation

The Project site is located within the Industrial Commercial zone and is designated for industrial or commercial use. It is likely that the Project would use small amounts of commercial cleaning materials, paints and solvents for building maintenance, and pesticides/herbicides for Project landscaping could be considered hazardous materials. However, the specific businesses or tenants that would occupy the Project's proposed building are not known at this time. Based on the list of land uses permitted in the City's I-C zone, it is possible that hazardous materials could be used during daily operations. If businesses

that use or store hazardous materials occupy the Project site, the business owners and operators would be required to comply with all applicable federal, state, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project would be less than significant.

Conclusion

The use, storage, and transportation of hazardous materials are subject to local, state, and federal regulations, the intent of which is to minimize the public's risk of exposure. Hazardous materials regulations, which are codified in CCR Titles 8, 22, and 26, and their enabling legislation set forth in California Health and Safety Code Chapter 6.95, were established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. Based on the uses that would be part of the Project and the existing regulatory structure related to these materials, the proposed Project would not cause a threat to public safety during project construction or operation.

Therefore, because the transport, use, storage, and disposal of hazardous materials pertaining to the Project would be relatively minor and subject to extensive regulatory oversight, this impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

As discussed above, construction and demolition activities associated with the proposed Project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. For example, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for equipment. Contractors would be required to use standard controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction and demolition practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law.

Hazardous materials related to Project operations would also be delivered to the site via area roadways, likely Garvey Avenue. Transportation of hazardous materials would comply with all regulations put forth

by the DOT, Caltrans, U.S. EPA, DTSC, CHP, and California State Fire Marshall. Adherence to all applicable laws and regulations governing hazardous materials would ensure that potential impacts associated with deliveries of hazardous materials to/from the project site are less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

The nearest education facility to the project site is De Anza Elementary School, located 0.10 miles north of the site. The Project is not of a size or scale that would involve large-scale handling or storage of hazardous materials or wastes. However, as part of the proposed Project, prior to construction, the Project would be required to prepare a hazardous substance management, handling, storage, disposal, and emergency response plan to be followed during construction activities. This plan would ensure adherence to the construction specifications and applicable regulations regarding hazardous materials and hazardous waste, including disposal, and would further ensure that construction of the proposed Project would not create a significant hazard to the public or the environment, including nearby schools. As such, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

Government Code §65962.5 requires the Department of Toxic Substances Control (DTSC), the State Department of Health Services, the SWRCB, and the California Integrated Waste Management Board to compile and annually update lists of hazardous waste sites and land designated as hazardous waste property throughout the state.

CalEPA's Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated on the project sites and/or the adjacent properties and businesses (CalEPA 2020). The list, although mostly covering the requirements of Section 65962.5, has always been incomplete as it does not indicate if a specific site was at one time included in the abandoned site program. DTSC does not and has never made that information available.

The list is a compilation of five separate websites that include: 1) DTSC's Envirostor that identifies waste or hazardous substances sites, 2) GeoTracker that identifies underground storage tanks for which an unauthorized release report was filed, cleanup sites, and all solid waste disposal facilities from which there

is a mitigation of hazardous waste for which a regional board has notified DTSC., 3) a pdf of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels outside the waste management unit, 4) a list of cease and desist orders and clean up and abatement orders, and 5) a list of hazardous waste facilities subject to corrective action.

1. DTSC's Envirostor indicated that that project site was not identified as a hazardous waste or substances site (DTSC 2020). Additionally, no surrounding sites identified during the search were within a one-mile radius of the Project. (Properties farther than 1 mile from the Project sites were not considered for further analysis because they present a low probability for releases that could affect the Project site).

2. GeoTracker did not identify the site as an underground storage tanks for which an unauthorized release report was filed, a cleanup site, or a solid waste disposal facility from which there is a mitigation of hazardous waste for which a regional board has notified DTSC (SWRCB 2020).

3. A list of solid waste disposal sites with waste constituents above hazardous waste levels outside the waste management unit was also checked. No records were listed.

4. The list of Cease and Desist Orders and Clean Up and Abatement Orders did not include the Project site location.

5. The list of hazardous facilities required to submit to corrective action do not include the Project site location.

As the project is not listed on one of the five websites provided to fulfill the Cortese List, the Project will not create a significant hazard to the public or the environment. There are no hazardous waste facilities or sites with known contamination on the project site or in its vicinity. There would be no impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

The closest airport to the proposed Project site is San Gabriel Airport (formerly El Monte Airport), located approximately 2.4 miles northwest of the site. The project site is not located within the San Gabriel Airport's safety zone area including the runway protection zone. No helistop/helipad is proposed, and no tall objects are proposed on the Project site that would cause a hazard to flight. For these reasons, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Implementation of the proposed Project would increase the potential need for emergency access to and from the site. The City's Police Department maintains an emergency plan called the Baldwin Park MultiHazard Functional Plan (Baldwin Park 2002a). The plan identifies potential threats to the community based on studies conducted by the Police Department in conjunction with other City departments. The plan sets forth the City's planner response to emergency situations including fire, earthquake, major civil disturbances, flooding, and more. The emergency response plan also designates evacuation routes and facilities for various types of hazards.

The Project design proposes emergency access to the site on Garvey Avenue. No offsite roadway improvements are proposed that would interfere with emergency access, response times, or impede circulation of emergency vehicles on surrounding roadways. During the course of the City of Baldwin Park's required review of the proposed Project's applications, the site plan would be reviewed to ensure that adequate access to and from the site and around the proposed buildings is provided for emergency vehicles. With adherence to the City of Baldwin Park requirements for emergency vehicle access, impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

The City of Baldwin Park does not contain any lands designated Very High Fire Hazard Severity Zones (VHFHSZ) (CAL FIRE 2011). The proposed Project is located within a heavily industrialized area and is not in the vicinity of any natural or wildlife areas. As such, implementation of the proposed Project is not likely to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, as discussed above, the Project would not impair emergency response plans if fire hazards were present. For these reasons, no impact would occur.

4.9.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

The National Flood Insurance Program rate maps (FIRM) classify all of Baldwin Park as an Area C with little chance of flooding. In the past, only minor flooding has occurred, drainage improvements in areas prone to minor flooding continue to be a priority for the City. Most major storm waters are easily handled by the San Gabriel River, the Big Dalton Wash, and the Walnut Creek Wash systems.

Regional Hydrology

The City of Baldwin Park is located within the San Gabriel River Watershed. Due to its relatively flat topography, runoff in the City typically forms as sheet flow that is then intercepted by stormwater conveyance systems. Major drainages in the area such as the San Gabriel River flow to the southwest and eventually drain to the Pacific Ocean.

Site Hydrology and On-Site Drainage

Drainage from the Project site flows to existing stormwater conveyance systems in Garvey Avenue and Westcott Avenue, southwest to the Walnut Creek wash, a lined flood control channel approximately 0.3-mile south of the Project site.

Groundwater in the vicinity of the site is designated as having a beneficial use. The nearest municipal groundwater production well is Well No. 2993W which is located approximately 0.2-mile west of the site along the bank of the San Gabriel River. Groundwater was not encountered during Quartech Consultants' soils investigation to a depth of 51.5 feet below surface grade (bsg) (Quartech 2020). The investigation indicates the historical high groundwater level beneath the site has been approximately 10 feet bsg.

4.10.2 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

Water discharge from project construction may consist of oil and grease, trash, heavy metals and pathogens as well as other pollutants. Regulation of discharges into water bodies is the responsibility of the State Water Resources Control Board. The Project will be required to comply with the City's local requirements to control storm water runoff to prevent violations of regional water quality standards, in accordance with its permit obligations under the citywide municipal storm water permit program, a component of the NPDES program of the federal Clean Water Act. The Project will be required to comply with Chapter 52 of the Municipal Code, which contains regulations to meet federal and State water quality requirements related to storm water runoff. General Plan Open Space and Conservation Policy 5.4 requires continued enforcement of municipal NPDES Permit to protect and improve the quality of local and

regional groundwater resources available to the City. Therefore, impacts would be less than significant with enforcement of these Permit requirements.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

Construction of the Project would result in the installation of new impervious surfaces which could increase runoff on the vacant site and lead to a decrease in the amount of water recharged to the groundwater system within the confines of the 0.984-acre site. However, due to the relatively small size of the Project, and the fact that the project design includes pervious, landscaped areas (see Figure 4. Conceptual Site Plan), the Project is not anticipated to substantially deplete groundwater supplies or impede sustainable groundwater management of the basin. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 that would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒

The Project site is essentially flat; site preparation for development would not substantially change the topography of the site. The site does not contain any naturally occurring water features such as streams or rivers. Though slightly less than one acre, under the NPDES General Construction permit, the Industrial Commercial project may be subject to SWPPP requirements prior to beginning of construction to prevent pollutants from entering surface waters. Integrated landscaping onsite within the rear property line buffer

would also allow for infiltration and would minimize the potential for runoff from the property (see Figure 4. Conceptual Site Plan). Additionally, onsite improvements for stormwater treatment may be identified in compliance with the City condition of approval requiring Low Impact Development (LID) design. Due to the minimal runoff anticipated for the Project site and the anticipated use of design elements to facilitate infiltration of water onsite, substantial amounts of polluted runoff would not occur. The Project is located within an area identified as having little chance of flooding. Moreover, the Project is not of a size or scale that would impede or redirect flood flows.

The Project would not result in substantial erosion or siltation on- or off-site and would have less than significant impacts related to the rate or amount of surface runoff, the capacity of storm water drainage systems, and the provision of additional sources of polluted runoff.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

The National Flood Insurance Program rate maps (FIRM) classify all of Baldwin Park as an Area C with little chance of flooding. The site is located approximately 27 miles from the nearest coastline and the City of Baldwin Park is not included in the DOC Los Angeles County Tsunami Inundation Map. The Project site is not located in proximity to any large reservoirs or water bodies capable of producing a significant seiche. Therefore, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

The nine RWQCBs throughout California each adopt and implement a Basin Plan designed to preserve water quality and protect all regional waters. In 2014, the LARWQCB created a Basin Plan for the protection of the beneficial uses of waters within the coastal watersheds of Los Angeles and Ventura counties. Specifically, the Basin Plan: (i) identifies beneficial uses for surface and ground waters, (ii) includes the narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy, and (iii) describes implementation programs and other actions that are necessary to achieve the water quality objectives established in the Basin Plan (LARWQCB 2014).

In accordance with these policies and objectives, the Project's connection to the existing storm drain system, implementation of a SWPPP, and compliance with City LID requirements would reduce the project's contributions to water quality and runoff impacts to levels that are less than significant. As such,

the proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Environmental Setting

Baldwin Park is located in the San Gabriel Valley, approximately 15 miles east of downtown Los Angeles. The San Gabriel Foothills and Los Angeles National Forest lie in the distance to the north, with the Los Angeles Basin to the east, south, and west (Figure 1. Regional Location). The City is traversed by I-10 to the south and the I-605 to the west. Baldwin Park is highly urbanized and built out, with a suburban character. Cities surrounding Baldwin Park are also fully developed and with similar character.

The proposed Project site is generally located in the southwestern portion of the City. The site consists of a single parcel at 12793 Garvey Avenue (Figure 2. Project Location). The subject property is located in an Industrial Commercial zone and the parcel is currently a vacant lot with paved vehicle tow lot in the rear. According to the City's General Plan, this type of zoning provides areas for the development of industrial parks, office complexes and light manufacturing businesses. The designation encourages a mutually beneficial mix of retail/service commercial businesses with light industrial activities and professional office uses (Baldwin Park 2020a).

Commercial land uses comprise approximately 226 acres, or about 5 percent of the City. A variety of commercial uses are scattered throughout the City, with the largest concentrations along major arterials such as Garvey Avenue, Ramona Boulevard, and Maine Street. Commercial uses represent approximately 2.5 million square feet of existing total development within the Planning Area. Almost all commercial businesses within the City consist of small, local-serving enterprises (Baldwin Park 2002b).

Manufacturing, industrial, and warehousing uses traditionally have been sited almost exclusively along the I-10 Freeway at the southern and northern edges of the City. Industrial uses comprise approximately 250 acres, or 6 percent of the planning area. Industrial uses comprise approximately 4.4 million square feet of development, approximately twice as much as the amount of square footage devoted to general commercial uses. Many of the industrial areas contain obsolete buildings and substandard streets (Baldwin Park 2002b).

Property located north of the Project site is occupied by garden multi-family residential uses. East of the Project site along Westcott Avenue is a commercial vehicle tow yard and transmission line corridor. The I-10 is located directly south of Garvey Avenue, and the I-10/I-605 freeway interchange is located approximately 400 feet west of the Project site. Property located west of the site is occupied by a trailer park (See Table 15).

Table 15. Surrounding Zoning and Land Use Designations

	Zoning District	Land Use Designation	Existing Land Use
Project Site	IC – Industrial Commercial	Commercial/Industrial	Vacant/Vehicle Tow Yard
North	RG – Garden Multi-Family Residential	Garden Multi-Family Residential	Garden Multi-Family Apartments
East	OS - Open Space IC – Industrial Commercial	Public Facilities Commercial/Industrial	Transmission Line Corridor Vehicle Tow Yard
South	Freeway	Freeway	I-10 San Bernardino Freeway
West	IC – Industrial Commercial	Commercial/Industrial	Mobile Home Park

Source: City of Baldwin Park 2019a, 2019b

4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

The proposed Industrial Commercial project is consistent with site zoning and similarly zoned and situated properties in the vicinity along Garvey Avenue. Perimeter fencing with barbed wire currently separates the site from multifamily residences to the north and trailers to the west. As such, the Project would not create a barrier within the established community. The presence of a new industrial commercial development would not physically hinder mobility within the community, nor disrupt the continuing operation of any surrounding land uses. For these reasons, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

The Project is located in the City of Baldwin Park and is subject to compliance with the City's adopted plans, policies and regulations. The subject property is located in an Industrial Commercial (I-C) Zone. According to the City's General Plan, this type of zoning provides areas for the development of industrial parks, office complexes and light manufacturing businesses. The proposed building is designed for single-

or multi-tenant warehouse or manufacturing use, which is consistent with its zoning and land use designation.

While the Project is consistent with the I-C Zone classification, it proposes a variance from side yard setback requirements along the west property boundary adjacent an established trailer park, which is also in the I-C Zone. Setback requirements are typically established to retain light and airspace, enable utility extensions and afford public safety access between adjacent properties. In this instance, the Project is proposed on an irregularly shaped lot that may be atypical of other Industrial Commercial properties found within the City. The City will consider these factors and others in consideration of the variance request. As such, the request for variance would not, in and of itself, represent a significant environmental impact or conflict with local regulations.

Therefore, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating a significant environmental effect. A less than significant impact would occur.

4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Environmental Setting

As stated in the City of Baldwin Park General Plan Final Program EIR, since 1982, all of Baldwin Park has been designated by the State Geologist as a Mineral Resource Zone 2 (MRZ- 2) where "adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists." This designation also applies to substantial acreage throughout the adjacent cities of Azusa and Irwindale, where active surface mining operations are present. Such areas contain aggregate resources, commonly known as gravel, which is considered to be an important construction material; however, as the City of Baldwin Park is nearing buildout, the areas containing significant mineral resources are largely developed (Baldwin Park 2002b).

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

Under existing conditions, the Project site is a vacant lot with a commercial industrial use at the rear of the property. No mines, wells, or other resource extraction activity occurs on the property or is known to have ever occurred on the property. Since 1982, the City's General Plan has identified the entire City as being

located within "Mineral Resource Zone 2 (MRZ-2)," which is defined as an area that likely contains mineral resources. However, the General Plan EIR also states that "the City is largely built out with urban uses that are incompatible with mineral extraction and/or surface mining activities" (Baldwin Park 2002b); this is true of the Project site and vicinity as well where any commercial enterprise involving extraction of mineral resources would be incompatible with existing urban uses. For the above reasons, Project impacts on mineral resources are considered to be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Refer to Response (a), above. The areas containing significant resources are largely developed. Due to existing conditions onsite and within the City of Baldwin Park, the proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on the General Plan, Specific Plan, or other land use plan. No mining operations exist on or in the vicinity of the site and no mining operations are proposed as part of the Project. Impacts would be less than significant.

4.12.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 Noise

4.12.4 Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

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. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about 5 dBA (FHWA 2006), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction

35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. [WEAL] 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the "line of sight" between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. [HMMH] 2006).

Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project site is positioned just north of the Interstate 10 (I-10) freeway, south of a vehicle tow yard, immediately east of a mobile home park and approximately 845 feet east of I-605, and west of Wescott Avenue. The nearest noise-sensitive land use receptors are mobile homes located within the mobile home park immediately adjacent to the Project site boundary and residences located north of the adjacent truck yard; approximately ninety feet from the Project site boundary.

Existing Ambient Noise Environment

The Project site is characterized by relatively flat and undeveloped land and is surrounded by a mix of residential and commercial land uses. The Project site is impacted by typical urban noise sources experienced in an urban area, such as traffic and day-to-day urban activities. Due to the proximity of the Project to I-10 and I-605, mobile sources are the dominant source of noise affecting the area. In order to quantify existing ambient noise levels in the Project area, ECORP Consulting, Inc. conducted three short-term noise measurements on August 27, 2020. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were taken between 9:20 a.m. and 9:47 a.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the daytime. L_{eq} is the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs

during the day or the night. The average noise levels and sources of noise measured at each location are listed in in Table 16.

Table 16 Existing (Baseline) Noise Measurements

Location Number	Location	Leq dBA	Lmin dBA	Lmax dBA	Time
1	The sidewalk along Wescott Avenue	71.1	52.0	89.5	9:20 a.m. – 9:30 a.m.
2	Three feet north of Garvey Ave. (on sidewalk)	68.7	65.7	78.4	9:33 a.m. – 9:43 a.m.
3	Within the mobile home park, west of project site	60.4	55.4	74.8	9:47 a.m. – 9:57 a.m.

Notes: Measurements were taken by ECORP with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Appendix D for noise measurement outputs.

As shown in Table 16, the ambient recorded noise levels range from 60.4 to 71.1 dBA L_{eq} near the Project site. The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles) traveling on I-10, I-680, and Garvey Avenue. Vehicular noise varies with the volume, speed and type of traffic. Slower traffic produces less noise than fast-moving traffic. Trucks typically generate more noise than cars. Infrequent or intermittent noise also is associated with vehicles, including sirens, vehicle alarms, slamming of doors, trains, garbage and construction vehicle activity and honking of horns. These noises add to urban noise and are regulated by a variety of agencies.

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Appendix D) and traffic volumes from traffic volumes from Caltrans (Caltrans 2017). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 17.

Table 17. Existing (Baseline) Traffic Noise Levels

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
Interstate 10		
Between I-605 Onramp and Frazier Street Offramp	Commercial, Industrial, Residential	76.3
Interstate 605		
Between I-10 Offramp and Ramona Boulevard Offramp	Commercial, Industrial, Residential	72.6

Sources: Traffic noise levels were calculated by ECORP using the FWHA roadway noise prediction model in conjunction with traffic volumes from Caltrans (Caltrans 2017). Refer to Appendix D for traffic noise modeling assumptions and results.

As shown, the existing traffic-generated noise level on the two interstates in the Project-vicinity range from 72.6 to 76.3 dBA CNEL. CNEL is 24-hour average noise level with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. It should be noted that the modeled noise levels depicted in Table 17 may differ from measured levels in Table 16 because the measurements represent noise levels at different locations around the Project site and are also reported in different noise metrics (e.g., noise measurements are the L_{eq} values and traffic noise levels are reported in CNEL).

Accounting for the existing masonry sound wall positioned in between I-10 and the Project site, the average daily noise level experienced on the Project site as a result of traffic on the I-10 is a maximum 66.3 dBA CNEL. As previously described, a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). Accounting for the distance between the site and I-605 (845 feet) as well as the masonry sound wall positioned between I-605 and the Project site, the average daily noise level experienced on the Project site as a result of traffic on the I-605, is approximately 50.0 dBA CNEL. This contribution of noise is more than 16 dBA *less* than the noise generated by the I-10 and thus does not contribute to the currently ambient noise environment on the Project site.

Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.12.5 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Construction Noise Impacts

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or

phase of construction (e.g., building construction, paving). Noise generated by construction equipment, including dozers, loaders, and excavators, can reach high levels. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive receptors in the vicinity of the construction site. Project construction would occur in one phase. Project construction would include site preparation, grading, building construction, paving, and architectural coating.

The City does not promulgate numeric thresholds pertaining to the noise associated with construction, yet instead limits the time that construction can take place. Specifically, the City of Baldwin Park Municipal Code Section 130.37, *Special Noise Sources*, exempts noise from construction provided that construction is limited between the hours of 7:00 a.m. to 7:00 p.m. It is typical to regulate construction noise in this manner since construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Project. Furthermore, the City of Baldwin Park is a developed urban community and construction noise is generally accepted as a reality within the urban environment. Additionally, construction would occur through the Project site and would not be concentrated at one point. Therefore, noise generated during construction activities, as long as conducted within the permitted hours, would not exceed City noise standards.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the demolition, site preparation, grading, building construction, paving and painting. Onsite building construction, paving and painting are modeled to occur simultaneously. These noise levels were compared against the construction-related noise level threshold established in the *Criteria for a Recommended Standard: Occupational Noise Exposure* prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 18. Consistent with Federal Transit Association (FTA) recommendations for calculating construction noise, construction noise was measured from the center of the Project site (FTA 2018). The nearest sensitive receptors are mobile homes located immediately west of the boundary of the Project site; as close as sixty-five feet distant from the center of the project site.

Table 18. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment – Unmitigated

Equipment	Estimated Exterior Construction Noise Level @ Nearest Residence	Construction Noise Standards (dBA L_{eq})	Exceeds Standards?
Site Preparation			
Front End Loader (1)	72.9	*85.0*	**No**
Combined Site Preparation Equipment	**72.9**	*85.0*	**No**
Grading			
Front End Loader (1)	72.9	*85.0*	**No**
Backhoes (1)	71.3	*85.0*	**No**
Excavator (1)	74.5	*85.0*	**No**
Combined Grading Equipment	**77.8**	*85.0*	**No**
Building Construction, Paving, and architectural coating			
Cranes (1)	70.3	*85.0*	**No**
Forklifts (2)	77.1	*85.0*	**No**
Tractors/Loaders/Backhoes (3)	71.3 (each)	*85.0*	**No**
Cement and Mortar Mixers (4)	72.5 (each)	*85.0*	**No**
Pavers (1)	71.9	*85.0*	**No**
Rollers (1)	70.7	*85.0*	**No**
Air Compressors (1)	71.4	*85.0*	**No**
Combined Building Construction, Paving and Painting Equipment	**84.3**	*85.0*	**No**

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix D for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2.

L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 18, during construction activities no individual or cumulative piece of construction equipment would exceed the NIOSHA threshold of 85 dBA L_{eq} at the nearest sensitive receptors. A less than significant impact would occur.

Project construction would result in minimal additional traffic on adjacent roadways over the time period that construction occurs. According to the CalEEMod model, which is used to predict air pollutant emissions associated with Project construction, including those generated by worker commute trips, the

maximum number of construction workers traveling to and from the Project site on a single day would be 70 (8 worker trips and 62 hauler trips). According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). As explained below, according to the Traffic Impact Study prepared for the Project (KOA 2020), the segment of Garvey Avenue traversing the site, experiences a combined 24-hour average daily traffic count (ADT) of 960 vehicle trips under existing conditions. Thus, the Project construction would not result in a doubling of traffic, and therefore its contribution to existing traffic noise would not be perceptible. A less than significant impact would occur.

Operational Offsite Traffic Noise Impacts

Project operation would also result in additional traffic on adjacent roadways within the City of Baldwin Park, thereby increasing vehicular noise in the Project area. Garvey Avenue would provide the main access to the Project site. According to the Traffic Impact Study prepared for the Project (KOA 2020), the segment of Garvey Avenue traversing the site, experiences a combined 24-hour average daily traffic count (ADT) of 960 vehicle trips under existing conditions. In addition, an AM peak-hour traffic volume of 50 vehicles in both directions was observed and a PM peak-hour traffic volume of 70 vehicles in both directions was observed.

Per the Traffic Impact Study prepared for the Project (KOA 2020), the Project would contribute an average of 63 daily trips. 31 daily trips are anticipated to be generated by the warehouse and 32 daily trips are anticipated to be generated by the office space. According to Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway would result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The addition of approximately 63 daily trips to the existing 960 daily vehicle trips would not result in a doubling of traffic on Garvey Avenue. Thus, the contribution of Project traffic noise to existing traffic noise would not be perceptible.

The increase in traffic due to the Project would subsequently result in an increase in traffic in surrounding cities as employees, delivery trucks, and visitors to the Project site travel to and from the surrounding cities. Cities located adjacent to Baldwin Park include the City of Industry to the south, the City of El Monte to the west, and the City of Arcadia to the north. The City of Irwindale is located northwest, north, and east of Baldwin Park's borders and the City of West Covina is located to the southeast. However, since these surrounding cities are highly populated and the Project is anticipated to generate 63 total trips per day, the Project would not result in a doubling of traffic on any given roadway in surrounding cities. As such, there is no impact.

Operational Onsite Noise Impacts

The City of Baldwin Park's Municipal Code (Chapter 153, *Noise*) regulates non-transportation noise sources (i.e., stationary sources). These standards are designed to protect people from objectionable non-transportation noise sources such as machinery, pumps, and HVAC units. The Baldwin Park noise standards are summarized in Table 19 below.

Table 19. Baldwin Park Noise Standards		
Zone	**Day (7:00 AM – 10:00 PM)**	**Night (10:00 PM – 7:00 AM)**
R-I	55 dBA	45 dBA
RG and R-3	60 dBA	55 dBA
Commercial	65 dBA	60 dBA
Industrial	70 dBA	70 dBA

The nearest noise-sensitive receptors are mobile homes located immediately west of the site and residences located approximately 83 feet north of the Project site. The mobile home park is zoned *IC – Industrial Commercial* and the residences to the north are zoned *RG – Garden Multi-Family Residential,* and thus are each subject to the respective noise standards in Table 19.

This analysis evaluates the effects of onsite Project noise on the surrounding existing land uses. The main onsite source of operational noise associated with the Project would be warehouse and business-related activity, such as delivery trucks idling and maneuvering the site. Additional potential stationary noise sources related to long-term operation of future development of the Project site would include mechanical equipment.

Previous noise measurements were taken by ECORP staff to evaluate typical noise levels produced by business park operations and mechanical equipment (e.g., HVAC equipment). These measurements were taken with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. A typical business park was found to generate noise levels of 50.9 dBA when measured from the center of the associated parking lot. Mechanical equipment, such as HVAC equipment, was found to generate noise levels less than 40 dBA at 50 feet. Both the business park and mechanical equipment noise measurements fall below the daytime and nighttime noise standards promulgated by the City for the nearby sensitive noise receptors. In addition, the residences located 83 feet to the north would experience lower sound levels due to the attenuation of noise at a rate of 6 dBA for doubling of distance for stationary noise sources. Further, warehouse and office operations would likely be limited to daytime hours. This impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

Construction-Generated Vibration

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Proposed Project would be primarily associated with

short-term construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 20.

Table 20. Representative Vibration Source Levels for Construction Equipment

Equipment Type	PPV at 25 Feet (inches per second)
Large Bulldozer	0.089
Pile Driver	0.170
Caisson Drilling	0.089
Loaded Trucks	0.076
Rock Breaker	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2018; Caltrans 2020

The City does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

Based on the representative vibration levels presented for various construction equipment types in Table 20 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels at the nearest offsite structure, located sixty-five feet distant from the center of the Project site. The FTA provides the following equation: [$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$]. Table 21 presents the expected Project related vibration levels at a distance of sixty-five feet.

Table 21. Project Construction Vibration Levels at Sixty-Five Feet

Receiver PPV Levels (in/sec)[1]							Peak Vibration	RMS Velocity Levels[2]	Threshold	Exceed Threshold
Large Bulldozer	Pile Driver	Drilling	Loaded Trucks	Rock Breaker	Jack-hammer	Small Bulldozer				
0.021	0.040	0.021	0.018	0.021	0.008	0.000	0.040	**0.02**	*0.2*	**No**

[1]Based on the Vibration Source Levels of Construction Equipment included on Table 5-2 (FTA 2018).
[2]Vibration levels in PPV are converted to RMS velocity using a 0.70 conversion factor identified by Caltrans (2020),

As shown, groundborne vibrations attenuate rapidly from the source due to geometric spreading and material damping. Geometric spreading occurs because the energy is radiated from the source and spreads over an increasingly large distance while material damping is a property of the friction loss which occurs during the passage of a vibration wave. As shown in Table 21, the nearest structures at sixty-five distant from the center of the construction site would not experience groundborne levels in exceedance of County standards, even in the rare case that pile diving equipment is used. This impact would be less than significant.

Operational-Generated Vibration

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. For this reason, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The Project site is not located within an airport land use plan and is not within two miles of an airport. The San Gabriel Airport is the nearest airport to the Project site, located approximately 2.29 miles to the northwest. Implementation of the Proposed Project would not affect airport operations nor result in increased exposure of noise-sensitive receptors to aircraft noise. For this reason, no impact would occur.

4.12.6 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.13 Population and Housing

4.13.1 Environmental Setting

According to the City's General Plan Housing Element Update, the City's population was approximately 75,390 persons in 2010. SCAG estimates that the population is expected to reach 82,200 by 2035, representing a less than 10% increase over 25 years (Baldwin Park 2002a). According to the 2010 Census, the average household size in Baldwin Park was 4.36 people. This represents a two percent decrease over the 4.44 average size in 2000. Baldwin Park's average household size is much higher than that of Los Angeles County as a whole, which averaged 2.98 persons per household (Baldwin Park 2002a).

4.13.2 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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)?	☐	☐	☐	☒

The proposed Project site is designated Commercial-Industrial in the City's General Plan. Accordingly, the Project would not result in growth that was not already anticipated by the City of Baldwin Park General Plan. The Project can be characterized as an infill development, and the site is served by existing public roadways and utility infrastructure already installed beneath public rights of way that adjoin the property. For these reasons, development of the proposed Project would not result in direct or indirect growth in the area, and impacts would be less than significant. No further analysis of this subject is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

The proposed Project site is a vacant lot with vehicle tow yard at the rear. The site is designated Commercial-Industrial according to the City's General Plan. The site does not contain any residential structures under existing conditions. Though proposed in close proximity to adjacent residential uses to the north (Garden Residential) and the west (Mobile Home Park), the proposed Project would not directly displace people or existing housing and would not require additional housing construction. A less than significant impact would occur.

4.13.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.14 Public Services

4.14.1 Environmental Setting

Incorporated in 1956, the City of Baldwin Park is located approximately 17 miles east of downtown Los Angeles and is bisected by the I-10 San Bernardino Freeway along the southern part of the City. The intersection of the I-10 and I-605 freeways lie near the southwest boundary of this 6.8 square mile City. Although Baldwin Park is predominantly a residential bedroom community, recent efforts have placed a greater emphasis on promoting the City's Downtown area, commercial and industrial land uses. The City is a full-service general law city that operates under the Council- Chief Executive Officer form of government. The City provides a full range of municipal services including police and fire, street maintenance and repair, building and engineering, planning and parks and recreation activities. The City offers five parks, five community centers, a teen center and skatepark, an aquatic center and a county operated library.

Police Services

The City of Baldwin Park Police Department is committed to Community Policing and Problem Solving, which includes many traditional methods of policing. Many programs have been implemented to provide communication and accessibility between the Police Department and the community (Baldwin Park 2002a). Programs include foot and bike patrol, neighborhood watch and business programs, graffiti removal, and a volunteer program. The Police Headquarters are located at 14403 Pacific Avenue approximately 2.5 miles to the northeast of the project site.

Fire Services

Baldwin Park is contracted with the Los Angeles County Fire Department for fire protection/emergency services. The East Regional Operations Bureau serves Baldwin Park and reports to the Chief Deputy of Emergency Operations, and includes Division 2, 4, 8, and 9, representing 76 fire stations serving communities within the east side of Los Angeles County, with Division 2 serving Baldwin Park. Fire protection would be provided by Station No. 29, located at 14334 Los Angeles Street.

Schools

Baldwin Park Unified School District currently has 13 elementary schools, 4 middle/junior high schools, and 3 high schools located within the District boundaries. The District also offers an Adult Transition program and an Adult Community Education program. The nearest education facility to the project site is De Anza Elementary School, located 0.10 mile from the site.

Parks

Baldwin Park is an urban community with limited opportunity for the addition of new open space. The City's Park Master Plan designated over 530 acres of land as open space, including parks, joint-use school

playgrounds, utility rights-of-way, and water channels. The City currently contains 27 acres of parkland in six public parks, which comprise slightly less than one percent of the Planning Area. To supplement the City's park inventory, the City maintains joint-use agreements with local public schools to allow school grounds to be used as public parkland during non-school hours. Additionally, residents have access to the Whittier Narrows and Santa Fe Dam Recreation Areas, located in close proximity to Baldwin Park. The closest public parks to the project site are Barnes Park, approximately 0.25-mile northwest of the project site, and Walnut Creek Park approximately 0.25-mile southeast of the site.

Baldwin Park has one community park, the 12-acre Morgan Park, located in the Central Business District within walking distance of the Civic Center and the public library. Major amenities include a 35,000 SF community center, 15,000 SF senior center, swimming pool, basketball courts, outdoor playground equipment, and an outdoor amphitheater for summer concerts and community celebrations (Baldwin Park 2002a).

Other Public Facilities

The City of Baldwin Park is served by the Baldwin Park Library. The Library is part of the Los Angeles County library system, located at 4181 Baldwin Park Boulevard. The 15,555 square foot library includes a meeting room, children's area, teen space, book drop for 24-hour accessible returns, and a reading room.

4.14.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

The Project proposes to build and industrial commercial facility on a currently vacant parcel with vehicle tow yard at the rear. The Project is consistent with the site's Industrial-Commercial zoning requirements. Additionally, the proposed Project is consistent with the City's General Plan, which identifies public service

levels sufficient to serve planned growth. Due to the infill nature of the Project, it is not anticipated that the project would result in the need for additional new or altered fire protection or police services and the Project would not alter acceptable service ratios or response times. The development would not contribute to any significant increase in the local population. The Project is, therefore, not expected to impact the City's existing schools, parks or recreational facilities.

In conclusion, it is anticipated the proposed Project would be adequately served by the City's public services during the construction and operational phases. The Project is not expected to generate significant need for additional fire and police protection, nor additional schools, parks, or other public facilities. A less than significant impact would occur.

4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.15 Recreation

4.15.1 Environmental Setting

Baldwin Park is an urban community with limited opportunity for the addition of new open space. The City's Park Master Plan designated over 530 acres of land as open space, including parks, joint-use school playgrounds, utility rights-of-way, and water channels. The City currently contains 27 acres of parkland in six public parks, which comprise slightly less than one percent of the Planning Area. To supplement the City's park inventory, the City maintains joint-use agreements with local public schools to allow school grounds to be used as public parkland during non-school hours. Additionally, residents have access to the Whittier Narrows and Santa Fe Dam Recreation Areas, located in close proximity to Baldwin Park. The closest public parks to the project site are Barnes Park, approximately 0.25-mile northwest of the project site, and Walnut Creek Park approximately 0.25-mile southeast of the site.

Baldwin Park has one community park, the 12-acre Morgan Park, located in the Central Business District within walking distance of the Civic Center and the public library. Major amenities include a 35,000 SF community center, 15,000 SF senior center, swimming pool, basketball courts, outdoor playground equipment, and an outdoor amphitheater for summer concerts and community celebrations (Baldwin Park 2002a).

4.15.2 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

The proposed Industrial Commercial Project would not result in any significant additional demand for, or use of park or other recreational facilities. The Project would not increase local or regional population that would result in any increase in demand for neighborhood or regional parks. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

The proposed Project does not include recreational facilities and would not require construction or expansion of recreational facilities. As the site is highly disturbed, development of the proposed onsite facility within the existing setting is not anticipated to result in adverse recreational effects. No impact would occur.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.16 Transportation

A focused traffic impact analysis was completed for the proposed Project by KOA Corporation (Appendix E). The focused traffic impact study included Garvey Avenue and the site driveway intersection with Wescott Avenue. Trip generation of the Project was derived from rates defined by Trip Generation, 10th Edition, published by the Institute of Transportation Engineers.

4.16.1 Environmental Setting

Existing Roadway System

Garvey Avenue provides one travel lane in each direction. The speed limit is 35 miles per hour (prima facie). On-street parking is generally permitted on both sides of the roadway with the exception of the 2nd and 4th Thursdays of each month from Noon to 4PM. Speed survey results on Garvey Avenue indicate that the 85th percentile combined speed is 42 MPH. With a current design speed of 40 mph, 42 mph is not a significant deviation that denotes any major speeding issues.

Garvey Avenue has a combined 24-hour average daily traffic count (ADT) of 960 vehicles. During the AM peak hour there is a volume of 50 vehicles in both directions, and during the PM peak hour there is a volume of 70 vehicles in both directions.

Sight distance conditions at the driveway intersection with Westcott Avenue, the primary project site access point to the local roadway system, was analyzed based on standards in the Caltrans Highway Design Manual. The project driveway is on a road that has a 25 mile per hour speed limit (prima facie speed applies, as regulatory signs are not posted in the vicinity).

4.16.2 Regulatory Setting

General Plan

The following goals support the City of Baldwin Park Circulation Plan and the City's vision to allow Baldwin Park residents and visitors to the City to move about the community in the most efficient manner, and to access regional transportation routes. The goals and policies in this Element recognize the built-out character of Baldwin Park and reflects the constraints imposed by a long-established network and freeway system, as well as relatively fixed land use patterns. However, the City's chief aim is to work creatively with all modes of transportation and to provide for safe and efficient circulation for all City residents.

Goal 1.0: Provide a street and highway system in Baldwin Park that provides adequate capacity to ensure acceptable traffic flow.

Goal 2.0: Maintain easy, convenient access to and from Baldwin Park via the I-10 and I-605 Freeways.

Goal 3.0: Encourage the increased use of public transportation.

Goal 4.0: Accommodate alternative modes of transportation in land use and circulation planning.

Goal 5.0: Ensure adequate parking is provided to meet existing and future demand.

Goal 6.0: Protect residential neighborhoods from through traffic associated with nonresidential use.

Goal 7.0: Provide necessary infrastructure improvements in the Auction Village Area to enhance circulation and access.

Goal 8.0: Provide a circulation system in Downtown that supports a cohesive pedestrian district. Pursue development of a Specific Plan that clearly defines circulation improvements in the area.

4.16.3 Transportation (XVII) Environmental Checklist and Discussion

	Would the Project:	Potentially Significant Impact	Less than Significant 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?	☐	☐	☒	☐

Construction Impacts

The proposed Project would generate short-term construction related vehicle trips. However, traffic generated by construction of the proposed Project would be temporary and would not conflict with the City of Baldwin Park's Circulation Element. Impacts would be less than significant.

Operational Impacts

Trip generation of the Project was derived from rates defined by *Trip Generation, 10th Edition,* published by the Institute of Transportation Engineers. The project traffic calculations are provided in Table 22.

Table 22. Project Trip Generation

ITE Code	Land Use	Intensity	Units	Weekday						
				Daily	AM Peak Hour			PM Peak Hour		
				Rate	Rate	In	Out	Rate	In	Out
Trip Generation Rates										
150	Warehousing	-	KSF	1.74	0.17	77%	23%	0.19	27%	73%
710	General Office	-	KSF	9.74	1.16	86%	14%	1.15	16%	84%
Trip Generation Totals-New Use										
150	Warehousing	17.539	KSF	31	3	2	1	3	1	2
710	General Office	3.308	KSF	32	4	3	1	4	1	3
Total		**20.847**	**KSF**	**63**	**7**	**6**	**1**	**7**	**2**	**6**

According to Table 22, the project is estimated to generate 63 daily trips, including 7 vehicle trips during the a.m. peak-hour (6 inbound trips and 1 outbound trips) and 7 vehicle trips during the p.m. peak hour (2 inbound trips and 6 outbound trips). These additional trips would have a negligible effect on area roadway operations and significant traffic impacts would not occur.

Transit System

The vicinity of the proposed Project site is adequately served by bus transit lines operated by the Baldwin Park Shuttle and Foothill Transit. The Foothill Transit 488 Line runs from the El Monte bus station to Glendora Lakes via Ramona Boulevard, Francisquito Avenue, Glendora Avenue, Rowland Avenue, and Grand Avenue. The Baldwin Park Shuttle Teal Line runs from the Metrolink Station to Kaiser Hospital via Ramona Boulevard, Maine Avenue, Stewart Avenue, Baldwin Park Boulevard, and Frazier Street. No public transit routes run along Garvey Avenue. Impacts to the public transit system would be less than significant.

Bicycle and Pedestrian Facilities

The City of Baldwin Park continues to support alternative modes of transportation in land use and planning (Baldwin Park 2002a). According to the General Plan Circulation Element, no existing or planned bike lanes are proposed near the Project, therefore the City's Bikeway Plan would not be affected by the Project. The Project would not otherwise conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) in the City of Baldwin Park.

In conclusion, conflicts with any program, plan, ordinance or policy addressing the circulation system would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒

The vehicle miles traveled analysis was based on current published CEQA guidelines and the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, of December 2018. Senate Bill (SB) 743 has defined VMT as the primary metric for CEQA transportation impact analysis, and the Technical Advisory was created to guide CEQA transportation analysis efforts.

There are four screening thresholds for land use projects that are defined by the Technical Advisory. These were applied to the project characteristics and location to determine if a project exemption from CEQA analysis would be the recommended course of action:

1) Screening Threshold for Small Projects

2) Map-Based Screening for Residential and Office Projects

3) Presumption of Less than Significant Impact Near Transit Stations

4) Presumption of Less Than Significant Impact for Affordable Residential Development

Criterion #1 – Small Projects states that a project can be determined to have a less than significant impact due to project location, size, or land use type. The screening threshold is defined as follows:

> "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact."

The project is expected to generate 63 daily trips, including 7 vehicle trips during the a.m. peak- hour (6 inbound trips and 1 outbound trip) and 7 vehicle trips during the p.m. peak hour (2 inbound trips and 6 outbound trips) (KOA 2020). As the Project has been estimated to generate fewer than 110 trips on a daily basis, it is exempt from CEQA analysis based on this criterion. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

Sight distance conditions at the driveway intersection with Westcott Avenue, the primary project site access point to the local roadway system, was analyzed based on standards in the Caltrans Highway Design Manual. The project driveway is on a road that has a 25 mile per hour speed limit (prima facie speed applies, as regulatory signs are not posted in the vicinity). The Highway Design Manual, in Table 201.1 Sight Distance Standards, defines the sight distance for roadways based on design speeds. Based on the 25 mph speed limit (prima facie) on Westcott Avenue, the design speed would be 30 mph. The stopping distance related to the 30 mph speed is 200 feet (KOA 2020; Appendix E).

From the project driveway, the 200-foot distance would not extend to any horizontal curves or major permanent obstructions to the north or south of the driveway. Neither would there be any horizontal curves or major obstructions within 200 feet east or west of Garvey Avenue/Westcott Avenue. The project trip generation is also not expected to increase by a large amount and the driveway on Westcott Avenue would operate in the same manner with the project as it does under existing conditions. Furthermore, the Project does not propose incompatible uses such as farm equipment. As such, the Project would not substantially increase traffic hazards. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☐	☒	☐

Construction of the proposed Project would result in temporary construction truck traffic along Garvey Avenue and Wescott Avenue which has the potential to interfere with emergency response access to areas near the Project site. The City's Police Department maintains an emergency plan called the Baldwin Park MultiHazard Functional Plan (Baldwin Park 2002a). The plan identifies potential threats to the community based on studies conducted by the Police Department in conjunction with other City departments. The plan sets forth the City's planned response to emergency situations including fire, earthquake, major civil disturbances, flooding, and more. The emergency response plan also designates evacuation routes and facilities for various types of hazards.

The Project design proposes emergency access to the site via the existing site driveway on Wescott Avenue. No offsite roadway improvements are proposed that would interfere with emergency access, response times, or impede circulation of emergency vehicles on surrounding roadways. During the course of the City of Baldwin Park's required review of the proposed Project's applications, the site plan would be reviewed to ensure that adequate access to and from the site and around the proposed buildings is provided for emergency vehicles. With adherence to the City of Baldwin Park requirements for emergency vehicle access, impacts would be less than significant.

4.16.4 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.17 Tribal Cultural Resources

4.17.1 Environmental Setting

Assembly Bill 52

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCR), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.

Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
    b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
    c. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria a and b also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Summary of AB 52 Consultation

On August 5, 2020, the City sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code: Gabrielino Tongva Tribe, Soboba Band of Luiseno Indians, and Gabrieleno Band of Mission Indians-Kizh Nation. Each recipient was provided a brief description of the project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation. As a result of the initial tribal notification letters, no responses requesting consultation were received by the City within 30 days as required by statute.

No response was received from the other contacted California Native American tribes.

4.17.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☐	☒	☐

Following tribal notifications, no request for AB 52 tribal consultation was received by the City within the statutory time frame. Although the City is aware the project site is located within a broad area of the San Garbiel Valley identified by the Gabrieleno Band of Mission Indians as within the ancestral territory of the Gabrielenos, there is no substantial evidence the project site contains a resource determined to be significant pursuant to subdivision (c) of PRC Section 5024.1.

The Project is not expected to disturb any human remains including those outside of formal cemeteries. The City of Baldwin Park does not have any cemeteries and the project site has not been used as a cemetery in the past. In addition, the site has not been used for any activities that have resulted in human remains being present on the property. The potential for uncovering such significant resources during project grading or excavation activities is therefore considered to be low. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code (PRC) would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission (NAHC) and consultation with the individual identified to be the "most likely descendant." With adherence to applicable laws and regulations, impacts to human remains are anticipated to be less than significant.

Thus, the potential for impacts from possible discovery of unknown TCRs during ground disturbing activities from Project construction is considered less than significant.

4.17.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.18 Utilities and Service Systems

4.18.1 Environmental Setting

Water Service

Potable water in Baldwin Park is provided by three water companies: Valley County Water District (VCWD), San Gabriel Valley Water Company (SGVWC), and Valley View Mutual Water Company (VVMWD). The proposed Project site is served by the SGVWC, which is a retail water supplier that serves all or portions of the Cities of Arcadia, Baldwin Park, El Monte, Industry, Irwindale, La Puente, Montebello, Monterey Park, Pico Rivera, Rosemead, San Gabriel, Santa Fe Springs, South El Monte, West Covina, Whittier, and unincorporated areas of Los Angeles County. SGVWC currently derives its groundwater supplies from two groundwater basins, the Main San Gabriel Basin (Main Basin) and the Central Basin, with the Main Basin as the primary groundwater source. Water supply sources also include recycled water and a connection with the Metropolitan Water District of Southern California (MWD) for delivery of treated imported water (SGVWC 2016).

Wastewater

The Los Angeles County Sanitation Districts (Districts) would be responsible for the treatment of wastewater generated by the project. The proposed Project is located within the jurisdictional boundaries of District 15, which is one of the seventeen districts that form the Join Outfall System. The Joint Outfall System is a regional, integrated sewerage system covers approximately 660 square miles, from the foothills of the San Gabriel Mountains in the north to San Pedro Bay in the south, and from the Los Angeles city limits on the west to the Los Angeles County border on the east. This system provides sewage treatment, reuse and disposal for residential, commercial, and industrial users. The system includes the main Joint Water Pollution Control Plant (JWPCP) in Carson, and six satellite water

reclamation plants (WRPs). The six WRPs include La Cañada WRP, Long Beach WRP, Los Coyotes WRP, Pomona WRP, San Jose Creek WRP, and Whittier Narrows WRP.

There are two main sewer lines serving the area around the site, operated and maintained by LACSD: one 12-inch sewer main line in Garvey Avenue and one 12-inch sewer main in Westcott Avenue/Torch Street. Wastewater generated by the City is treated at the SJCWRP or at the JWPCP if wastewater flows exceed SJCWRP capacity, which is 100 million gallons per day. JWPCP provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day and has a total permitted capacity of 400 million gallons per day.

Solid Waste

Baldwin Park contracts for solid waste collection services with Waste Management of San Gabriel Valley/Pomona to provide mixed waste collection services and other available programs to its residents and business community. Waste Management transports waste to the Azusa Transfer Station/Valley Vista and then to El Sobrante Landfill in the City of Corona. The El Sobrante Landfill has a remaining capacity of approximately 143,977,170 cubic yards and a daily permitted capacity of 16,054 tons/day. The El Sobrante landfill is currently slated for closure in January 2051 (CalRecycle 2019).

Electricity

Southern California Edison provides electricity to over 15 million people in 50,000 square miles of service area, encompassing 15 counties in central, coastal, and southern California. SCE currently provides electricity to the citizens, businesses, and industries within the City of Baldwin Park. SCE would extend electric service to the Project in accordance with rules and policies for extension of service on file with the California Public Utilities Commission.

Natural Gas

The Southern California Gas Company provides natural gas services to the area and would extend service to the Project site at the time contractual arrangements are made in accordance with SoCalGas policies and extension rules on file with the California Public Utilities Commission.

4.18.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

The proposed Project would install connections to existing utility lines, including gas, water, and sewer. Small encroachments into adjacent public rights of way of developed/paved streets to connect to existing utilities will be required to serve the Project. Trenching for new onsite utility lines would be required. Physical disturbance for the installation of these new utility lines would be limited and largely indistinguishable from overall grading for development on the proposed Project site.

Electric Power

As shown in *Section 4.6 Energy*, the increase in electricity usage as a result of the Project would constitute an approximate 0.0002 percent increase in the typical annual electricity consumption attributable to non-residential uses in Los Angeles County. Project increases in natural gas usage across Los Angeles County would also be negligible. The Project would adhere to all federal, state, and local requirements for energy efficiency, including the Title 24 standards. The Project would be required to comply with Title 24 building energy efficiency standards, which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage.

Natural Gas

As discussed in *Section 4.6 Energy*, the Project would consume approximately 353 therms of natural gas annually. This represents a negligible increase in natural gas consumption.

Water

The Project would not result in additional demand on water supplies as future development has been previously accounted for and analyzed in the General Plan EIR and SGVWC planning documents. Because the Project is consistent with SGVWC's water supply projections that indicate there are sufficient water supplies to serve the project and region, and because the development/connection fees required for Project implementation would help mitigate future new or expanded entitlements that potentially may be needed with future regional growth, Project impacts would not result in the need for new or expanded water supplies.

Wastewater

Wastewater would be treated at the San Jose Creek WRP located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average of 58.5 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP would be diverted and treated at the Joint Water Pollution Control Plant located in the City of Carson. The development of the proposed industrial commercial facility is not anticipated to cause significant wastewater treatment capacity issues because of its relatively small size.

Storm Drainage

The amount of impervious surface area onsite would increase with development of the proposed industrial commercial uses, access drive, driveways, and other paved surfaces, thereby increasing the potential for stormwater runoff from the site. However, the Project would be designed to ensure that no

increase in runoff from the project site into the storm drain system would occur as compared to existing conditions, thereby minimizing potential effects on the City's storm drain system.

Overall, impacts related to relocation or construction of new or expanded utilities would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

The proposed Project site is served by the SGVWC, which procures its water supplies primarily from the Main Basin and imported water. San Gabriel's groundwater production from 2011 to 2015 has averaged approximately 35,340 AFY from the Main Basin and approximately 540 AFY from the Central Basin (SGVWC 2016). According to SGVWC's 2015 Urban Water Management Plan, the minimum water supplies available at the end of an average water year, a single dry year, and multiple dry years would be equal to water demand.

The Project would not result in significant additional demand on water supplies as future development has been previously accounted for and analyzed in the General Plan EIR and will not result in the need for new or expanded water supplies. The Project would also comply with the Water Shortage Contingency Plan outlined in the UWMP, if implemented. For example, limits may be applied to the number of days, frequency and duration of outdoor watering.

Because the Project is consistent with SGVWC's water supply projections that indicate there are sufficient water supplies to serve the project and region, and because the development/connection fees required for Project implementation would help mitigate future new or expanded entitlements that potentially may be needed with future regional growth, Project impacts are considered less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

There are two main sewer lines serving the area around the site, operated and maintained by LACSD: one 12-inch sewer main line in Garvey Avenue and one 12-inch sewer mainline in Westcott Avenue/Torch Street.. Wastewater generated by the Project would be treated at the San Jose Creek Water Reclamation

Plant (SJCWRP) or at the Joint Water Pollution Control Plant (JWPCP) if wastewater flows exceed SJCWRP capacity, which is 100 million gallons per day. JWPCP provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day and has a total permitted capacity of 400 million gallons per day. As discussed in threshold (a) above, the development of the proposed industrial commercial facility is not anticipated to cause significant wastewater treatment capacity issues because of its relatively small size. Additionally, the Project would be subject to the payment of connection fees for public sewer services that are used to fund improvements needed to continue serving the applicable service area, ensure adequate capacity, and comply with SWRCB treatment requirements. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

The City's Source Reduction and Recycling Element outlines and formalizes the City's integrated waste management procedures. These programs and policies plans identify how the City will meet the requirements of the California Integrated Waste Management Act (AB 939), which recognizes that an integrated approach to waste management is effective in extending the life of existing landfills and preventing the need to devote additional valuable land resources to trash disposal.

The generation of Project-related construction-related waste is considered to be minimal and temporary, and would cease upon completion of the proposed Project. Waste would be transported to the El Sobrante Landfill, which has a remaining capacity of approximately 143,977,170 cubic yards and a daily permitted capacity of 16,054 tons/day. The El Sobrante landfill is currently slated for closure in January 2051 (CalRecycle 2019). Although a precise quantity of construction and demolition debris cannot be specifically determined at this time, mandatory compliance with all applicable state and local regulations governing solid waste, source reduction, and recycling would reduce the amount of construction waste entering landfills. Therefore, conformance with the various state and local source reduction and recycling programs would ensure that the project would not contribute excessive amounts of solid waste to landfills. For these reasons, impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

The proposed Project would be required to comply with all Resource Conservation and Recovery Act (RCRA) Regulations, including Title 40 of the Code of Federal Regulations (CFR), as well as City of Baldwin Park waste reduction programs. In accordance with Assembly Bill 341, the Project would be required to work with Waste Management to implement a commercial recycling program during the operational phase.

As discussed above, the Project would comply with the various state and local source reduction and recycling programs. The implementation of these programs and policies would reduce the amount of solid waste generated be the proposed Project and diverted to landfills. Impacts would be less than significant.

4.18.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.19 Wildfire

4.19.1 Environmental Setting

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CALFIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30 to 50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to buildings.

No part of Baldwin Park is located within a Very High Fire Hazard Severity Zone. The proposed Project is located within a heavily industrialized area and is not in the immediate vicinity of any natural or wildlife areas.

4.19.2 Wildfire (XX) Environmental Checklist and Discussion

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 with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

The project site is located on land designated as non-VHFHSZ as recommended by CALFIRE (CALFIRE 2011). The Project proposes to construct a new industrial commercial facility on an existing vacant lot. The Project is not anticipated to impair an adopted emergency response plan or emergency evacuation plan. Access to the proposed Project is planned at an entryway on Westcott Avenue just north of Garvey Avenue, thereby facilitating emergency response and evacuation, if necessary. No impact would occur.

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 with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

As described above, the Project is not located in or near state responsibility areas or land classified as VHFHSZ. The Project would not substantially alter slope, prevailing wind patterns, or other factors and therefore would not expose project occupants to pollutant concentrations from wildfire. No impact would occur.

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 with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

The proposed Project is located within a heavily industrialized area and would require utility connections to serve the proposed industrial use. However, the Project is not located in or near local responsibility areas or land classified as VHFHSZ. Therefore, the Project would not exacerbate fire risk resulting in temporary or ongoing impacts to the environment. No impact would occur.

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 with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

As described above, the proposed Project is not located in or near state responsibility areas or land classified as VHFHSZ. Additionally, the project site is located on relatively flat terrain and would not be subject to landslide. No wildfire impact associated with downslope or downstream flooding or landslides would occur.

4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 Mandatory Findings of Significance

4.20.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Impacts to biological resources, cultural resources, geology and soils (paleontological resources), and tribal cultural resources are discussed in the respective sections of this Initial Study. Impacts would be less than significant with Mitigation Measures BIO-1, BIO-2, and GEO-1.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) 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)?	☐	☐	☒	☐

Impacts from the Proposed Project on transportation, air quality, greenhouse gas emissions and noise are discussed in corresponding sections of this Initial Study. Impacts would not be cumulatively considerable.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

SECTION 5.0 LIST OF PREPARERS

5.1 City of Baldwin Park

Lead Agency

Ron Garcia, City Planner

5.2 ECORP Consulting, Inc.

CEQA Documentation/Air Quality/Cultural Resources/Energy/Greenhouse Gas/Noise

Tom Holm, Project Manager

Lindsay Liegler, Associate Environmental Planner

Rosemary Worden, Assistant Environmental Planner

Seth Myers, Senior Air Quality/GHG/Noise Analyst

Wendy Blumel, Assistant Manager Inland Empire Cultural Resources Group

5.3 KOA Corporation

Transportation Analysis

Brian Marchetti, Vice President/Senior Planner

SECTION 6.0 BIBLIOGRAPHY

[Baldwin Park] City of Baldwin Park

2002a Baldwin Park 2020 General Plan. Available at https://www.baldwinpark.com/docssidemenu/community-development/planning/general-plan-individual-elements. Accessed November 7, 2019.

2002b 2020 General Plan EIR. Published September 2002.

2018a Land Use Map. Available at https://www.baldwinpark.com/planning. Accessed November 12, 2019.

2018b Zoning Map. Available at https://www.baldwinpark.com/planning. Accessed November 12, 2019.

[CALFIRE] California Department of Forestry and Fire Protection

2011 Very High Fire Hazard Severity Zones in LRA: Los Angeles County. Available at https://osfm.fire.ca.gov/media/7280/losangelescounty.pdf. Accessed December 10, 2019.

CalRecycle

2019 El Sobrante Landfill. Available at https://www2.calrecycle.ca.gov/swfacilities/Directory/33-AA-0217. Accessed November 5, 2019.

[Caltrans] California Department of Transportation

2020 2020. Transportation- and Construction-Induced Vibration Guidance Manual. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

2017 Traffic Census Data. https://dot.ca.gov/programs/traffic-operations/census.

2013 Technical Noise Supplement to the Traffic Noise Analysis Protocol. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf.

2011 California Scenic Highway Mapping System Website. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed December 10, 2019.

2002 California Airport Land Use Planning Handbook. https://www.placer.ca.gov/DocumentCenter/View/8266/Caltrans-2002-California-Airport-Land-Use-Planning-Handbook-PDF.

[CARB] California Air Resources Board

2017 EMFAC2017 Web Database Emissions Inventory. https://www.arb.ca.gov/emfac/2017/.

[CEC] California Energy Commission

2019 California Energy Consumption Database. http://www.ecdms.energy.ca.gov/Default.aspx.

[CGS] California Geological Survey

1999 Earthquake Zones of Required Investigation Baldwin Park Quadrangle. Available at http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/BALDWIN_PARK_EZRIM.pdf Accessed December 11, 2019.

Climate Registry

2016 General Reporting Protocol for the Voluntary Reporting Program version 2.1. January 2016.

[DOC] California Department of Conservation

1998 Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle. Available at http://gmw.conservation.ca.gov/SHP/EZRIM/Reports/SHZR/SHZR_022_Baldwin_Park.pdf. Accessed December 11, 2019.

2016 Online Farmland Mapping and Monitoring Program, Important Farmland Finder. Available at https://www.conservation.ca.gov/dlrp/fmmp. Accessed December 11, 2019.

[DTSC] Department of Toxic Substances Control

2020 Envirostor. Available at https://www.envirostor.dtsc.ca.gov/public/. Accessed August 27, 2020.

[ECDMS] California Energy Commission

2019 California Energy Consumption Database. http://www.ecdms.energy.ca.gov/Default.aspx.

[ECORP] ECORP Consulting, Inc.

2020 Air Quality and Greenhouse Gas Emissions Assessment.

[FHWA] Federal Highway Administration

2006 Roadway Construction Noise Model.

2011 Effective Noise Control During Nighttime Construction. http://ops.fhwa.dot.gov/wz/workshops/accessible/schexnayder_paper.htm.

[FTA] Federal Transit Administration

2018 Transit Noise and Vibration Impact Assessment. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

[HMMH] Harris Miller, Miller & Hanson Inc.

2006 Transit Noise and Vibration Impact Assessment, Final Report.

[KOA] KOA Corporation

2020 Traffic Impact Study: 12793 Garvey Avenue Industrial Commercial Project. October 2020.

[SGVWC] San Gabriel Valley Water Company

2016 2015 Urban Water Management Plan. Published July 2016. Available at sgvwater.com/wp-content/uploads/2018/09/Volume-I-FINAL-AMENDED_2015-UWMP_SGVWC_LACD.pdf. Accessed December 11, 2019.

[SCAQMD] South Coast Air Quality Management District

1992 1992 Federal Attainment Plan for Carbon Monoxide.

1993 CEQA Air Quality Handbook.

2008 Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]).

2009 Localized Significance Threshold Appendix C – Mass Rate LST Look-Up Tables. Revised October 21, 2009. http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

[SWRCB] State Water Resources Control Board

2020 Geotracker. Available at https://geotracker.waterboards.ca.gov/map/?global_id=T060373132. Accessed August 27, 2020.

[WEAL] Western Electro-Acoustic Laboratory, Inc.

2000 Sound Transmission Sound Test Laboratory Report No. TL 96-186.

SECTION 7.0 LIST OF APPENDICES

Appendix A – Air Quality/Greenhouse Gases/Energy

Appendix B – Cultural and Tribal Cultural Resources

Appendix C – Geotechnical Engineering Investigation

Appendix D – Noise Impact Assessment

Appendix E – Traffic Impact Assessment

APPENDIX A

Appendix A – Air Quality/Greenhouse Gases/Energy

APPENDIX B

Appendix B – Cultural and Tribal Cultural Resources

APPENDIX C

Appendix C – Geotechnical Engineering Investigation

APPENDIX D

Appendix D – Noise Impact Assessment

APPENDIX E

Appendix E – Traffic Impact Assessment

Air Quality & Greenhouse Gas Assessment

12793 Garvey Avenue Industrial Building Project

Baldwin Park, California

Prepared For:

Baldwin Park Homes, LLC
1773 San Bernardino Road, STE. B42
West Covina, California 91790

August 2020

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

CONTENTS

1.0 INTRODUCTION 1
1.1 Project Location and Description 1
2.0 AIR QUALITY 4
2.1 Air Quality Setting 4
2.1.1 South Coast Air Basin 4
2.1.2 Criteria Air Pollutants 5
2.1.3 Carbon Monoxide 6
2.1.4 Nitrogen Oxides 6
2.1.5 Ozone 7
2.1.6 Particulate Matter 7
2.1.7 Toxic Air Contaminants 8
2.1.8 Ambient Air Quality 8
2.1.9 Sensitive Receptors 10
2.2 Regulatory Framework 11
2.2.1 Federal 11
2.2.2 State 11
2.2.3 Local 13
2.3 Air Quality Emissions Impact Assessment 15
2.3.1 Thresholds of Significance 15
2.3.2 Methodology 16
2.3.3 Impact Analysis 17
3.0 GREENHOUSE GAS EMISSIONS 28
3.1 Greenhouse Gas Setting 28
3.1.1 Sources of Greenhouse Gas Emissions 29
3.2 Regulatory Framework 30
3.2.1 State 30
3.2.2 Local 32
3.3 Greenhouse Gas Emissions Impact Assessment 32
3.3.1 Thresholds of Significance 32
3.3.2 Impact Analysis 35
4.0 REFERENCES 41

LIST OF TABLES

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects 6
Table 2-2. Summary of Ambient Air Quality Data 9
Table 2-3. Attainment Status of Criteria Pollutants in the South Coast Air Basin 10
Table 2-4. SCAQMD Regional Significance Thresholds – Pounds per Day 15
Table 2-5. Local Significance Thresholds at or within 25 Meters of a Sensitive Receptor 16
Table 2-6. Construction-Related Emissions (Regional Significance Analysis) 17
Table 2-7. Construction-Related Emissions (Localized Significance Analysis) 19
Table 2-8. Operational-Related Emissions (Regional Significance Analysis) 20
Table 3-1. Greenhouse Gases 29
Table 3-2. Construction-Related Greenhouse Gas Emissions 36
Table 3-3. Operational-Related GHG Emissions 36

LIST OF FIGURES

Figure 1. Project Vicinity 2
Figure 2. Project Location 3

LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Air Quality Emissions
Attachment B – CalEEMod Output File for Greenhouse Gas Emissions

LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
µg/m3	Micrograms per cubic meter; ppm = parts per million
2016 AQMP	2016 Air Quality Management Plan
2016 RTP/SCS	2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy
AB	Assembly Bill
AERMOD	USEPA air toxic dispersion model
ATCM	Airborne toxics control measure
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CC&Rs	Covenants, Codes, and Restrictions

LIST OF ACRONYMS AND ABBREVIATIONS

CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DOC	Department of Conservation
DPM	Diesel particulate matter
EMFAC	EMission FACtor model
EO	Executive Order
GHG	Greenhouse gas
HRA	Health risk assessment
I-	Interstate
IPCC	Intergovernmental Panel on Climate Change
LOS	Level of service
LSTs	Localized significance threshold
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO_2	Nitrogen dioxide
NOx	Nitric oxides
NSR	New Source Review
O_3	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment's
OPR	Office of Planning and Research
PM_{10}	Coarse particulate matter
$PM_{2.5}$	Fine particulate matter
ppb	Parts per billion
ppm	Parts per million
Project	12793 Garvey Avenue Industrial Building Project
RCPG	Regional Comprehensive Plan and Guide
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
Risk Reduction Plan	Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles
ROGs	Reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square-foot
SIP	State Implementation Plan
SCAQMD	South Coast Air Quality Management District
SO_2	Sulfur dioxide
SoCAB	South Coast Air Basin
SO_x	Sulfur oxides

LIST OF ACRONYMS AND ABBREVIATIONS

SRA	Source receptor area
SSAB	Salton Sea Air Basin
Strategy	Mobile Source Strategy
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile organic compounds

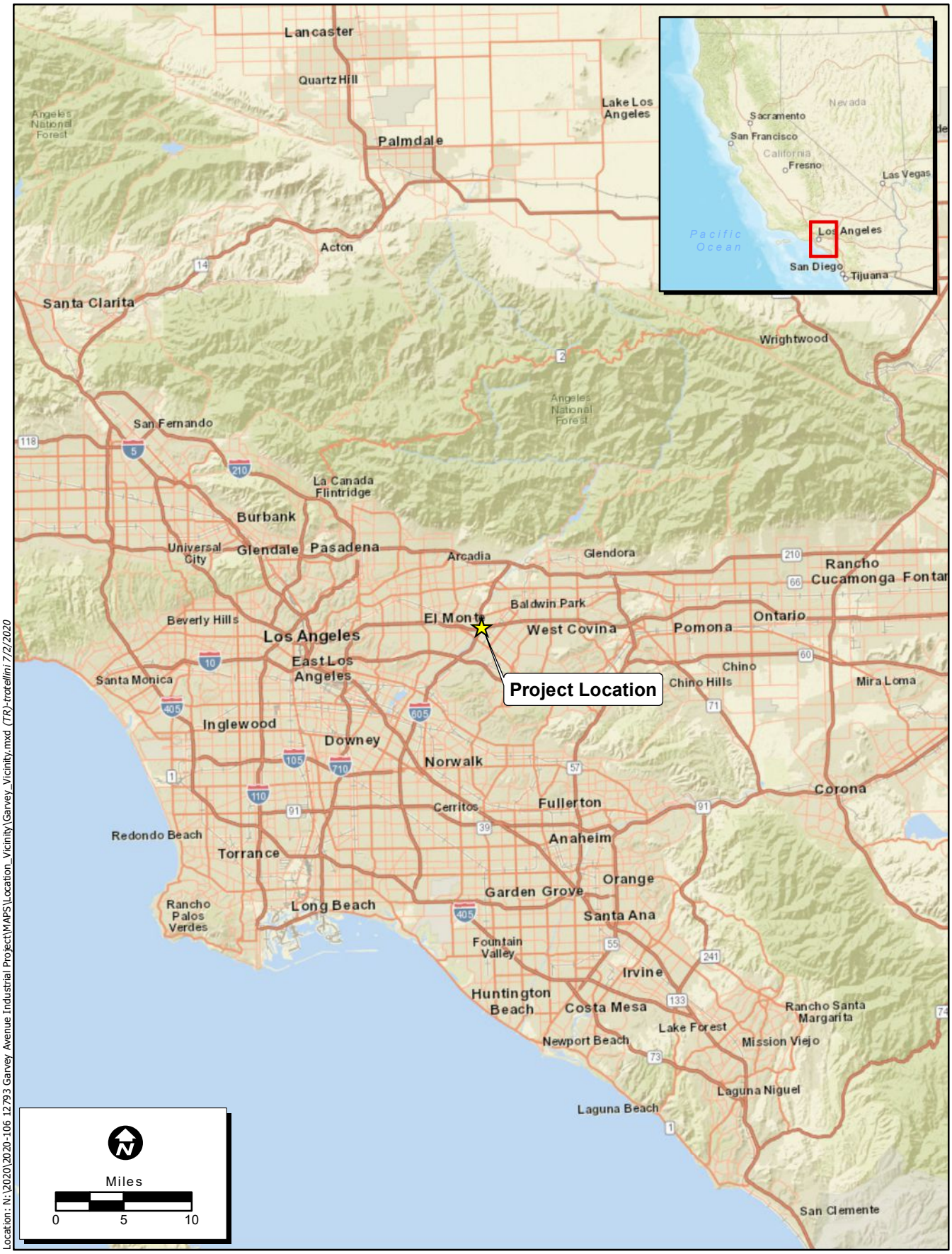
1.0 INTRODUCTION

This report documents the results of an Emissions Impact Assessment completed for the 12793 Garvey Avenue Industrial Project (Project), which includes the construction of an industrial warehouse and office space in Baldwin Park, California. This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and greenhouse gas (GHG) emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 Project Location and Description

The Project site is located in the City of Baldwin Park, located in central Los Angeles County (see Figure 1). The Project site is an approximate 42,875 square foot (SF) lot located along Garvey Avenue. The irregular-shaped site is generally bounded by a vehicle tow yard to the north, Interstate (I-) 10 and Garvey Avenue to the south, Wescott Avenue to the east, and mobile homes and I-605 to the west (see Figure 2. *Project Vicinity*). The Project is proposing a 20,847 SF building that will be used for industrial cannabis cultivation purposes. The total proposed building space is 20,847 SF; comprised of 17,539 SF of warehouse space and 3,308 SF of office space (the office space would be divided between two stories). Construction would require 1,000 cubic yards (CY) of soil import. The site is currently undeveloped.

The Project site is designated by the City of Baldwin Park General Plan as *CI – Commercial Industrial*. According to the General Plan, the *CI* designation allows for commercial, light manufacturing, and office in both business park settings and individual lots. The *CI* designation typically applies to properties located along I-605 and I-10 (Baldwin Park 2002).



Location: N:\2020\2020-106 12793 Garvey Avenue Industrial Project\MAPS\Location_Vicinity\Garvey_Vicinity.mxd *(TR)-trotellini 7/2/2020*

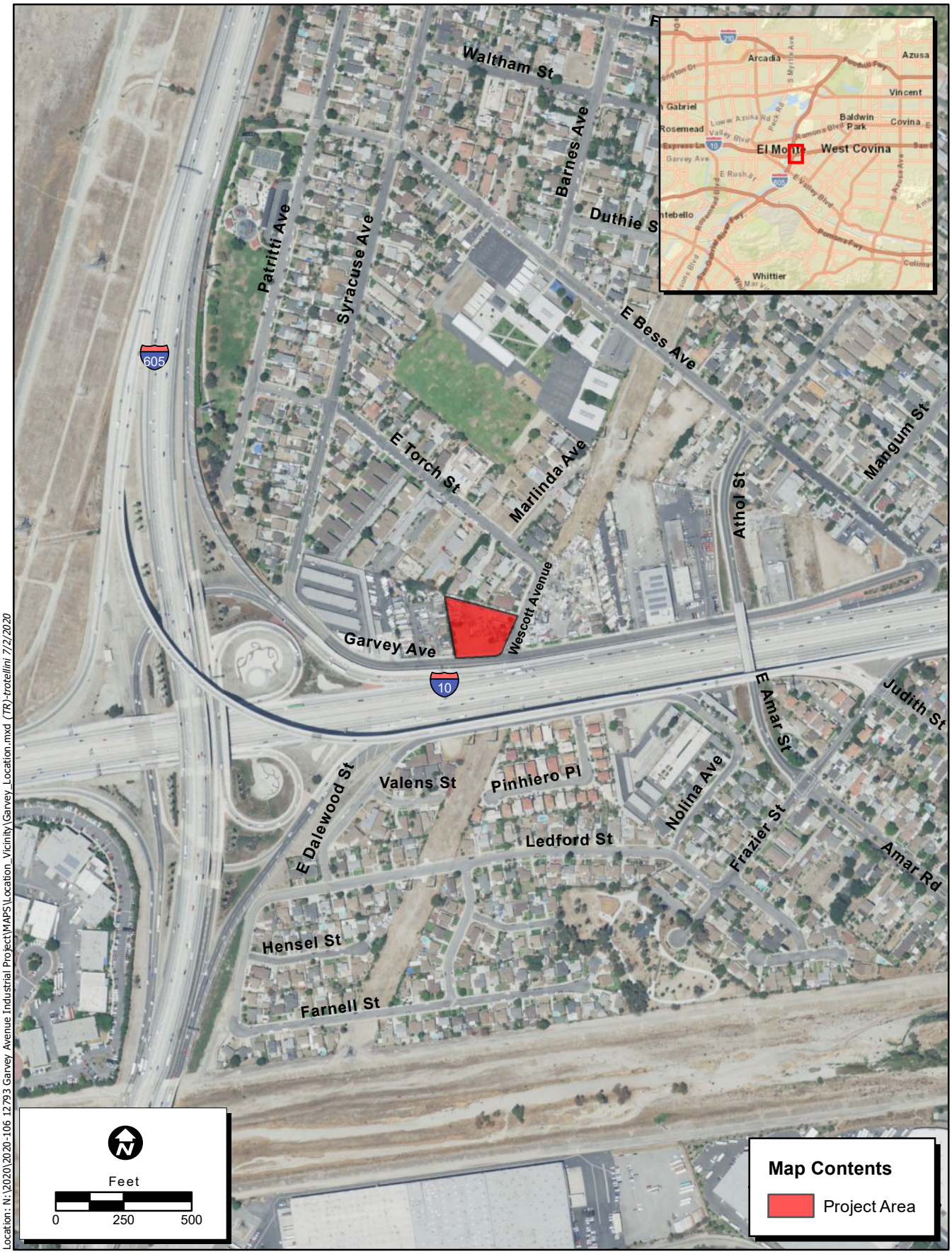
Map Date: 7/2/2020

Sources:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Regional Location

2020-106 12793 Garvey Avenue Industrial Project



Location: N:\2020\2020-106 12793 Garvey Avenue Industrial Project\MAPS\Location_Vicinity\Garvey_Location.mxd *(TR)-trotellini 7/2/2020*

Map Date: 7/2/2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2. Project Location

2020-106 12793 Garvey Avenue Industrial Project

2.0 AIR QUALITY

2.1 Air Quality Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project site, pursuant to the regulatory authority of the SCAQMD.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area.

2.1.1 South Coast Air Basin

CARB divides the state into air basins that share similar meteorological and topographical features. The Project site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Los Angeles County (SCAQMD 1993).

2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} & $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

2.1.3 Carbon Monoxide

CO, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most sever meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances (i.e., up to 600 feet or 185 meters) of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards.

2.1.4 Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in

the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO_2, attribute to the formation of O_3 and $PM_{2.5}$. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

2.1.5 Ozone

O_3 is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROG and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO_x forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

2.1.6 Particulate Matter

Particulate matter includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM_{10}) and small than or equal to 2.5 microns in diameter ($PM_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $PM_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SOx) and VOCs. $PM_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $PM_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $PM_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and

$PM_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

2.1.7 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's $PM_{2.5}$ air quality problems. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Diesel Exhaust

Most recently, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

2.1.8 Ambient Air Quality

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout

California. The Azusa (803 North Loren Avenue, Azusa) air quality monitoring station, located approximately six miles northeast of the Project site, is one of the two closest monitoring stations to the site. The Azusa monitoring station monitors ambient concentrations of $PM_{2.5}$ and PM_{10}. The Pico Rivera monitoring station (4144 San Gabriel River Parkway, Pico Rivera, CA), located approximately six miles southwest of the Project site, monitors ambient concentrations of $PM_{2.5}$ and O_3. Together, the two monitoring stations monitor the three pollutants in nonattainment of air quality standards in the Project region. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in the development area.

Table 2-2 summarizes the published data concerning O_3 and $PM_{2.5}$ between 2016 and 2018 from the Pico Rivera monitoring station (4144 San Gabriel River Parkway, Pico Rivera, CA) and published data concerning PM_{10} from the Azusa monitoring station (803 N. Loren Avenue, Azusa, CA 91702) for each year that the monitoring data is provided. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region.

Table 2-2. Summary of Ambient Air Quality Data

Pollutant Standards	2016	2017	2018
O_3 – Pico Rivera Monitoring Station			
Max 1-hour concentration (ppm)	0.111	0.118	0.115
Max 8-hour concentration (ppm) (state/federal)	0.081 / 0.081	0.087 / 0.086	0.082 / 0.082
Number of days above 1-hour standard (state/federal)	9 / 0	7 / 0	3 / 0
Number of days above 8-hour standard (state/federal)	6 / 0	9 / 1	5 / 0
PM_{10} – Azusa Monitoring Station			
Max 24-hour concentration (µg/m3) (state/federal)	74.6 / 74.0	83.9 / 83.9	78.3 / 78.3
Number of days above 24-hour standard (state/federal)	* / 0	* / 0	59.2 / 0
$PM_{2.5}$– Pico Rivera Monitoring Station			
Max 24-hour concentration (µg/m3) (state/federal)	46.5 / 46.5	49.5 / 49.5	56.3 / 56.3
Number of days above federal 24-hour standard	6.2	3.2	6.1

Source: CARB 2019a
µg/m3 = micrograms per cubic meter; ppm = parts per million
* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the SoCAB is included in Table 2-3.

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$ (CARB 2018). The Project region is also a nonattainment area for the federal lead standard. This is a result of operations at the Ports of Los Angeles and Long Beach coupled with a few specific industrial processes that occur in the region, such as battery recycling. The Project would not be source of lead.

Table 2-3. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Source: CARB 2018

2.1.9 Sensitive Receptors

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

The nearest sensitive receptors to the Project site are mobile homes located immediately adjacent to the western boundary of the Project site.

2.2 Regulatory Framework

2.2.1 Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO_2) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO_2.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SoCAB for the criteria pollutants.

2.2.2 State

California Clean Air Act

The California Clean Air Act (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and

control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The *2016 Air Quality Management Plan* (2016 AQMP) is the SIP for the SoCAB. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin that are under SCAQMD's jurisdiction. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (USEPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS. The current status of the SIPs for the SoCAB's nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted a SIP revision to the USEPA for O_3, $PM_{2.5}$ (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal $PM_{2.5}$ standard in the SoCAB by 2014 and attainment of the federal eight-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the eight-hour O_3 standard in the SoCAB by June 2024. CARB approved $PM_{2.5}$ SIP revisions in April 2011 and the O_3 SIP revisions in July 2011. The USEPA approved the $PM_{2.5}$ SIP in 2013 and has approved 46 of the 61, 1997 eight-hour O_3 SIP requirements (USEPA 2018a). In 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 $PM_{2.5}$ standards. In 2016, the USEPA determined that the SoCAB had attained the 1997 $PM_{2.5}$ standards; however, the SoCAB was not redesignated as an attainment area because the USEPA had not approved a maintenance plan and additional requirements under the CAA had not been met (USEPA 2018b).
- In 2012, the SCAQMD adopted the 2012 AQMP, which was a regional and multiagency effort (the SCAQMD, CARB, SCAG, and the USEPA). The primary purposes of the 2012 AQMP were to demonstrate attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 and to update the USEPA-approved eight-hour Ozone Control Plan. In 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013.

- In 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP includes strategies and measures to meet the following NAAQS:
  - 2008 eight-hour O_3 (75 parts per billion [ppb]) by 2013
  - 2012 Annual $PM_{2.5}$ (12 µg/m^3) by 2025
  - 1997 eight-hour O_3 (80 ppb) by 2023
  - 1979 one-hour O_3 (120 ppb) by 2022
  - 2006 24-hour $PM_{2.5}$ (35 µg/m^3) by 2019

Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act

CARB's Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

2.2.3 Local

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project site. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 201 & Rule 203 (Permit to Construct & Permit to Operate)** – Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

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

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.
- **Rule 1401 (New Source Review of Toxic Air Contaminants)** – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

2.3 Air Quality Emissions Impact Assessment

2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

3) Expose sensitive receptors to substantial pollutant concentrations.

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

SCAQMD Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 2-4.

Table 2-4. SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual

emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a Project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. The Proposed Project is located within SCAQMD SRA 9 (East San Gabriel Valley). Table 2-5 shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 9 with sensitive receptors located within 25 meters of the Project site (as previously described, the nearest sensitive receptors are mobile homes located immediately west of the Project site.

Table 2-5. Local Significance Thresholds at or within 25 Meters of a Sensitive Receptor

Project Size	Pollutant (pounds per day Construction/Operations)			
	NO_2	CO	PM_{10}	$PM_{2.5}$
1 Acre	89 / 89	623 / 623	5 / 2	3 / 1
2 Acres	128 / 128	953 / 953	7 / 2	5 / 2
5 Acres	203 / 203	1,733 / 1,733	14 / 4	8 / 2

Source: SCAQMD 2009

2.3.2 Methodology

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Los Angeles County in addition to construction equipment information provided by the Project Applicant.

Operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates calculated by KOA (2020).

2.3.3 Impact Analysis

Project Construction-Generated Criteria Air Quality Emissions

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 2-6. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 2-6. Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction in 2021	38.88	15.88	8.92	0.03	0.99	0.46
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Emissions estimates account for the site preparation and grading of 42,875 SF. Building construction, paving, and painting are assumed to occur in overlapping phases. The duration of each construction phase is based on construction information provided by the Project Applicant. The CalEEMod model accounts for 1,000 CY of soil import.

Emissions were taken from summer or winter, whichever is greater.

As shown in Table 2-6, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Localized Construction Significance Analysis

As previously stated, nearest sensitive receptors to the Project site are residences directly adjacent to the Project site boundary to the west. In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the East San Gabriel Valley, SRA 9. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. As previously described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. The Project site is 42,875 SF, or approximately 0.98 acre. Thus, the LST threshold value for a one-acre site was employed from the LST lookup tables.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptors to the Project site are the residences located immediately adjacent to the western side of the Project site. Notwithstanding, the SCAQMD Methodology explicitly states: "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in this analysis. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. Table 2-7 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project site daily during site preparation activities and grading activities at 25 meters or less from sensitive receptors.

Table 2-7. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Project Site Preparation	3.86	1.59	0.49	0.15
Project Site Grading	7.43	6.56	0.50	0.50
SCAQMD Localized Significance Threshold (1.0 acre of disturbance)	*89.00*	*623.00*	*5.00*	*3.00*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.
Emissions estimates account for the site preparation and grading of 42,875 SF. Building construction, paving, and painting are assumed to occur in overlapping phases. The duration of each construction phase is based on construction information provided by the Project Applicant. The CalEEMod model accounts for 1,000 CY of soil import.
Emissions were taken from summer or winter, whichever is greater.

Table 2-7 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would likely not adversely impact the neighboring receptors to the west.

Project Operations Criteria Air Quality Emissions

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as ozone precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use. As previously described, operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates from KOA (2020).

Long-term operational emissions attributable to the Project are identified in Table 2-8 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 2-8. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	0.46	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	0.11	0.53	1.50	0.00	0.44	0.12
Total:	**0.57**	**0.54**	**1.51**	**0.00**	**0.44**	**0.12**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	0.46	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00	0.00	0.00
Mobile	0.10	0.54	1.42	0.00	0.44	0.12
Total:	**0.57**	**0.55**	**1.44**	**0.00**	**0.44**	**0.12**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.
Notes: Emissions projections account for a trip generation rate and fleet mix identified by KOA 2020.Specifically, KOA estimates the Project generation 63 average vehicle trips daily.

As shown in Table 2-8, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

As identified in Table 2-3, the Los Angeles County portion of the SoCAB is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$. O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-8, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the

objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operations of a project only if the project includes stationary sources or attracts substantial amounts of heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Proposed Project does not include such uses. Therefore, in the case of the Proposed Project, the operational LST protocol is not applied.

Conflict with the 2016 Air Quality Management Plan

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 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 Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

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 or cause or contribute to new air quality violations?

As shown in Table 2-6, 2-7, and 2-8 above, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

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

As shown in Table 2-6and 2-8 above, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or 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 SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Baldwin Park. Specifically, SCAG's *Growth Management* Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's *2016 RTP/SCS* provides socioeconomic forecast projections of regional population growth. The City of Baldwin Park General Plan is referenced by SCAG in order to assist forecasting future growth in Baldwin Park.

The Proposed Project is consistent with the land use designation and development density presented in the City of Baldwin Park General Plan. As previously stated, the Project site is designated by the City of Baldwin Park General Plan as *CI – Commercial Industrial*. According to the General Plan, the *CI* designation allows for commercial, light manufacturing, and office uses in both business park settings and individual lots. Furthermore, the Project does not involve any uses that would increase population beyond what is

considered in the General Plan and, therefore, would not affect city-wide plans for population growth at the Project site. Thus, the Proposed Project is consistent with the types, intensity, and patterns of land use envisioned for the Project site in the General Plan and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2016 AQMP. The City of Baldwin Park's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

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

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the Proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. As shown in Table 2-6, 2-7, and 2-8 above, the Proposed Project would not exceed applicable SCAQMD thresholds of significance during construction and operation. The Proposed Project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. The Proposed Project's long-term influence would also be consistent with the goals, objectives, and strategies of the SCAQMD's 2016 AQMP.

The Project would be consistent with the emission-reduction goals of the 2016 AQMP. No impact would occur.

Exposure of Sensitive Receptors to Toxic Air Contaminants

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project site are residences located on the western side of the Project site.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Table 2-6 and Table 2-7, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions. The portion of the SoCAB which encompasses the Project area is designated as a nonattainment area for federal O_3 and fine particulate matter ($PM_{2.5}$) standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} standards (CARB 2018). Thus, existing O_3 and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods.

The health effects associated with O_3 are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NOx) in excess of the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust $PM_{2.5}$, considered a surrogate for DPM, would be 0.41 pounds/day (see Attachment A). ($PM_{2.5}$ exhaust is

considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., $PM_{2.5}$). Most $PM_{2.5}$ derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Additionally, the Project would be required to comply with SCAQMD Rule 403 described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the Project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. As shown in Table 2-9, the maximum operation-related emissions of exhaust $PM_{2.5}$, considered a surrogate for DPM, would be 0.004 pounds per day. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project will not have a high carcinogenic or non-carcinogenic risk during operation.

Naturally Occurring Asbestos

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (Department of Conservation [DOC] 2000). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have

become increasingly more stringent in the last 20 years. In 1993, the SoCAB was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is now designated as attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD's *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

In order to establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway.

According to the Traffic Study prepared for the Project (KOA 2020), the Project is anticipated to generate 63 daily trips on average. Because the Proposed Project would not increase traffic volumes at any intersection to more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile source emissions would not be a concern.

Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified by the SCAQMD as being associated with odors. However, while the Project is not explicitly applying for cannabis use, it is located within the City's Cannabis Overlay Zone. As mandated by the City's Municipal Code Section 127.07, all marijuana cultivation facilities must possess air scrubbers or a filtration system capable of eliminating odors from escaping the building before operating. Thus, in the case that the facility operator applies for a cannabis-related use permit in the future, the facility would be required to include sufficient odor absorbing ventilation and/or exhaust systems. Further, the Project would be subject to SCAQMD Rule 402. Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2 (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged

over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere (IPCC 2013).

Table 3-1. Greenhouse Gases

Greenhouse Gas	Description
CO_2	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
CH_4	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about12 years.[2]
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: [1]US EPA 2016a, [2] USEPA 2016b, [3] USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.1.1 Sources of Greenhouse Gas Emissions

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO2e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in-state and out-of-state sources (15 percent) (CARB 2019b). Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water), respectively, two of the most common processes for removing CO_2 from the atmosphere.

3.2 Regulatory Framework

3.2.1 State

Executive Order S-3-05

EO S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this EO remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed AB 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO_2e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on

December 14, 2017. The Scoping Plan Update addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Executive Order B-30-15

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2˚C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Edmund (Jerry) Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.2.2 Local

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including an interim screening level numeric "bright-line" threshold of 3,000 metric tons of CO_2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (defined as the people that work, study, live, patronize and/or congregate on the Project site) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

Southern California Association of Governments

On April 7, 2016, the SCAG Regional Council adopted the *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by State law to lower regional GHG emissions.

3.3 Greenhouse Gas Emissions Impact Assessment

3.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

1) generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or

2) conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

SCAQMD Thresholds

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), 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 that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community

conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The local air quality agency regulating the SoCAB is the SCAQMD, the regional air pollution control officer for the basin. As previously stated, to provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold Working Group. The Working Group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the Basin, various utilities such as sanitation and power companies throughout the Basin, industry groups, and environmental and professional organizations. The numeric bright line and efficiency-based thresholds described above were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

In *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal. 4th 2014, 213, 221, 227, following its review of various potential GHG thresholds proposed in an academic study [Crockett, *Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World* (July 2011), 4 Golden Gate U. Envtl. L. J. 203], the California Supreme Court identified the use of numeric bright-line thresholds as a potential pathway for compliance with CEQA GHG requirements. The study found numeric bright line thresholds designed to determine when small projects were so small as to not cause a cumulatively considerable impact on global climate change was consistent with CEQA. Specifically, Public Resources Code section 21003(f) provides it is a policy of the state that "[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." The Supreme Court-reviewed study noted, "[s]ubjecting the smallest projects to the full panoply of CEQA requirements, even though the public benefit would be minimal, would not be consistent with implementing the statute in the most efficient, expeditious manner. Nor would it be consistent with applying lead agencies' scarce resources toward mitigating actual significant climate change impacts." (Crockett, *Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World* (July 2011), 4 Golden Gate U. Envtl. L. J. 203, 221, 227.)

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The City of Baldwin Park may set a project-specific threshold based on the context of each particular project, including using the SCAQMD Working Group expert recommendation. This standard is appropriate for this Project because it is in the same air quality basin that the experts analyzed.

For the Proposed Project, the SCAQMD's 3,000 metric tons of CO_2e per year threshold is used as the significance threshold in addition to the qualitative thresholds of significance set forth below from Section VII of CEQA Guidelines Appendix G. The 3,000 metric tons of CO_2e per year threshold represents a 90 percent capture rate (i.e., this threshold captures projects that represent approximately 90 percent of GHG emissions from new sources). The 3,000 metric tons of CO_2e per year value is typically used in defining small projects within this air basin that are considered less than significant because it represents less than one percent of future 2050 statewide GHG emissions target and the lead agency can provide more efficient implementation of CEQA by focusing its scarce resources on the top 90 percent. This threshold is correlated to the 90 percent capture rate for industrial projects within the air basin. Land use projects above the 3,000 metric tons of CO_2e per year level would fall within the percentage of largest projects that are worth mitigating without wasting scarce financial, governmental, physical and social resources. (SCAQMD, Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold, at pp. 3-2 and 3-3; Crockett 2011). As noted in the academic study, the fact that small projects below a numeric bright line threshold are not subject to CEQA-based mitigation, does not mean such small projects do not help the state achieve its climate change goals because even small projects participate in or comply with non-CEQA-based GHG reduction programs, such as constructing development in accordance with statewide GHG-reducing energy efficiency building standards, called Cal Green or Title 24 energy-efficiency building standards (Crockett 2011).

Methodology

GHG-related impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where GHG emission quantification was required, emissions were modeled using the CalEEMod, version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated GHG emissions were calculated using CalEEMod model defaults for Los Angeles County in addition to construction equipment information provided by the Project Applicant. Operational GHG emissions were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from KOA (2020).

3.3.2 Impact Analysis

Contribution of Greenhouse Gas Emissions

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

As shown in Table 3-2, Project construction would result in the generation of approximately 67 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

Table 3-2. Construction-Related Greenhouse Gas Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
2021 Construction	**67**
Total Emissions	**67**

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3-3 and compared to SCAQMD's numeric bright-line threshold of 3,000 metric tons of CO_2e annually.

Table 3-3. Operational-Related GHG Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Construction Emissions (amortized over the 30-year life of the Project)	2
Area Source Emissions	0
Energy Source Emissions	29
Mobile Source Emissions	88
Solid Waste Emissions	9
Water Emissions	52
Total Emissions	**180**
SCAQMD Screening Threshold	*3,000*
Exceed SCAQMD Threshold?	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 3-3, Project operations would result in the generation of approximately 180 metric tons of CO_2e annually and thus would not exceed the SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually. This threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to the statewide GHG emissions reduction goals for the year 2020 promulgated under AB 32 and the post-2020 reduction goals promulgated under SB 32. Thus, both cumulatively and individually, projects that generate less than 3,000 metric tons CO_2e per year have a negligible contribution to overall emissions.

Conflict with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

The City of Baldwin Park does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. However, Baldwin Park is a member city of the SCAG. SCAG's 2016–2040 RTP/SCS, adopted April 7, 2016, is a long-range visioning plan that balances future mobility and

housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 and establishes an overall GHG target for the region consistent with both the statewide GHG-reduction targets for 2020 and the post-2020 statewide GHG reduction goals. The 2016 RTP/SCS contains over 4,000 transportation projects, including highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six-county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently. The Proposed Project's consistency with the RTP/SCS goals is analyzed in detail in Table 3-4.

Table 3-4. Consistency with SCAG's RTP/SCS Goals

SCAG Goals	Compliance with Goal
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Not Applicable**: This is not a project-specific policy and is therefore not applicable.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consisten**t: Improvements to the transportation network in Baldwin Park are developed and maintained to meet the needs of local and regional transportation and to ensure efficient mobility. A number of regional and local plans and programs are used to guide development and maintenance of transportation networks, including but not limited to: • Caltrans Traffic Impact Studies Guidelines • Caltrans Highway Capacity Manual • SCAG RTP/SCS The Project is proposing light industrial/commercial warehouse and office space in close proximity to I-10 and I-605, which are major regional freeway corridors. I-10 has been identified as a "Major International Trade Highway Routes" in the California State Goods Movement Action Plan (EPA 2007). Both the I-10 and I-605 serve to accommodate existing truck trips along the interstate. The Goods Movement Action Plan is a statewide initiative to improve and expand California's goods movement industry and infrastructure in a manner which will increase mobility and relieve traffic congestion as well as reduce GHG emissions. The Plan further identifies I-10 (located just south of the Project site) as a "Priority Corridor" for development towards more efficient goods movement and anticipates that the development of good movement-supporting facilities, such as industrial warehouses like that proposed by the Project, will improve the efficiency of overall goods movement throughout the state, and thus reduce truck-related GHG emissions.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent**: All modes of transit in Baldwin Park are required to follow safety standards set by corresponding regulatory documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Baldwin Park, County of Los Angeles) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans. The Project is proposing light industrial/commercial warehouse and office space in close proximity to I-10 and I-605, which are major regional freeway corridors. Industrial and warehouse uses positioned in close proximity to major freeway corridors are considered goods-movement-supporting facilities and will improve the efficiency of overall goods movement throughout the state, and thus reduce truck-related GHG emissions.
Goal 4: Preserve and ensure a sustainable regional transportation system.	**Consistent**: All new roadway developments and improvements to the existing transportation network must be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the needs for improving future traffic capacities.

Table 3-4. Consistency with SCAG's RTP/SCS Goals

SCAG Goals		Compliance with Goal
Goal 5:	Maximize the productivity of our transportation system.	**Consistent**: The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The City of Baldwin Park's Public Works Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. The City also strives to maximize productivity of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Baldwin Park.
Goal 6:	Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent**: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. For example, development projects are required to comply with the provisions of the California Building and Energy Efficiency Standards and the Green Building Standards Code (CALGreen). The City also strives to maximize the protection of the environment and improvement of air quality by encouraging and improving the use of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Baldwin Park.
Goal 7:	Actively encourage and create incentives for energy efficiency, where possible.	**Not Applicable:** This is not a project-specific policy and is therefore not applicable
Goal 8:	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consisten**t: See response to RTP/SCS Goal 6.
Goal 9:	Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent**: The City of Baldwin Park monitors existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies (e.g., Los Angeles County Transportation Department, Caltrans, SCAG) work with the City to manage these systems. Security situations involving roadways and evacuations would be addressed in the County of Los Angles emergency management protocols (e.g., Los Angeles County Operational Area Emergency Operations Plan) developed in accordance with the state and federal mandated emergency management regulations.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. As shown, the Proposed Project would in no way conflict with the stated goals of the RTP/SCS; therefore, the Proposed Project would not interfere with SCAG's ability to achieve the region's year 2020 and post-2020 mobile source GHG reduction targets outlined in the 2016 RTP/SCS, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. The Proposed Project is consistent with the land use designation and development intensity for the site in the City of Baldwin Park General Plan, which is referenced by SCAG in order to assist planning for integrated land use and transportation planning in the region. The Project proposes a light industrial/commercial warehouse use in close proximity to I-605 and I-10, which are major regional freeway corridors. Further, the I-10 corridor has been identified as a "Major International Trade Highway Route" in the California State Goods Movement Action Plan, and therefore serves to

accommodate existing truck trips along the interstate. The Goods Movement Action Plan is a statewide initiative to improve and expand California's goods movement industry and infrastructure in a manner which will increase mobility and relieve traffic congestion as well as reduce GHG emissions. The Plan further identifies I-10 (located just south of the Project site) as a "Priority Corridor" for development towards more efficient goods movement and anticipates that the development of good movement-supporting facilities, such as the industrial/commercial warehouse proposed by the Project, will improve the efficiency of overall goods movement throughout the state, and thus, reduce truck-related GHG emissions. Furthermore, the Proposed Project is not regionally significant per CEQA Guidelines Section 15206 and as such, it would not conflict with the SCAG RTP/SCS targets, since those targets were established and are applicable on a regional level.

4.0 REFERENCES

Baldwin Park, City of. 2019. General Plan. https://www.baldwinpark.com/online-documents/community-development/planning/general-plan-individual-elements.

CAPCOA. 2017. California Emissions Estimator Model (CalEEMod), version 2016.3.2.

_____. 2013. *Health Effects*. http://www.capcoa.org/health-effects/.

CARB. 2019a. Air Quality Data Statistics. http://www.arb.ca.gov/adam/index.html.

_____. 2019b. *California Greenhouse Gas Emission Inventory 2019 Edition.* https://ww3.arb.ca.gov/cc/inventory/data/data.htm.

_____. 2018. State and Federal Area Designation Maps. http://www.arb.ca.gov/desig/adm/adm.htm.

_____. 2017. California's 2017 Climate Change Scoping Plan. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

_____. 2008. *Climate Change Scoping Plan Appendices* (Appendix F).

Crockett, Alexander G. 2011. Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World.

DOC. 2000. *A General Location Guide for Ultramafic Rocks in California-Areas More Likely to Contain Naturally Occurring Asbestos.* https://ww2.arb.ca.gov/sites/default/files/classic//toxics/asbestos/ofr_2000-019.pdf.

IPCC. 2014. *Climate Change 2014 Synthesis Report: Approved Summary for Policymakers*. http://www.ipcc.ch/.

_____. 2013. *Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf.

KOA. 2020 Traffic Impact Study: 12793 Garvey Avenue Industrial Building Project.

SCAQMD. 2009. *Localized Significance Threshold Appendix C – Mass Rate LST Look-Up Tables*. Revised October 21, 2009. http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

_____. 2008. *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]).

_____. 1993. *CEQA Air Quality Handbook*.

_____. 1992. 1992 Federal Attainment Plan for Carbon Monoxide.

State of California. 2007. Goods Movement Action Plan. https://ww3.arb.ca.gov/gmp/docs/gmap-1-11-07.pdf.

USEPA. 2018a. *Status of SIP Required Elements for California Designated Areas*.

_____. 2018b. *Nonattainment Areas for Criteria Pollutants*.

_____. 2016a. *Climate Change – Greenhouse Gas Emissions: Carbon Dioxide*. http://www.epa.gov/climatechange/emissions/co2.html.

_____. 2016b. *Methane*. https://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html.

_____. 2016c. *Nitrous Oxide*. https://www3.epa.gov/climatechange/ghgemissions/gases/n2o.html.

_____. 2007. Goods Movement Action Plan. https://ww3.arb.ca.gov/gmp/docs/gmap-1-11-07.pdf.

_____. 2002. Health Assessment Document for Diesel Engine Exhaust. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=300055PV.TXT.

LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Air Quality Emissions

Attachment B – CalEEMod Output File for Greenhouse Gas Emissions

ATTACHMENT A

CalEEMod Output Files – Criteria Air Pollutants

12793 Garvey Avenue Industrial

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	3.31	1000sqft	0.25	3,310.00	0
Unrefrigerated Warehouse-No Rail	17.54	1000sqft	0.74	17,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Summer

Project Characteristics - 2017 SCE CO2 Intensity Factor

Land Use - Site acreage = 0.99

Construction Phase - Construction phases per Project Applicant

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Ibid

Off-road Equipment -

Off-road Equipment - Ibid

Demolition -

Grading - Project site = 1 acre. 1,000 CY of material import.

Vehicle Trips - Trips per the TIS (KOA 2020).

Energy Use - Source: Energy Impacts of Cannabis Cultivation (CEC 2017).

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 measures.

Energy Mitigation - Per the 2019 Building Energy Efficiency standards, the nonresidential buildings will be 30% more efficient.

Water Mitigation - CA water conservation standards.

Fleet Mix - Default fleet mix.

Water And Wastewater - Source: Task Force Look at Energy, Water Use Related to Marijuana Production (Oregonlive.com , no date)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	T24E	0.65	1.25
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	630.00
tblGrading	MaterialImported	0.00	370.00

tblLandUse	LotAcreage	0.08	0.25
tblLandUse	LotAcreage	0.40	0.74
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblTripsAndVMT	HaulingTripNumber	828.00	37.00
tblTripsAndVMT	HaulingTripNumber	860.00	62.00
tblVehicleTrips	ST_TR	0.00	9.74
tblVehicleTrips	ST_TR	1.68	1.76
tblVehicleTrips	SU_TR	0.00	9.74
tblVehicleTrips	SU_TR	1.68	1.76
tblVehicleTrips	WD_TR	68.93	9.74
tblVehicleTrips	WD_TR	1.68	1.76
tblWater	IndoorWaterUseRate	4,056,125.00	12,058,293.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	38.8834	15.7781	8.8377	0.0388	1.7828	0.4489	1.9424	0.3071	0.4130	0.5518	0.0000	4,046.1783	4,046.1783	0.6113	0.0000	4,061.4598
Maximum	**38.8834**	**15.7781**	**8.8377**	**0.0388**	**1.7828**	**0.4489**	**1.9424**	**0.3071**	**0.4130**	**0.5518**	**0.0000**	**4,046.1783**	**4,046.1783**	**0.6113**	**0.0000**	**4,061.4598**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	38.8834	15.7781	8.8377	0.0388	0.8386	0.4489	0.9982	0.1754	0.4130	0.4620	0.0000	4,046.1783	4,046.1783	0.6113	0.0000	4,061.4598
Maximum	**38.8834**	**15.7781**	**8.8377**	**0.0388**	**0.8386**	**0.4489**	**0.9982**	**0.1754**	**0.4130**	**0.4620**	**0.0000**	**4,046.1783**	**4,046.1783**	**0.6113**	**0.0000**	**4,061.4598**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.96**	**0.00**	**48.61**	**42.88**	**0.00**	**16.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Energy	1.4700e-003	0.0134	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003		16.0248	16.0248	3.1000e-004	2.9000e-004	16.1200
Mobile	0.1120	0.5338	1.5039	5.4500e-003	0.4428	4.4000e-003	0.4472	0.1185	4.1000e-003	0.1226		555.1430	555.1430	0.0278		555.8390
Total	**0.5795**	**0.5472**	**1.5172**	**5.5300e-003**	**0.4428**	**5.4200e-003**	**0.4482**	**0.1185**	**5.1200e-003**	**0.1236**		**571.1724**	**571.1724**	**0.0282**	**2.9000e-004**	**571.9639**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Energy	1.0400e-003	9.4900e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		11.3931	11.3931	2.2000e-004	2.1000e-004	11.4608
Mobile	0.1120	0.5338	1.5039	5.4500e-003	0.4428	4.4000e-003	0.4472	0.1185	4.1000e-003	0.1226		555.1430	555.1430	0.0278		555.8390
Total	**0.5790**	**0.5433**	**1.5140**	**5.5100e-003**	**0.4428**	**5.1300e-003**	**0.4479**	**0.1185**	**4.8300e-003**	**0.1233**		**566.5406**	**566.5406**	**0.0281**	**2.1000e-004**	**567.3046**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.07**	**0.71**	**0.21**	**0.36**	**0.00**	**5.35**	**0.06**	**0.00**	**5.66**	**0.23**	**0.00**	**0.81**	**0.81**	**0.32**	**27.59**	**0.81**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	4/14/2021	5	10	
2	Site Preparation	Site Preparation	4/15/2021	4/15/2021	5	1	
3	Grading	Grading	4/16/2021	4/19/2021	5	2	
4	Building Construction	Building Construction	4/20/2021	9/6/2021	5	100	
5	Paving	Paving	9/7/2021	9/13/2021	5	5	
6	Architectural Coating	Architectural Coating	9/14/2021	9/20/2021	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,275; Non-Residential Outdoor: 10,425; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	37.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0428	0.0000	0.0428	6.4800e-003	0.0000	6.4800e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0428**	**0.0000**	**0.0428**	**6.4800e-003**	**0.0000**	**6.4800e-003**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6700e-003	0.0537	0.0126	1.6000e-004	3.5000e-003	1.6000e-004	3.6600e-003	9.6000e-004	1.6000e-004	1.1200e-003		16.9289	16.9289	1.1500e-003		16.9577
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.6700e-003**	**0.0537**	**0.0126**	**1.6000e-004**	**3.5000e-003**	**1.6000e-004**	**3.6600e-003**	**9.6000e-004**	**1.6000e-004**	**1.1200e-003**		**16.9289**	**16.9289**	**1.1500e-003**		**16.9577**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0142	0.0000	0.0142	2.1500e-003	0.0000	2.1500e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0142**	**0.0000**	**0.0142**	**2.1500e-003**	**0.0000**	**2.1500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6700e-003	0.0537	0.0126	1.6000e-004	2.4400e-003	1.6000e-004	2.6000e-003	7.0000e-004	1.6000e-004	8.6000e-004		16.9289	16.9289	1.1500e-003		16.9577
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.6700e-003**	**0.0537**	**0.0126**	**1.6000e-004**	**2.4400e-003**	**1.6000e-004**	**2.6000e-003**	**7.0000e-004**	**1.6000e-004**	**8.6000e-004**		**16.9289**	**16.9289**	**1.1500e-003**		**16.9577**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1023	0.0000	1.1023	0.1209	0.0000	0.1209			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185		605.2262	605.2262	0.1957		610.1198
Total	**0.3430**	**3.8638**	**1.5987**	**6.2500e-003**	**1.1023**	**0.1288**	**1.2312**	**0.1209**	**0.1185**	**0.2394**		**605.2262**	**605.2262**	**0.1957**		**610.1198**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3085	9.9250	2.3271	0.0289	0.6470	0.0305	0.6774	0.1773	0.0292	0.2065		3,131.8512	3,131.8512	0.2125		3,137.1647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.3214**	**9.9339**	**2.4480**	**0.0292**	**0.6805**	**0.0307**	**0.7112**	**0.1862**	**0.0294**	**0.2156**		**3,166.0143**	**3,166.0143**	**0.2136**		**3,171.3529**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3654	0.0000	0.3654	0.0401	0.0000	0.0401			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185	0.0000	605.2262	605.2262	0.1957		610.1198
Total	**0.3430**	**3.8638**	**1.5987**	**6.2500e-003**	**0.3654**	**0.1288**	**0.4943**	**0.0401**	**0.1185**	**0.1586**	**0.0000**	**605.2262**	**605.2262**	**0.1957**		**610.1198**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3085	9.9250	2.3271	0.0289	0.4513	0.0305	0.4818	0.1293	0.0292	0.1585		3,131.8512	3,131.8512	0.2125		3,137.1647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0219	2.7000e-004	0.0221	6.0300e-003	2.5000e-004	6.2800e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.3214**	**9.9339**	**2.4480**	**0.0292**	**0.4732**	**0.0307**	**0.5039**	**0.1353**	**0.0294**	**0.1647**		**3,166.0143**	**3,166.0143**	**0.2136**		**3,171.3529**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5659	0.0000	0.5659	0.0627	0.0000	0.0627			0.0000			0.0000
Off-Road	0.7126	7.4390	6.5657	0.0138		0.3171	0.3171		0.2917	0.2917		1,331.0933	1,331.0933	0.4305		1,341.8558
Total	**0.7126**	**7.4390**	**6.5657**	**0.0138**	**0.5659**	**0.3171**	**0.8830**	**0.0627**	**0.2917**	**0.3544**		**1,331.0933**	**1,331.0933**	**0.4305**		**1,341.8558**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2585	8.3156	1.9498	0.0242	0.5421	0.0255	0.5676	0.1486	0.0244	0.1730		2,623.9834	2,623.9834	0.1781		2,628.4353
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.2928**	**8.3391**	**2.2720**	**0.0251**	**0.6315**	**0.0262**	**0.6577**	**0.1723**	**0.0251**	**0.1974**		**2,715.0850**	**2,715.0850**	**0.1808**		**2,719.6040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1876	0.0000	0.1876	0.0208	0.0000	0.0208			0.0000			0.0000
Off-Road	0.7126	7.4390	6.5657	0.0138		0.3171	0.3171		0.2917	0.2917	0.0000	1,331.0933	1,331.0933	0.4305		1,341.8558
Total	**0.7126**	**7.4390**	**6.5657**	**0.0138**	**0.1876**	**0.3171**	**0.5047**	**0.0208**	**0.2917**	**0.3125**	**0.0000**	**1,331.0933**	**1,331.0933**	**0.4305**		**1,341.8558**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2585	8.3156	1.9498	0.0242	0.3781	0.0255	0.4036	0.1083	0.0244	0.1328		2,623.9834	2,623.9834	0.1781		2,628.4353
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0583	7.2000e-004	0.0591	0.0161	6.7000e-004	0.0168		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.2928**	**8.3391**	**2.2720**	**0.0251**	**0.4364**	**0.0262**	**0.4627**	**0.1244**	**0.0251**	**0.1495**		**2,715.0850**	**2,715.0850**	**0.1808**		**2,719.6040**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.1200e-003	0.2913	0.0762	7.7000e-004	0.0192	6.0000e-004	0.0198	5.5300e-003	5.7000e-004	6.1000e-003		82.4642	82.4642	4.8600e-003		82.5856
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0434**	**0.3148**	**0.3984**	**1.6800e-003**	**0.1086**	**1.3200e-003**	**0.1099**	**0.0292**	**1.2400e-003**	**0.0305**		**173.5658**	**173.5658**	**7.5400e-003**		**173.7543**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.1200e-003	0.2913	0.0762	7.7000e-004	0.0137	6.0000e-004	0.0143	4.1900e-003	5.7000e-004	4.7600e-003		82.4642	82.4642	4.8600e-003		82.5856
Worker	0.0343	0.0236	0.3222	9.1000e-004	0.0583	7.2000e-004	0.0591	0.0161	6.7000e-004	0.0168		91.1016	91.1016	2.6800e-003		91.1687
Total	**0.0434**	**0.3148**	**0.3984**	**1.6800e-003**	**0.0721**	**1.3200e-003**	**0.0734**	**0.0203**	**1.2400e-003**	**0.0215**		**173.5658**	**173.5658**	**7.5400e-003**		**173.7543**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.1312	1.6300e-003	0.1329	0.0362	1.5000e-003	0.0377		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.1312**	**1.6300e-003**	**0.1329**	**0.0362**	**1.5000e-003**	**0.0377**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	38.6559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**38.8748**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.5700e-003	5.8900e-003	0.0806	2.3000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.1000e-003		22.7754	22.7754	6.7000e-004		22.7922
Total	**8.5700e-003**	**5.8900e-003**	**0.0806**	**2.3000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.1000e-003**		**22.7754**	**22.7754**	**6.7000e-004**		**22.7922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	38.6559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**38.8748**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.5700e-003	5.8900e-003	0.0806	2.3000e-004	0.0146	1.8000e-004	0.0148	4.0200e-003	1.7000e-004	4.1900e-003		22.7754	22.7754	6.7000e-004		22.7922
Total	**8.5700e-003**	**5.8900e-003**	**0.0806**	**2.3000e-004**	**0.0146**	**1.8000e-004**	**0.0148**	**4.0200e-003**	**1.7000e-004**	**4.1900e-003**		**22.7754**	**22.7754**	**6.7000e-004**		**22.7922**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1120	0.5338	1.5039	5.4500e-003	0.4428	4.4000e-003	0.4472	0.1185	4.1000e-003	0.1226		555.1430	555.1430	0.0278		555.8390
Unmitigated	0.1120	0.5338	1.5039	5.4500e-003	0.4428	4.4000e-003	0.4472	0.1185	4.1000e-003	0.1226		555.1430	555.1430	0.0278		555.8390

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	32.24	32.24	32.24	75,916	75,916
Unrefrigerated Warehouse-No Rail	30.87	30.87	30.87	132,302	132,302
Total	63.11	63.11	63.11	208,218	208,218

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Unrefrigerated Warehouse-No Rail	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0400e-003	9.4900e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		11.3931	11.3931	2.2000e-004	2.1000e-004	11.4608
NaturalGas Unmitigated	1.4700e-003	0.0134	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003		16.0248	16.0248	3.1000e-004	2.9000e-004	16.1200

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	94.403	1.0200e-003	9.2600e-003	7.7700e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004		11.1062	11.1062	2.1000e-004	2.0000e-004	11.1722
Unrefrigerated Warehouse-No Rail	41.8077	4.5000e-004	4.1000e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		4.9186	4.9186	9.0000e-005	9.0000e-005	4.9478
Total		**1.4700e-003**	**0.0134**	**0.0112**	**8.0000e-005**		**1.0100e-003**	**1.0100e-003**		**1.0100e-003**	**1.0100e-003**		**16.0248**	**16.0248**	**3.0000e-004**	**2.9000e-004**	**16.1200**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	0.0671431	7.2000e-004	6.5800e-003	5.5300e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		7.8992	7.8992	1.5000e-004	1.4000e-004	7.9461
Unrefrigerated Warehouse-No Rail	0.0296979	3.2000e-004	2.9100e-003	2.4500e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4939	3.4939	7.0000e-005	6.0000e-005	3.5146
Total		**1.0400e-003**	**9.4900e-003**	**7.9800e-003**	**6.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**11.3931**	**11.3931**	**2.2000e-004**	**2.0000e-004**	**11.4608**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Unmitigated	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Total	**0.4660**	**2.0000e-005**	**2.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.5600e-003**	**4.5600e-003**	**1.0000e-005**		**4.8600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Total	**0.4660**	**2.0000e-005**	**2.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.5600e-003**	**4.5600e-003**	**1.0000e-005**		**4.8600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12793 Garvey Avenue Industrial

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	3.31	1000sqft	0.25	3,310.00	0
Unrefrigerated Warehouse-No Rail	17.54	1000sqft	0.74	17,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2017 SCE CO2 Intensity Factor

Land Use - Site acreage = 0.99

Construction Phase - Construction phases per Project Applicant

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Ibid

Off-road Equipment -

Off-road Equipment - Ibid

Demolition -

Grading - Project site = 1 acre. 1,000 CY of material import.

Vehicle Trips - Trips per the TIS (KOA 2020).

Energy Use - Source: Energy Impacts of Cannabis Cultivation (CEC 2017).

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 measures.

Energy Mitigation - Per the 2019 Building Energy Efficiency standards, the nonresidential buildings will be 30% more efficient.

Water Mitigation - CA water conservation standards.

Fleet Mix - Default fleet mix.

Water And Wastewater - Source: Task Force Look at Energy, Water Use Related to Marijuana Production (Oregonlive.com , no date)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	T24E	0.65	1.25
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	630.00
tblGrading	MaterialImported	0.00	370.00

tblLandUse	LotAcreage	0.08	0.25
tblLandUse	LotAcreage	0.40	0.74
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblTripsAndVMT	HaulingTripNumber	828.00	37.00
tblTripsAndVMT	HaulingTripNumber	860.00	62.00
tblVehicleTrips	ST_TR	0.00	9.74
tblVehicleTrips	ST_TR	1.68	1.76
tblVehicleTrips	SU_TR	0.00	9.74
tblVehicleTrips	SU_TR	1.68	1.76
tblVehicleTrips	WD_TR	68.93	9.74
tblVehicleTrips	WD_TR	1.68	1.76
tblWater	IndoorWaterUseRate	4,056,125.00	12,058,293.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	38.8843	15.8825	8.9278	0.0384	1.7828	0.4489	1.9429	0.3071	0.4130	0.5521	0.0000	3,995.4009	3,995.4009	0.6174	0.0000	4,010.8354
Maximum	**38.8843**	**15.8825**	**8.9278**	**0.0384**	**1.7828**	**0.4489**	**1.9429**	**0.3071**	**0.4130**	**0.5521**	**0.0000**	**3,995.4009**	**3,995.4009**	**0.6174**	**0.0000**	**4,010.8354**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	38.8843	15.8825	8.9278	0.0384	0.8386	0.4489	0.9986	0.1754	0.4130	0.4624	0.0000	3,995.4009	3,995.4009	0.6174	0.0000	4,010.8354
Maximum	**38.8843**	**15.8825**	**8.9278**	**0.0384**	**0.8386**	**0.4489**	**0.9986**	**0.1754**	**0.4130**	**0.4624**	**0.0000**	**3,995.4009**	**3,995.4009**	**0.6174**	**0.0000**	**4,010.8354**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.96**	**0.00**	**48.60**	**42.88**	**0.00**	**16.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Energy	1.4700e-003	0.0134	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003		16.0248	16.0248	3.1000e-004	2.9000e-004	16.1200
Mobile	0.1087	0.5466	1.4268	5.1900e-003	0.4428	4.4200e-003	0.4472	0.1185	4.1300e-003	0.1226		528.3895	528.3895	0.0278		529.0836
Total	**0.5762**	**0.5599**	**1.4401**	**5.2700e-003**	**0.4428**	**5.4400e-003**	**0.4482**	**0.1185**	**5.1500e-003**	**0.1236**		**544.4189**	**544.4189**	**0.0281**	**2.9000e-004**	**545.2085**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Energy	1.0400e-003	9.4900e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		11.3931	11.3931	2.2000e-004	2.1000e-004	11.4608
Mobile	0.1087	0.5466	1.4268	5.1900e-003	0.4428	4.4200e-003	0.4472	0.1185	4.1300e-003	0.1226		528.3895	528.3895	0.0278		529.0836
Total	**0.5757**	**0.5561**	**1.4369**	**5.2500e-003**	**0.4428**	**5.1500e-003**	**0.4479**	**0.1185**	**4.8600e-003**	**0.1234**		**539.7872**	**539.7872**	**0.0280**	**2.1000e-004**	**540.5492**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.07**	**0.69**	**0.22**	**0.38**	**0.00**	**5.33**	**0.06**	**0.00**	**5.63**	**0.23**	**0.00**	**0.85**	**0.85**	**0.32**	**27.59**	**0.85**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	4/14/2021	5	10	
2	Site Preparation	Site Preparation	4/15/2021	4/15/2021	5	1	
3	Grading	Grading	4/16/2021	4/19/2021	5	2	
4	Building Construction	Building Construction	4/20/2021	9/6/2021	5	100	
5	Paving	Paving	9/7/2021	9/13/2021	5	5	
6	Architectural Coating	Architectural Coating	9/14/2021	9/20/2021	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,275; Non-Residential Outdoor: 10,425; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	37.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0428	0.0000	0.0428	6.4800e-003	0.0000	6.4800e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0428**	**0.0000**	**0.0428**	**6.4800e-003**	**0.0000**	**6.4800e-003**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7100e-003	0.0543	0.0133	1.5000e-004	3.5000e-003	1.7000e-004	3.6600e-003	9.6000e-004	1.6000e-004	1.1200e-003		16.6357	16.6357	1.1900e-003		16.6654
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.7100e-003**	**0.0543**	**0.0133**	**1.5000e-004**	**3.5000e-003**	**1.7000e-004**	**3.6600e-003**	**9.6000e-004**	**1.6000e-004**	**1.1200e-003**		**16.6357**	**16.6357**	**1.1900e-003**		**16.6654**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0142	0.0000	0.0142	2.1500e-003	0.0000	2.1500e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0142**	**0.0000**	**0.0142**	**2.1500e-003**	**0.0000**	**2.1500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7100e-003	0.0543	0.0133	1.5000e-004	2.4400e-003	1.7000e-004	2.6100e-003	7.0000e-004	1.6000e-004	8.6000e-004		16.6357	16.6357	1.1900e-003		16.6654
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.7100e-003**	**0.0543**	**0.0133**	**1.5000e-004**	**2.4400e-003**	**1.7000e-004**	**2.6100e-003**	**7.0000e-004**	**1.6000e-004**	**8.6000e-004**		**16.6357**	**16.6357**	**1.1900e-003**		**16.6654**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1023	0.0000	1.1023	0.1209	0.0000	0.1209			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185		605.2262	605.2262	0.1957		610.1198
Total	**0.3430**	**3.8638**	**1.5987**	**6.2500e-003**	**1.1023**	**0.1288**	**1.2312**	**0.1209**	**0.1185**	**0.2394**		**605.2262**	**605.2262**	**0.1957**		**610.1198**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3159	10.0466	2.4677	0.0284	0.6470	0.0309	0.6779	0.1773	0.0296	0.2069		3,077.5975	3,077.5975	0.2200		3,083.0983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.3302**	**10.0564**	**2.5781**	**0.0287**	**0.6805**	**0.0312**	**0.7117**	**0.1862**	**0.0298**	**0.2161**		**3,109.7650**	**3,109.7650**	**0.2210**		**3,115.2895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3654	0.0000	0.3654	0.0401	0.0000	0.0401			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185	0.0000	605.2262	605.2262	0.1957		610.1198
Total	**0.3430**	**3.8638**	**1.5987**	**6.2500e-003**	**0.3654**	**0.1288**	**0.4943**	**0.0401**	**0.1185**	**0.1586**	**0.0000**	**605.2262**	**605.2262**	**0.1957**		**610.1198**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3159	10.0466	2.4677	0.0284	0.4513	0.0309	0.4822	0.1293	0.0296	0.1589		3,077.5975	3,077.5975	0.2200		3,083.0983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0219	2.7000e-004	0.0221	6.0300e-003	2.5000e-004	6.2800e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.3302**	**10.0564**	**2.5781**	**0.0287**	**0.4732**	**0.0312**	**0.5044**	**0.1353**	**0.0298**	**0.1652**		**3,109.7650**	**3,109.7650**	**0.2210**		**3,115.2895**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5659	0.0000	0.5659	0.0627	0.0000	0.0627			0.0000			0.0000
Off-Road	0.7126	7.4390	6.5657	0.0138		0.3171	0.3171		0.2917	0.2917		1,331.0933	1,331.0933	0.4305		1,341.8558
Total	**0.7126**	**7.4390**	**6.5657**	**0.0138**	**0.5659**	**0.3171**	**0.8830**	**0.0627**	**0.2917**	**0.3544**		**1,331.0933**	**1,331.0933**	**0.4305**		**1,341.8558**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2647	8.4174	2.0675	0.0238	0.5421	0.0259	0.5680	0.1486	0.0248	0.1734		2,578.5276	2,578.5276	0.1844		2,583.1364
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.3029**	**8.4435**	**2.3621**	**0.0246**	**0.6315**	**0.0266**	**0.6581**	**0.1723**	**0.0255**	**0.1978**		**2,664.3077**	**2,664.3077**	**0.1869**		**2,668.9796**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1876	0.0000	0.1876	0.0208	0.0000	0.0208			0.0000			0.0000
Off-Road	0.7126	7.4390	6.5657	0.0138		0.3171	0.3171		0.2917	0.2917	0.0000	1,331.0933	1,331.0933	0.4305		1,341.8558
Total	**0.7126**	**7.4390**	**6.5657**	**0.0138**	**0.1876**	**0.3171**	**0.5047**	**0.0208**	**0.2917**	**0.3125**	**0.0000**	**1,331.0933**	**1,331.0933**	**0.4305**		**1,341.8558**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2647	8.4174	2.0675	0.0238	0.3781	0.0259	0.4040	0.1083	0.0248	0.1331		2,578.5276	2,578.5276	0.1844		2,583.1364
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0583	7.2000e-004	0.0591	0.0161	6.7000e-004	0.0168		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.3029**	**8.4435**	**2.3621**	**0.0246**	**0.4364**	**0.0266**	**0.4631**	**0.1244**	**0.0255**	**0.1499**		**2,664.3077**	**2,664.3077**	**0.1869**		**2,668.9796**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.5700e-003	0.2907	0.0842	7.5000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.9000e-004	6.1200e-003		80.2037	80.2037	5.1800e-003		80.3331
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0477**	**0.3168**	**0.3788**	**1.6100e-003**	**0.1086**	**1.3300e-003**	**0.1100**	**0.0292**	**1.2600e-003**	**0.0305**		**165.9838**	**165.9838**	**7.7000e-003**		**166.1763**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.5700e-003	0.2907	0.0842	7.5000e-004	0.0137	6.1000e-004	0.0144	4.1900e-003	5.9000e-004	4.7700e-003		80.2037	80.2037	5.1800e-003		80.3331
Worker	0.0382	0.0261	0.2946	8.6000e-004	0.0583	7.2000e-004	0.0591	0.0161	6.7000e-004	0.0168		85.7801	85.7801	2.5200e-003		85.8432
Total	**0.0477**	**0.3168**	**0.3788**	**1.6100e-003**	**0.0721**	**1.3300e-003**	**0.0734**	**0.0203**	**1.2600e-003**	**0.0215**		**165.9838**	**165.9838**	**7.7000e-003**		**166.1763**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.1312	1.6300e-003	0.1329	0.0362	1.5000e-003	0.0377		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.1312**	**1.6300e-003**	**0.1329**	**0.0362**	**1.5000e-003**	**0.0377**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	38.6559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**38.8748**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.5400e-003	6.5200e-003	0.0737	2.2000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.1000e-003		21.4450	21.4450	6.3000e-004		21.4608
Total	**9.5400e-003**	**6.5200e-003**	**0.0737**	**2.2000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.1000e-003**		**21.4450**	**21.4450**	**6.3000e-004**		**21.4608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	38.6559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**38.8748**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.5400e-003	6.5200e-003	0.0737	2.2000e-004	0.0146	1.8000e-004	0.0148	4.0200e-003	1.7000e-004	4.1900e-003		21.4450	21.4450	6.3000e-004		21.4608
Total	**9.5400e-003**	**6.5200e-003**	**0.0737**	**2.2000e-004**	**0.0146**	**1.8000e-004**	**0.0148**	**4.0200e-003**	**1.7000e-004**	**4.1900e-003**		**21.4450**	**21.4450**	**6.3000e-004**		**21.4608**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1087	0.5466	1.4268	5.1900e-003	0.4428	4.4200e-003	0.4472	0.1185	4.1300e-003	0.1226		528.3895	528.3895	0.0278		529.0836
Unmitigated	0.1087	0.5466	1.4268	5.1900e-003	0.4428	4.4200e-003	0.4472	0.1185	4.1300e-003	0.1226		528.3895	528.3895	0.0278		529.0836

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	32.24	32.24	32.24	75,916	75,916
Unrefrigerated Warehouse-No Rail	30.87	30.87	30.87	132,302	132,302
Total	63.11	63.11	63.11	208,218	208,218

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Unrefrigerated Warehouse-No Rail	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0400e-003	9.4900e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		11.3931	11.3931	2.2000e-004	2.1000e-004	11.4608
NaturalGas Unmitigated	1.4700e-003	0.0134	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003		16.0248	16.0248	3.1000e-004	2.9000e-004	16.1200

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	94.403	1.0200e-003	9.2600e-003	7.7700e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004		11.1062	11.1062	2.1000e-004	2.0000e-004	11.1722
Unrefrigerated Warehouse-No Rail	41.8077	4.5000e-004	4.1000e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		4.9186	4.9186	9.0000e-005	9.0000e-005	4.9478
Total		**1.4700e-003**	**0.0134**	**0.0112**	**8.0000e-005**		**1.0100e-003**	**1.0100e-003**		**1.0100e-003**	**1.0100e-003**		**16.0248**	**16.0248**	**3.0000e-004**	**2.9000e-004**	**16.1200**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	0.0671431	7.2000e-004	6.5800e-003	5.5300e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		7.8992	7.8992	1.5000e-004	1.4000e-004	7.9461
Unrefrigerated Warehouse-No Rail	0.0296979	3.2000e-004	2.9100e-003	2.4500e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4939	3.4939	7.0000e-005	6.0000e-005	3.5146
Total		**1.0400e-003**	**9.4900e-003**	**7.9800e-003**	**6.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**11.3931**	**11.3931**	**2.2000e-004**	**2.0000e-004**	**11.4608**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Unmitigated	0.4660	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Total	**0.4660**	**2.0000e-005**	**2.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.5600e-003**	**4.5600e-003**	**1.0000e-005**		**4.8600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.5600e-003	4.5600e-003	1.0000e-005		4.8600e-003
Total	**0.4660**	**2.0000e-005**	**2.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.5600e-003**	**4.5600e-003**	**1.0000e-005**		**4.8600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT B

CalEEMod Output Files – Greenhouse Gas Emissions

12793 Garvey Avenue Industrial

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	3.31	1000sqft	0.25	3,310.00	0
Unrefrigerated Warehouse-No Rail	17.54	1000sqft	0.74	17,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Annual

Project Characteristics - 2017 SCE CO2 Intensity Factor

Land Use - Site acreage = 0.99

Construction Phase - Construction phases per Project Applicant

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Ibid

Off-road Equipment -

Off-road Equipment - Ibid

Demolition -

Grading - Project site = 1 acre. 1,000 CY of material import.

Vehicle Trips - Trips per the TIS (KOA 2020).

Energy Use - Source: Energy Impacts of Cannabis Cultivation (CEC 2017).

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 measures.

Energy Mitigation - Per the 2019 Building Energy Efficiency standards, the nonresidential buildings will be 30% more efficient.

Water Mitigation - CA water conservation standards.

Fleet Mix - Default fleet mix.

Water And Wastewater - Source: Task Force Look at Energy, Water Use Related to Marijuana Production (Oregonlive.com , no date)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	T24E	0.65	1.25
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	630.00
tblGrading	MaterialImported	0.00	370.00

tblLandUse	LotAcreage	0.08	0.25
tblLandUse	LotAcreage	0.40	0.74
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblTripsAndVMT	HaulingTripNumber	828.00	37.00
tblTripsAndVMT	HaulingTripNumber	860.00	62.00
tblVehicleTrips	ST_TR	0.00	9.74
tblVehicleTrips	ST_TR	1.68	1.76
tblVehicleTrips	SU_TR	0.00	9.74
tblVehicleTrips	SU_TR	1.68	1.76
tblVehicleTrips	WD_TR	68.93	9.74
tblVehicleTrips	WD_TR	1.68	1.76
tblWater	IndoorWaterUseRate	4,056,125.00	12,058,293.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1415	0.4596	0.4175	7.5000e-004	8.1800e-003	0.0240	0.0322	2.0000e-003	0.0221	0.0241	0.0000	66.6007	66.6007	0.0180	0.0000	67.0511
Maximum	**0.1415**	**0.4596**	**0.4175**	**7.5000e-004**	**8.1800e-003**	**0.0240**	**0.0322**	**2.0000e-003**	**0.0221**	**0.0241**	**0.0000**	**66.6007**	**66.6007**	**0.0180**	**0.0000**	**67.0511**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1415	0.4596	0.4175	7.5000e-004	5.0100e-003	0.0240	0.0290	1.3400e-003	0.0221	0.0234	0.0000	66.6006	66.6006	0.0180	0.0000	67.0511
Maximum	**0.1415**	**0.4596**	**0.4175**	**7.5000e-004**	**5.0100e-003**	**0.0240**	**0.0290**	**1.3400e-003**	**0.0221**	**0.0234**	**0.0000**	**66.6006**	**66.6006**	**0.0180**	**0.0000**	**67.0511**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**38.75**	**0.00**	**9.82**	**33.00**	**0.00**	**2.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	0.2639	0.2639
2	7-1-2021	9-30-2021	0.3414	0.3414
		Highest	0.3414	0.3414

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0850	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Energy	2.7000e-004	2.4400e-003	2.0500e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	33.0156	33.0156	1.6500e-003	3.8000e-004	33.1703
Mobile	0.0193	0.1013	0.2634	9.6000e-004	0.0790	8.0000e-004	0.0798	0.0212	7.5000e-004	0.0219	0.0000	88.4696	88.4696	4.5600e-003	0.0000	88.5838
Waste						0.0000	0.0000		0.0000	0.0000	3.9725	0.0000	3.9725	0.2348	0.0000	9.8418
Water						0.0000	0.0000		0.0000	0.0000	4.0342	42.3464	46.3806	0.4166	0.0103	59.8486
Total	**0.1046**	**0.1038**	**0.2657**	**9.7000e-004**	**0.0790**	**9.9000e-004**	**0.0800**	**0.0212**	**9.4000e-004**	**0.0221**	**8.0067**	**163.8322**	**171.8389**	**0.6576**	**0.0106**	**191.4450**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0850	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Energy	1.9000e-004	1.7300e-003	1.4600e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	29.4733	29.4733	1.4900e-003	3.4000e-004	29.6108
Mobile	0.0193	0.1013	0.2634	9.6000e-004	0.0790	8.0000e-004	0.0798	0.0212	7.5000e-004	0.0219	0.0000	88.4696	88.4696	4.5600e-003	0.0000	88.5838
Waste						0.0000	0.0000		0.0000	0.0000	3.9725	0.0000	3.9725	0.2348	0.0000	9.8418
Water						0.0000	0.0000		0.0000	0.0000	3.5355	37.2502	40.7858	0.3651	8.9800e-003	52.5897
Total	**0.1046**	**0.1031**	**0.2651**	**9.7000e-004**	**0.0790**	**9.3000e-004**	**0.0800**	**0.0212**	**8.8000e-004**	**0.0221**	**7.5081**	**155.1937**	**162.7018**	**0.6059**	**9.3200e-003**	**180.6266**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.08**	**0.68**	**0.22**	**0.00**	**0.00**	**6.06**	**0.07**	**0.00**	**6.38**	**0.27**	**6.23**	**5.27**	**5.32**	**7.85**	**12.32**	**5.65**

3.0 Construction Detail

Construction Phase

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	4/14/2021	5	10	
2	Site Preparation	Site Preparation	4/15/2021	4/15/2021	5	1	
3	Grading	Grading	4/16/2021	4/19/2021	5	2	
4	Building Construction	Building Construction	4/20/2021	9/6/2021	5	100	
5	Paving	Paving	9/7/2021	9/13/2021	5	5	
6	Architectural Coating	Architectural Coating	9/14/2021	9/20/2021	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,275; Non-Residential Outdoor: 10,425; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

12793 Garvey Avenue Industrial - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	37.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.8000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0762	0.0762	1.0000e-005	0.0000	0.0764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**2.8000e-004**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0762**	**0.0762**	**1.0000e-005**	**0.0000**	**0.0764**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0000e-005	0.0000	7.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.8000e-004	6.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0762	0.0762	1.0000e-005	0.0000	0.0764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**2.8000e-004**	**6.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0762**	**0.0762**	**1.0000e-005**	**0.0000**	**0.0764**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5000e-004	0.0000	5.5000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.9300e-003	8.0000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.2745	0.2745	9.0000e-005	0.0000	0.2768
Total	**1.7000e-004**	**1.9300e-003**	**8.0000e-004**	**0.0000**	**5.5000e-004**	**6.0000e-005**	**6.1000e-004**	**6.0000e-005**	**6.0000e-005**	**1.2000e-004**	**0.0000**	**0.2745**	**0.2745**	**9.0000e-005**	**0.0000**	**0.2768**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.1200e-003	1.1900e-003	1.0000e-005	3.2000e-004	2.0000e-005	3.3000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.4103	1.4103	1.0000e-004	0.0000	1.4127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0148	0.0148	0.0000	0.0000	0.0148
Total	**1.7000e-004**	**5.1300e-003**	**1.2500e-003**	**1.0000e-005**	**3.4000e-004**	**2.0000e-005**	**3.5000e-004**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**1.4251**	**1.4251**	**1.0000e-004**	**0.0000**	**1.4275**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8000e-004	0.0000	1.8000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.9300e-003	8.0000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.2745	0.2745	9.0000e-005	0.0000	0.2768
Total	**1.7000e-004**	**1.9300e-003**	**8.0000e-004**	**0.0000**	**1.8000e-004**	**6.0000e-005**	**2.4000e-004**	**2.0000e-005**	**6.0000e-005**	**8.0000e-005**	**0.0000**	**0.2745**	**0.2745**	**9.0000e-005**	**0.0000**	**0.2768**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.1200e-003	1.1900e-003	1.0000e-005	2.2000e-004	2.0000e-005	2.4000e-004	6.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.4103	1.4103	1.0000e-004	0.0000	1.4127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0148	0.0148	0.0000	0.0000	0.0148
Total	**1.7000e-004**	**5.1300e-003**	**1.2500e-003**	**1.0000e-005**	**2.3000e-004**	**2.0000e-005**	**2.5000e-004**	**6.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**1.4251**	**1.4251**	**1.0000e-004**	**0.0000**	**1.4275**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.7000e-004	0.0000	5.7000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1000e-004	7.4400e-003	6.5700e-003	1.0000e-005		3.2000e-004	3.2000e-004		2.9000e-004	2.9000e-004	0.0000	1.2076	1.2076	3.9000e-004	0.0000	1.2173
Total	**7.1000e-004**	**7.4400e-003**	**6.5700e-003**	**1.0000e-005**	**5.7000e-004**	**3.2000e-004**	**8.9000e-004**	**6.0000e-005**	**2.9000e-004**	**3.5000e-004**	**0.0000**	**1.2076**	**1.2076**	**3.9000e-004**	**0.0000**	**1.2173**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	8.5800e-003	2.0000e-003	2.0000e-005	5.3000e-004	3.0000e-005	5.6000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	2.3631	2.3631	1.6000e-004	0.0000	2.3672
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**2.9000e-004**	**8.6100e-003**	**2.3000e-003**	**2.0000e-005**	**6.2000e-004**	**3.0000e-005**	**6.5000e-004**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**2.4422**	**2.4422**	**1.6000e-004**	**0.0000**	**2.4464**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9000e-004	0.0000	1.9000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1000e-004	7.4400e-003	6.5700e-003	1.0000e-005		3.2000e-004	3.2000e-004		2.9000e-004	2.9000e-004	0.0000	1.2076	1.2076	3.9000e-004	0.0000	1.2173
Total	**7.1000e-004**	**7.4400e-003**	**6.5700e-003**	**1.0000e-005**	**1.9000e-004**	**3.2000e-004**	**5.1000e-004**	**2.0000e-005**	**2.9000e-004**	**3.1000e-004**	**0.0000**	**1.2076**	**1.2076**	**3.9000e-004**	**0.0000**	**1.2173**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	8.5800e-003	2.0000e-003	2.0000e-005	3.7000e-004	3.0000e-005	4.0000e-004	1.1000e-004	2.0000e-005	1.3000e-004	0.0000	2.3631	2.3631	1.6000e-004	0.0000	2.3672
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	3.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**2.9000e-004**	**8.6100e-003**	**2.3000e-003**	**2.0000e-005**	**4.3000e-004**	**3.0000e-005**	**4.6000e-004**	**1.3000e-004**	**2.0000e-005**	**1.5000e-004**	**0.0000**	**2.4422**	**2.4422**	**1.6000e-004**	**0.0000**	**2.4464**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**0.0388**	**0.3993**	**0.3632**	**5.7000e-004**		**0.0224**	**0.0224**		**0.0206**	**0.0206**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0148	4.0100e-003	4.0000e-005	9.4000e-004	3.0000e-005	9.8000e-004	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	3.6975	3.6975	2.3000e-004	0.0000	3.7031
Worker	1.7200e-003	1.3400e-003	0.0151	4.0000e-005	4.3800e-003	4.0000e-005	4.4200e-003	1.1600e-003	3.0000e-005	1.2000e-003	0.0000	3.9557	3.9557	1.2000e-004	0.0000	3.9586
Total	**2.1900e-003**	**0.0161**	**0.0191**	**8.0000e-005**	**5.3200e-003**	**7.0000e-005**	**5.4000e-003**	**1.4300e-003**	**6.0000e-005**	**1.5000e-003**	**0.0000**	**7.6531**	**7.6531**	**3.5000e-004**	**0.0000**	**7.6617**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**0.0388**	**0.3993**	**0.3632**	**5.7000e-004**		**0.0224**	**0.0224**		**0.0206**	**0.0206**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0148	4.0100e-003	4.0000e-005	6.8000e-004	3.0000e-005	7.1000e-004	2.1000e-004	3.0000e-005	2.4000e-004	0.0000	3.6975	3.6975	2.3000e-004	0.0000	3.7031
Worker	1.7200e-003	1.3400e-003	0.0151	4.0000e-005	2.8600e-003	4.0000e-005	2.9000e-003	7.9000e-004	3.0000e-005	8.2000e-004	0.0000	3.9557	3.9557	1.2000e-004	0.0000	3.9586
Total	**2.1900e-003**	**0.0161**	**0.0191**	**8.0000e-005**	**3.5400e-003**	**7.0000e-005**	**3.6100e-003**	**1.0000e-003**	**6.0000e-005**	**1.0600e-003**	**0.0000**	**7.6531**	**7.6531**	**3.5000e-004**	**0.0000**	**7.6617**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.5000e-004	1.7000e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4450	0.4450	1.0000e-005	0.0000	0.4453
Total	**1.9000e-004**	**1.5000e-004**	**1.7000e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4450**	**0.4450**	**1.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.5000e-004	1.7000e-003	0.0000	3.2000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.4450	0.4450	1.0000e-005	0.0000	0.4453
Total	**1.9000e-004**	**1.5000e-004**	**1.7000e-003**	**0.0000**	**3.2000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.4450**	**0.4450**	**1.0000e-005**	**0.0000**	**0.4453**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0972**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0495
Total	**2.0000e-005**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0495**	**0.0495**	**0.0000**	**0.0000**	**0.0495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0972**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0495
Total	**2.0000e-005**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0495**	**0.0495**	**0.0000**	**0.0000**	**0.0495**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0193	0.1013	0.2634	9.6000e-004	0.0790	8.0000e-004	0.0798	0.0212	7.5000e-004	0.0219	0.0000	88.4696	88.4696	4.5600e-003	0.0000	88.5838
Unmitigated	0.0193	0.1013	0.2634	9.6000e-004	0.0790	8.0000e-004	0.0798	0.0212	7.5000e-004	0.0219	0.0000	88.4696	88.4696	4.5600e-003	0.0000	88.5838

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	32.24	32.24	32.24	75,916	75,916
Unrefrigerated Warehouse-No Rail	30.87	30.87	30.87	132,302	132,302
Total	63.11	63.11	63.11	208,218	208,218

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Unrefrigerated Warehouse-No Rail	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.5871	27.5871	1.4600e-003	3.0000e-004	27.7134
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.3625	30.3625	1.6000e-003	3.3000e-004	30.5015
NaturalGas Mitigated	1.9000e-004	1.7300e-003	1.4600e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8863	1.8863	4.0000e-005	3.0000e-005	1.8975
NaturalGas Unmitigated	2.7000e-004	2.4400e-003	2.0500e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.6531	2.6531	5.0000e-005	5.0000e-005	2.6689

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	34457.1	1.9000e-004	1.6900e-003	1.4200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8388	1.8388	4.0000e-005	3.0000e-005	1.8497
Unrefrigerated Warehouse-No Rail	15259.8	8.0000e-005	7.5000e-004	6.3000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8143	0.8143	2.0000e-005	1.0000e-005	0.8192
Total		**2.7000e-004**	**2.4400e-003**	**2.0500e-003**	**1.0000e-005**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**2.6531**	**2.6531**	**6.0000e-005**	**4.0000e-005**	**2.6689**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	24507.2	1.3000e-004	1.2000e-003	1.0100e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3078	1.3078	3.0000e-005	2.0000e-005	1.3156
Unrefrigerated Warehouse-No Rail	10839.7	6.0000e-005	5.3000e-004	4.5000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5785	0.5785	1.0000e-005	1.0000e-005	0.5819
Total		**1.9000e-004**	**1.7300e-003**	**1.4600e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**1.8863**	**1.8863**	**4.0000e-005**	**3.0000e-005**	**1.8975**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	42996.9	10.7072	5.7000e-004	1.2000e-004	10.7562
Unrefrigerated Warehouse-No Rail	78930	19.6553	1.0400e-003	2.1000e-004	19.7453
Total		**30.3625**	**1.6100e-003**	**3.3000e-004**	**30.5015**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	38429.1	9.5697	5.1000e-004	1.0000e-004	9.6135
Unrefrigerated Warehouse-No Rail	72352.5	18.0174	9.5000e-004	2.0000e-004	18.0999
Total		**27.5871**	**1.4600e-003**	**3.0000e-004**	**27.7134**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0850	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Unmitigated	0.0850	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0753					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Total	**0.0850**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.2000e-004**	**5.2000e-004**	**0.0000**	**0.0000**	**5.5000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0753					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.2000e-004	5.2000e-004	0.0000	0.0000	5.5000e-004
Total	**0.0850**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.2000e-004**	**5.2000e-004**	**0.0000**	**0.0000**	**5.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.7858	0.3651	8.9800e-003	52.5897
Unmitigated	46.3806	0.4166	0.0103	59.8486

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.657564 / 0.403023	3.4558	0.0216	5.4000e-004	4.1571
Unrefrigerated Warehouse-No Rail	12.0583 / 0	42.9248	0.3950	9.7000e-003	55.6915
Total		**46.3806**	**0.4166**	**0.0102**	**59.8486**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.576289 / 0.403023	3.1665	0.0189	4.8000e-004	3.7817
Unrefrigerated Warehouse-No Rail	10.5679 / 0	37.6193	0.3462	8.5100e-003	48.8080
Total		**40.7857**	**0.3651**	**8.9900e-003**	**52.5897**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.9725	0.2348	0.0000	9.8418
Unmitigated	3.9725	0.2348	0.0000	9.8418

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	3.08	0.6252	0.0370	0.0000	1.5489
Unrefrigerated Warehouse-No Rail	16.49	3.3473	0.1978	0.0000	8.2929
Total		**3.9725**	**0.2348**	**0.0000**	**9.8418**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	3.08	0.6252	0.0370	0.0000	1.5489
Unrefrigerated Warehouse-No Rail	16.49	3.3473	0.1978	0.0000	8.2929
Total		**3.9725**	**0.2348**	**0.0000**	**9.8418**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

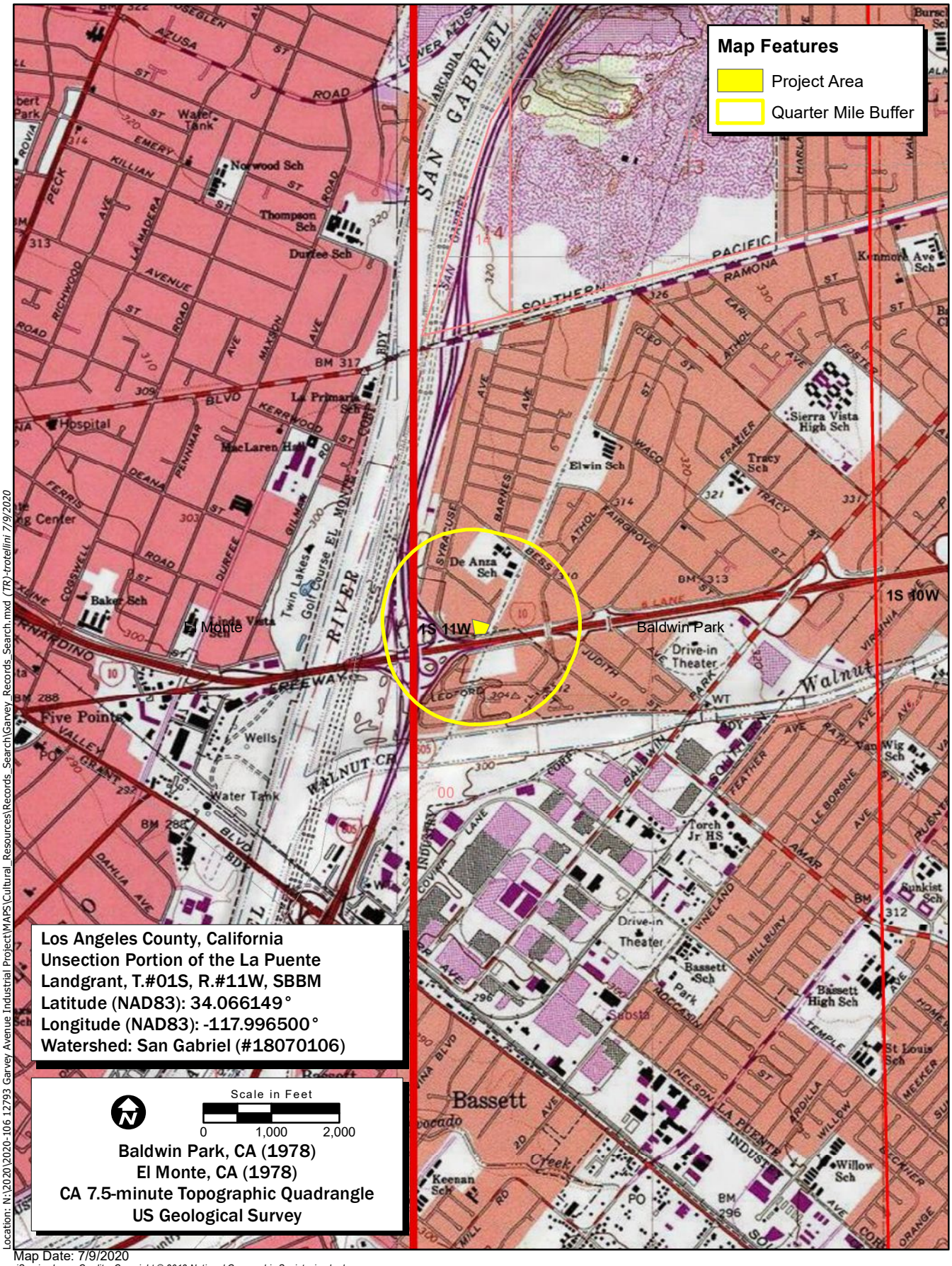
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CULTURAL RECORDS SEARCH



Location: N:\2020\2020-106 12793 Garvey Avenue Industrial Project\MAPS\Cultural_Resources\Records_Search\Garvey_Records_Search.mxd (TR)-trotellini 7/9/2020

Map Date: 7/9/2020

iService Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed
Compiled by the Bureau of Land Management (BLM) - National Operations Center (NOC), OC-530

DRAFT

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Records Search

2020-106 12793 Garvey Avenue Industrial Project

1.0 RESULTS

1.1 Records Search

A records search for the property was completed by South Central Coastal Information Center (SCCIC) staff with the results supplied to ECORP on August 19, 2020. The purpose of the records search was to determine the extent of previous surveys within a ¼ mile radius of the proposed Project location, and whether previously documented pre-contact or historic-period archaeological sites or architectural resources exist within this area.

1.1.1 Previous Research

Nine previous cultural resource investigations have been conducted within ¼ mile of the Project Area. Of these, one a survey conducted in 2002, overlaps the entire Project Area (Table 1). The previous studies were conducted between 1968 and 2012 and vary in size from 100 acres to 2016 acres.

Table 1. Previous Cultural Studies In or Within 1/4 Mile of the Project Area

SCCIC Report Number	Author(s)	Report Title	Year	Includes Portion of the APE?
LA-02412	Singer, Clay A.	UCLA Archaeological Survey Field Project Number Ucas-086.	1968	No
LA-03056	Wlodarski, Robert J.	Negative Archaeological Survey Report Minor Widening for I-10 Malibu, California.	1994	No
LA-04880	Smith, Philomene and Sriro, Adam	Pavement Rehabilitation Along Route 605 Within the Cities of Long Beach, Lakewood, Cerritos, Downey, Pico Rivera, Santa Fe Springs, Whittier, City of Industry, Baldwin Park and Irwindale.	2000	No
LA-06282	Duke, Curt	Cultural Resource Assessment for AT & T Fixed Wireless Services Facility Number La_156_a, County of Los Angeles, California	2001	No
LA-10151	Cotterman, Cary D. and Evelyn N. Chandler	Cultural Resources Inventory of Proposed Pole Replacement in the City of Baldwin Park, Los Angeles County, CA	2008	No
LA-10189	Gust, Sherri and Sara Alarcon	Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Interstate 605 Soundwall Project, from Whittier to Baldwin Park, Los Angeles County, CA	2003	No
LA-10190	Harbert, Claudia	Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities	2002	Yes

		of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA		
LA-10883	Stewart, Noah M.	Finding of no adverse effect - Interstate Route 10-605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA:245400	2008	No
LA-11784	Stewart, Noah	Supplemental Finding of No Adverse Effect, Interstate Route 10-605 Interchange Improvement	2012	No

The records search also determined that eight previously recorded historic-era cultural resources are located within ¼ mile of the Project Area (Table 2). Of these, six are historic residential properties, one is mixed-use residential/commercial property, and one is a public utility engineering structure (transmission line). No previously recorded resources are located within the Project Area. However, a portion of the transmission line is located adjacent to the Project Area.

Table 2. Previously Recorded Cultural Resources In or Within 1/4 Mile of the Project Area

Site Number (Trinomial/Primary)	Recorder and Year	Age/ Period	Site Description	Within Project Area?
P-19-188913	2002 (Claudia A. Harbert, Caltrans)	Historic	12836 Dalewood St Baldwin Park (APN 8564-003-009)	No
P-19-188914	2002 (Claudia A. Harbert, Caltrans)	Historic	12901 Dalewood St Baldwin Park (APN 8564-003-016)	No
P-19-188915	2002 (Claudia A. Harbert, Caltrans)	Historic	819 Frazier St Baldwin Park (APN 8559-011-002)	No
P-19-188916	2002 (Claudia A. Harbert, Caltrans)	Historic	807-811 Frazier St Baldwin Park (APN 8559-011-003)	No
P-19-188917	2002 (Claudia A. Harbert, Caltrans)	Historic	805 Frazier St Baldwin Park (APN 8559-011-004)	No
P-19-188918	2002 (Kelly F. Ewing, Caltrans)	Historic	12957 Garvey Ave Baldwin Park (APN 8556-023-005)	No
P-19-188919	2002 (Kelly F. Ewing, Caltrans)	Historic	12961 Garvey Ave Baldwin Park (APN 8556-023-004)	No
P-19-188983	1999 (Stephen Van Wormer, KEA); Updated 2008 (Noah M.	Historic	Boulder Dam – Los Angeles 287.5 kV Transmission Line	No

Table 2. Previously Recorded Cultural Resources In or Within 1/4 Mile of the Project Area				
Site Number (Trinomial/Primary)	**Recorder and Year**	**Age/ Period**	**Site Description**	**Within Project Area?**
	Stewart, Caltrans District 7); Updated 2013 (Heather Gibson and Marc Beherec, AECOM); Updated 2018 (Jessica B. Feldman, ICF)			

1.1.2 Records

12793 Garvey Avenue is listed on the California Built Environment Resources Directory (BERD). The BERD notes that the property was developed in 1940. The BERD also states that the structures present were determined ineligible in 1995 for National Register by consensus through Section 106 process – not evaluated for California Register or Local Listing (NRHP Status Code 6Y).

A review of historic-period aerial photographs indicate that one or more historic-period structures were present on the property in 1948 (earliest available photograph). However, by 2003, these buildings had been torn down and the property currently contains several mobile trailers and appears to be used as a tow yard.

TRIBAL CONSULTATION

August 5, 2020

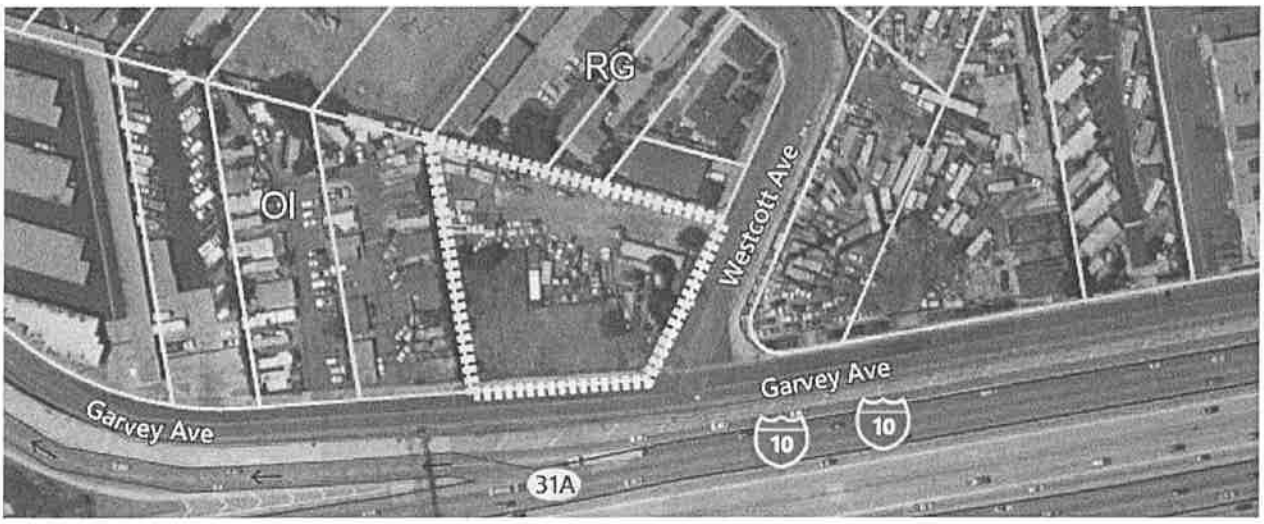
Linda Candelaria
Co-Chairwoman
C/O Sam Dunlap, Cultural Resource Representative
Gabrielino Tongva Tribe
tongvaTCR@gmail.com

RE: Tribal Consultation Notification Pursuant to Assembly Bill 52; 12793 Garvey Avenue Project, Baldwin Park, California

Chairwoman Candelaria:

This letter is to notify you of the proposed new 20,847-square foot two-story Industrial commercial building at 12793 Garvey Avenue (APNs: 8550-005-003), (Proposed Project) described below in the City of Baldwin Park (City), Los Angeles County, California. Pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines, the City, as Lead Agency, has initiated preparation of an Initial Study for the Proposed Project.

The subject property is located in an "Industrial Commercial" (I-C) Zone. The surrounding land uses and zoning consists of Garden Multi-Family Residential (R-G), and Multi-Family Residential to the north, and Industrial Commercial (I-C) on the east, and west of subject property.



The proposed building consists of a 19,193-sqaure foot first floor including a 1,654 square feet of office area and a 17,539-sqaure foot warehouse area. The second floor consists of 1,654 square feet of office.

The proposed project has been tentatively approved by the City's Design Review Committee and requires approval by the Planning Commission of the following entitlements:

1. Design Review for the building architecture and site design.
2. Variance to deviate from side yard setback requirements (minimum 10 ft.), where the applicant is proposing a zero foot side yard setback along the easterly property line.

Your tribal group is invited to contact the City and participate in AB 52 consultation with the City pertaining to the Proposed Project. Please consider this letter and preliminary project information as the formal notification of the Proposed Project. The point of contact for the City is as follows.

Name/Title: Ron Garcia, City Planner
Address: 14403 E. Pacific Ave
City and Zip Code: Baldwin Park, CA 91706
Telephone: 626.960.4011, ext. 475
Email: rgarcia@baldwinpark.com

The City would appreciate receiving any comments, information or questions you may have regarding cultural places within the Proposed Project site. All information provided will be kept confidential.

Pursuant to Government Code Section 65352.3, **please respond with 30 thirty days** of the date of this letter if you would like to consult on the Proposed Project. Apart from consultation, please contact Ron Garcia, City Planner, at 626.960.4011, ext. 475 if you would like to be notified of public hearings for the proposed project or if you have any questions or concerns with the proposed project.

Thank you for your involvement in this process and your attention to this matter.

Sincerely,

Ron Garcia
City Planner

August 5, 2020

Mr. Andrew Salas, Chairperson
Gabrieleño Band of Mission Indians-Kizh Nation
P. O. Box 393
Covina, CA 91723

RE: Tribal Consultation Notification Pursuant to Assembly Bill 52; 12793 Garvey Avenue Project, Baldwin Park, California

Chairwoman Candelaria:

This letter is to notify you of the proposed new 20,847-square foot two-story Industrial commercial building at 12793 Garvey Avenue (APNs: 8550-005-003), (Proposed Project) described below in the City of Baldwin Park (City), Los Angeles County, California. Pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines, the City, as Lead Agency, has initiated preparation of an Initial Study for the Proposed Project.

The subject property is located in an "Industrial Commercial" (I-C) Zone. The surrounding land uses and zoning consists of Garden Multi-Family Residential (R-G), and Multi-Family Residential to the north, and Industrial Commercial (I-C) on the east, and west of subject property.

The proposed building consists of a 19,193-sqaure foot first floor including a 1,654 square feet of office area and a 17,539-sqaure foot warehouse area. The second floor consists of 1,654 square feet of office.

The proposed project has been tentatively approved by the City's Design Review Committee and requires approval by the Planning Commission of the following entitlements:

1. Design Review for the building architecture and site design.
2. Variance to deviate from side yard setback requirements (minimum 10 ft.), where the applicant is proposing a zero foot side yard setback along the easterly property line.

Your tribal group is invited to contact the City and participate in AB 52 consultation with the City pertaining to the Proposed Project. Please consider this letter and preliminary project information as the formal notification of the Proposed Project. The point of contact for the City is as follows.

Name/Title: Ron Garcia, City Planner
Address: 14403 E. Pacific Ave
City and Zip Code: Baldwin Park, CA 91706
Telephone: 626.960.4011, ext. 475
Email: rgarcia@baldwinpark.com

The City would appreciate receiving any comments, information or questions you may have regarding cultural places within the Proposed Project site. All information provided will be kept confidential.

Pursuant to Government Code Section 65352.3, **please respond with 30 thirty days** of the date of this letter if you would like to consult on the Proposed Project. Apart from consultation, please contact Ron Garcia, City Planner, at 626.960.4011, ext. 475 if you would like to be notified of public hearings for the proposed project or if you have any questions or concerns with the proposed project.

Thank you for your involvement in this process and your attention to this matter.

Sincerely,

Ron Garcia
City Planner

August 5, 2020

Mr. Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseno Indians
P. O. Box 487
San Jacinto, CA 92581

RE: Tribal Consultation Notification Pursuant to Assembly Bill 52; 12793 Garvey Avenue Project, Baldwin Park, California

Chairwoman Candelaria:

This letter is to notify you of the proposed new 20,847-square foot two-story Industrial commercial building at 12793 Garvey Avenue (APNs: 8550-005-003), (Proposed Project) described below in the City of Baldwin Park (City), Los Angeles County, California. Pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines, the City, as Lead Agency, has initiated preparation of an Initial Study for the Proposed Project.

The subject property is located in an "Industrial Commercial" (I-C) Zone. The surrounding land uses and zoning consists of Garden Multi-Family Residential (R-G), and Multi-Family Residential to the north, and Industrial Commercial (I-C) on the east, and west of subject property.

The proposed building consists of a 19,193-sqaure foot first floor including a 1,654 square feet of office area and a 17,539-sqaure foot warehouse area. The second floor consists of 1,654 square feet of office.

The proposed project has been tentatively approved by the City's Design Review Committee and requires approval by the Planning Commission of the following entitlements:

1. Design Review for the building architecture and site design.
2. Variance to deviate from side yard setback requirements (minimum 10 ft.), where the applicant is proposing a zero foot side yard setback along the easterly property line.

Your tribal group is invited to contact the City and participate in AB 52 consultation with the City pertaining to the Proposed Project. Please consider this letter and preliminary project information as the formal notification of the Proposed Project. The point of contact for the City is as follows.

Name/Title: Ron Garcia, City Planner
Address: 14403 E. Pacific Ave
City and Zip Code: Baldwin Park, CA 91706
Telephone: 626.960.4011, ext. 475
Email: rgarcia@baldwinpark.com

The City would appreciate receiving any comments, information or questions you may have regarding cultural places within the Proposed Project site. All information provided will be kept confidential.

Pursuant to Government Code Section 65352.3, **please respond with 30 thirty days** of the date of this letter if you would like to consult on the Proposed Project. Apart from consultation, please contact Ron Garcia, City Planner, at 626.960.4011, ext. 475 if you would like to be notified of public hearings for the proposed project or if you have any questions or concerns with the proposed project.

Thank you for your involvement in this process and your attention to this matter.

Sincerely,

Ron Garcia
City Planner

Cal Land Engineering, Inc.
dba Quartech Consultants
Geotechnical, Environmental, and Civil Engineering

January 14, 2020

Baldwin Park Homes, LLC
1773 W. San Bernardino Rd, Suite B-42,
W. Covina, CA 91790

Attention: Mr. Craig Cook

Subject: Report of Geotechnical Engineering Investigation, Proposed Commercial Development, 12793 Garvey Avenue, APN: 8550-005-061, Baldwin Park, California, QCI Project No.: 19-019-029GE

Gentlemen:

In accordance with your request, Quartech Consultants (QCI) is pleased to submit this Geotechnical Engineering Report for the subject site. The purpose of this report was to evaluate the subsurface conditions and provide recommendations for foundation designs and other relevant parameters of the proposed construction.

Based on the findings and observations during our investigation, the proposed construction of the subject site for the intended use is considered feasible from the geotechnical engineering viewpoints, provided that specific recommendations set forth herein are followed.

This opportunity to be of service is sincerely appreciated. If you have any questions pertaining to this report, please call the undersigned.

Respectfully submitted,
Cal Land Engineering, Inc. (CLE)
dba Quartech Consultants (QCI)

Jack C. Lee, GE 2153
Principal Engineer

Churuo Zhang
Project Engineer

Abe Kazemzadeh
Project Engineer

Dist: (4) Addressee

REPORT OF GEOTECHNICAL ENGINEERING INVESTIGATION

Proposed Commercial Development

At

12793 Garvey Avenue
APN: 8550-005-061
Baldwin Park, California

Prepared by

QUARTECH CONSULTANTS

Project No.: 19-019-029GE

January 14, 2020

TABLE OF CONTENTS

1.0 INTRODUCTION 3

1.1 PURPOSE 3
1.2 SCOPE OF SERVICES 3
1.3 PROPOSED CONSTRUCTION 3
1.4 SITE LOCATION 3

2.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING 4

2.1 SUBSURFACE EXPLORATION 4
2.2 LABORATORY TESTING 4

3.0 SUMMARY OF GEOTECHNICAL CONDITIONS 4

3.1 SOIL CONDITIONS 4
3.2 GROUNDWATER 4

4.0 SEISMICITY 5

4.1 FAULTING 5
4.2 SEISMICITY 5
4.3 ESTIMATED EARTHQUAKE GROUND MOTIONS 6

5.0 SEISMIC HAZARDS 6

5.1 LIQUEFACTION 6
5.2 EARTHQUAKE INDUCED SETTLEMENT 6
5.3 LANDSLIDING 7
5.4 LURCHING 7
5.5 SURFACE RUPTURE 7
5.6 SURFACE MANIFESTATION OF LIQUEFACTION 7
5.7 GROUND SHAKING 7

6.0 CONCLUSIONS 8

6.1 SEISMICITY 8
6.2 LIQUEFACTION POTENTIAL 8
6.3 GROUNDWATER 8
6.4 EXCAVATABILITY 8

7.0 RECOMMENDATIONS 8

7.1 GRADING 8

7.1.1 Site Preparation 8

7.1.2 Surficial Soil Removals 9

7.1.3 Treatment of Removal Bottoms 9

7.1.4 Structural Backfill 9

7.2 SHALLOW FOUNDATION DESIGN 9

7.2.1 Bearing Value 9

7.2.2 Lateral Pressures 9

7.2.3 Settlement 10

7.3 FOUNDATION CONSTRUCTION 10

7.4 CONCRETE SLAB 10

7.5 TEMPORARY EXCAVATION AND BACKFILL 11

8.0 INSPECTION 11

9.0 SEISMIC DESIGN 11

10.0 CORROSION POTENTIAL 12

11.0 PRELIMINARY PAVEMENT DESIGN 12

12.0 REMARKS 12

13.0 REFERENCES 13

1.0 INTRODUCTION

1.1 Purpose

This report presents a summary of our preliminary geotechnical engineering investigation for the proposed construction at the subject site. The purposes of this investigation were to evaluate the subsurface conditions at the area of proposed construction and to provide recommendations pertinent to grading, foundation design and other relevant parameters of the development.

1.2 Scope of Services

Our scope of services included:

- Review of available soil engineering data of the area.
- Subsurface exploration consisting of logging and sampling of two 8-inch diameter hollow stem auger boring to a maximum depth of 51.5 feet below the existing grade at the subject site. The exploration was logged by a QCI engineer. Boring logs are presented in Appendix A.
- Laboratory testing of representative samples to establish engineering characteristics of the on-site soil. The laboratory test results are presented in Appendices A and B.
- Engineering analyses of the geotechnical data obtained from our background studies, field investigation, and laboratory testing.
- Preparation of this report presenting our findings, conclusions, and recommendations for the proposed construction.

1.3 Proposed Construction

The subject site would be used for a commercial development and associated improvements. The proposed buildings are anticipated to be two and/or three-story wood frame structures with concrete slab-on-grade. Column loads are unknown at this time but are expected to be light to medium. Minor cut and fill grading operation is anticipated to reach the desired grades.

1.4 Site Location

The project site is located at the northwest corner of Garvey Avenue and Westcott Avenue in the City of Baldwin Park, California. The site is approximately 41,700 square feet (0.957 acres). The approximate location of the site is presented in the attached Site Location Map (Figure 1). The site is currently vacant. No major surface erosions were observed during our subsurface exploration.

2.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING

2.1 Subsurface Exploration

Our subsurface exploration consisted of drilling two 8-inch diameter hollow stem auger boring to a maximum depth of 51.5 feet at the locations shown on the attached Site Plan, Figure 2. The excavation of the boring was supervised and logged by a QCI's engineer. Relatively undisturbed and bulk samples were collected for laboratory testing. Boring logs are presented in Appendix A.

2.2 Laboratory Testing

Representative samples were tested for the following parameters: in-situ moisture content and density, consolidation, direct shear strength, percent fines, expansion and corrosion potential. Results of our laboratory testing along with a summary of the testing procedures are presented in Appendix B. In-situ moisture and density test results are presented on the boring logs in Appendix A.

3.0 SUMMARY OF GEOTECHNICAL CONDITIONS

3.1 Soil Conditions

The onsite near surface soils consist predominantly silty sand (SM). In general, these soils exist in loose to medium dense and slightly moist condition. Underlying the surface soils, gravelly silty sand (SM), mixture of sand and silty sand (SP/SM) and poorly graded sand (SP) were disclosed in the borings to the depths explored (51.5 feet below the existing ground surface). These soils exist in the medium dense to very dense, and slightly moist conditions. The soils become denser as depth increases.

3.2 Groundwater

Ground water level was not encountered to the depth explored (approximately 51.5 feet below the existing grade) during our subsurface investigation. In our opinion, groundwater will not be a problem during the near surface construction. Based on our review of the "Historically Highest Ground Water Contours and Borehole Log Data Locations, Baldwin Park Quadrangle", by CGS (formerly CDMG), it is estimated that the highest historical ground water level is approximately 10 feet below the existing grade. It should be noted that the CDMG ground water map is obtained by evaluating technical publications, geotechnical borehole data, water-well logs dating back to the "turn-of-the-century". This report also indicated that ground water levels in the areas from 1960-1997 data are generally 5 to 50 feet deeper than the earlier measured data. No specific date was provided pertaining to the high ground water level.

4.0 SEISMICITY

4.1 Faulting

Based on our study, there are no known active faults crossing the property. The nearest known active regional fault is Elsinore Fault zones located 5.7 miles from the site.

4.2 Seismicity

The subject site is located in Southern California, which is a tectonically active area. The type and magnitude of seismic hazards affecting the site depend on the distance to causative faults, the intensity, and the magnitude of the seismic event. Table 1 indicates the distance of the fault zones and the associated maximum magnitude earthquake that can be produced by nearby seismic events. As indicated in Table 1, Elsinore fault zones are considered to have the most significant effect to the site from a design standpoint.

TABLE 1

Characteristics and Estimated Earthquakes for Regional Faults

Fault Name	Approximate Distance to Site (mile)	Maximum Magnitude Earthquake (Mw)
Elsinore;W+GI+T+J+CM	5.7	7.8
Elysian Park (Upper)	5.9	6.7
Raymond	6.0	6.8
Sierra Madre	6.5	7.2
Sierra Madre Connected	6.5	7.3
San Jose	7.0	6.7
Clamshell-Sawpit	7.7	6.7
Puente Hills (Santa Fe Springs)	9.4	6.7
Puente Hills (LA)	10.0	7.0
Verdugo	10.1	6.9
Puente Hills (Coyote Hills)	12.3	6.9
Hollywood	13.9	6.7
Chino, alt 2	14.6	6.8
Chino, alt 1	14.6	6.7
Cucamonga	15.9	6.7
Santa Monica Connected alt 2	16.8	7.4
Newport Inglewood Connected alt 2	19.5	7.5

Reference: 2008 National Seismic Hazard Maps - Source Parameters

4.3 Estimated Earthquake Ground Motions

In order to estimate the seismic ground motions at the subject site, QCI has utilized the seismic hazard map published by California Geological Survey. According to this report, the peak ground alluvium acceleration at the subject site for a 2% and 10% probability of exceedance in 50 years is about 0.753g and 0.478g, respectively (2008 USGS Interactive Deaggregation). Site modified peak ground acceleration (PGA_M), corresponding to USGS Design Map Summary Report, ASCE 7-16 Standard, is 0.816g.

5.0 SEISMIC HAZARDS

5.1 Liquefaction

Liquefaction is the transformation of a granular material from a solid to a liquid state as a result of increasing pore-water pressure. The material will then loses strength and can flow if unrestrained, thus leading to ground failure. Liquefaction can be triggered in saturated cohesionless material by short-term cyclic loading, such as shaking due to an earthquake. Ground failure that results from liquefaction can be manifested as flow landsliding, lateral spread, loss of bearing capacity, or settlement.

The potential for liquefaction at the site's sandy soil was evaluated using the computer program "LIQUEFY2" by Thomas Blake, the subsurface data from Boring B-1, the design earthquake (M =7.0), and ground acceleration of 0.753g (2% probability of exceedance in 50 years). The total unit weight used for the onsite soils is 120 pcf. The calculated ground water level is raised to the depth of 5 feet below the existing ground surface. Conversion from California modified split spoon to field SPT blow counts is 0.7 (County of L.A. GS045.0 October 1, 2014). Based on the analyses presented on the enclosed Appendix C, the factor of safety is indicated to be less than 1.30 for the onsite soils at the depth of 37 to 42 feet.

5.2 Earthquake Induced Settlement

The sandy soils tend to settle and densify when they are subjected to earthquake shaking. Should the sand be saturated and there is no possibility for drainage so that constant volume conditions are maintained, the primary effect of the shaking is the generation of excess pore water pressures. Settlement then occurs as the excess pore pressures dissipate. The primary factors controlling seismic induced settlement are the cyclic stress ratio, maximum shear strain induced by earthquake, the strength and density of the sand, and the magnitude of the

earthquake. Based on the procedures developed by Tokimatsu and Seed, 1987, it is our opinion that total seismic induced settlement and differential settlement of saturated sand are **0.66 inches** and **0.44 inches** respectively.

5.3 Landsliding

A potential for landsliding is often suggested in areas of moderate to steep terrain that is underlain by weak or un-favorably oriented geological conditions. Neither of these conditions exists at the site. Due to the relatively flat nature of the site, it is our opinion that the potential for landslide is remote.

5.4 Lurching

Soil lurching refers to the rolling motion on the surface due to the passage of seismic surface waves. Effects of this nature are not considered significant on the subject site where the thickness of alluvium does not vary appreciably under structures.

5.5 Surface Rupture

Surface rupture is a break in the ground surface during or as a consequence of seismic activity. The potential for surface rupture on the subject site is considered low due to the absence of known active faults at the site.

5.6 Surface Manifestation of Liquefaction

One of the most dramatic causes of damage to structures during earthquakes has been the development of liquefaction in saturated sandy soils, manifested either by the formation of boils and mud-spouts at the ground surface, by seepage of water through ground cracks. Based on the evaluation procedures suggested by the Ishihara (1985), it is concluded that surface manifestation of liquefaction is unlikely at the subject site under the design earthquake event.

5.7 Ground Shaking

Throughout southern California, ground shaking, as a result of earthquakes, is a constant potential hazard. The relative potential for damage from this hazard is a function of the type and magnitude of earthquake events and the distance of the subject site from the event. Accordingly, proposed structures should be designed and constructed in accordance with applicable portions of the building code.

6.0 CONCLUSIONS

Based on the results of our subsurface investigation, it is our opinion that the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained herein are incorporated in the design and construction. The following is a summary of the geotechnical design and construction factors that may affect the development of the site:

6.1 Seismicity

Based on our studies on seismicity, there are no known active faults crossing the property. However, the site is located in a seismically active region and is subject to seismically induced ground shaking from nearby and distant faults, which is a characteristic of all Southern California.

6.2 Liquefaction Potential

Based on our field investigation, liquefaction analyses and laboratory testing, the analyses presented on the enclosed Appendix C indicated that the factor of safety is less than 1.30 for the onsite soils at the depth of 37 to 42 feet.

6.3 Groundwater

No groundwater was encountered in the borings to the depths explored. In our opinion, groundwater will not be a problem during the near surface construction.

6.4 Excavatability

Based on our subsurface investigation, excavation of the subsurface materials should be able to be accomplished with conventional earthwork equipment.

7.0 RECOMMENDATIONS

Based on the subsurface conditions exposed during field investigation and laboratory testing program, it is recommended that the following recommendations be incorporated in the design and construction phases of the project.

7.1 Grading

7.1.1 Site Preparation

Prior to initiating grading operations, any existing vegetation, trash, debris, over-sized materials (greater than 8 inches), and other deleterious materials within construction areas should be removed from the subject site.

7.1.2 Surficial Soil Removals

Based on our field exploration and laboratory data obtained to date, it is recommended that the existing surficial soils be removed to a minimum depth of 4 feet below the existing grade or two feet below the bottom of the footing, whichever is deeper. The recommended removal should be extended at least 4 feet beyond building lines. The existing near surface soils should also be removed to a depth of about 12-inches within the proposed driveway and concrete flatwork areas. Locally deeper removals may be necessary to expose competent natural ground. The actual removal depths should be determined in the field as conditions are exposed. Visual inspection and/or testing may be used to define removal requirements.

7.1.3 Treatment of Removal Bottoms

Soils exposed within areas approved for fill placement should be scarified to a depth of 6 to 10 inches, conditioned to near optimum moisture content, then compacted in-place to minimum project standards.

7.1.4 Structural Backfill

The onsite soils may be used as compacted fill, provided they are free of organic materials and debris. Fills should be placed in relatively thin lifts (6 to 8 inches), brought to near optimum moisture content, then compacted to at least 90 percent relative compaction based on laboratory standard ASTM D-1557-12.

7.2 Shallow Foundation Design

7.2.1 Bearing Value

An allowable bearing value of 2000 pounds per square foot (psf) may be used for design of continuous and pad footings with a minimum of 12 and 24 inches in width, respectively. All footings should be a minimum of 24 inches deep. This value may be increased by one third (1/3) when considering short duration seismic or wind loads.

7.2.2 Lateral Pressures

Passive earth pressure may be computed as an equivalent fluid pressure of 300 pcf, with a maximum earth pressure of 2000 psf. An allowable coefficient of friction between soil and concrete of 0.30 may be used with the dead load forces. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one third (1/3).

7.2.3 Settlement

Settlement of the footings placed as recommended, and subject to no more than allowable loads is not expected to exceed 1/2 inch. Differential settlement between adjacent columns is not anticipated to exceed 1/4 inch for the adjacent column spaced at a distance of about 30 feet. Additionally, the foundation should also be designed to resist the potential seismic induced total settlement and differential settlement of saturated sand **of 0.66 inches** and **0.44 inches** respectively

7.3 Foundation Construction

It is anticipated that the entire structure will be underlain by onsite soils of very low expansion potential. All footings should be founded at a minimum depth of 24 inches below the lowest adjacent ground surface. All continuous footings should have at least two No. 4 reinforcing bar placed both at the top and two No. 4 reinforcing bar placed at the bottom of the footings.

7.4 Concrete Slab

Concrete slabs should be a minimum of 4 inches thick and reinforced with a minimum of No. 3 reinforcing bar spaced 16-inch each way or it's equivalent. All slab reinforcement should be supported to ensure proper positioning during placement of concrete.

In order to comply with the requirements of the 2019 CalGreen Section 4.505.2.1 within the moisture sensitive concrete slabs, a minimum of 4-inch thick base of ½ inch or larger clean aggregate should be provided with a vapor barrier in direct contact with concrete. A 10-mil Polyethylene vapor retarder, with joints lapped not less than 6 inches, should be placed above the aggregate and in direct contact with the concrete slab. As an alternate method, 2 inches of sand then 10-mil polyethylene membrane and another 2 inches of sand over the membrane and under the concrete may be used, provided this request for an alternative method is approved by City Building Officials.

The above foundation and concrete slab reinforcement recommendations are presented in accordance with the geotechnical engineering viewpoint. Additional reinforcement may be required in the concentrated column and/or traffic loading areas. Final reinforcement should be designed by the project structural engineer.

7.5 Temporary Excavation and Backfill

All trench excavations should conform to CAL-OSHA and local safety codes. All utilities trench backfill should be brought to near optimum moisture content and then compacted to obtain a minimum relative compaction of 90 percent of ASTM D-1557-12. All temporary excavations should be observed by a field engineer of this office so as to evaluate the suitability of the excavation to the exposed soil conditions.

8.0 INSPECTION

As a necessary requisite to the use of this report, the following inspection is recommended:

- Temporary excavations.
- Removal of surficial and unsuitable soils.
- Backfill placement and compaction.
- Utility trench backfill.

The geotechnical engineer should be notified at least 1 day in advance of the start of construction. A joint meeting between the client, the contractor, and the geotechnical engineer is recommended prior to the start of construction to discuss specific procedures and scheduling.

9.0 SEISMIC DESIGN

Based on our studies on seismicity, there are no known active faults crossing the property. However, the subject site is located in southern California, which is a tectonically active area. Based on ASCE 7-16 Standard, CBC 2019, the following seismic related values may be used:

Seismic Parameters (Latitude: 34.066178, Longitude: -117.996757)	Site Class "D"
Mapped 0.2 Sec Period Spectral Acceleration, **S_S**	1.741
Mapped 1.0 Sec Period Spectral Acceleration, **S_1**	0.633g
Site Coefficient for Site Class "D", **F_a**	1.0
Site Coefficient for Site Class "D", **F_v**	1.7
Maximum Considered Earthquake Spectral Response Acceleration Parameter at 0.2 Second, **S_{MS}**	1.741g
Maximum Considered Earthquake Spectral Response Acceleration Parameter at 1.0 Second, **S_{M1}**	1.076g
Design Spectral Response Acceleration Parameters for 0.2 sec, **S_{DS}**	1.160g
Design Spectral Response Acceleration Parameters for 1.0 Sec, **S_{D1}**	0.717g

The Project Structural Engineer should be aware of the information provided above to determine if any additional structural strengthening is warranted.

10.0 CORROSION POTENTIAL

Chemical laboratory tests were conducted on the existing onsite near surface materials sampled during QCI's field investigation to aid in evaluation of soil corrosion potential and the attack on concrete by sulfate soils. The testing results are presented in Appendix B. According to 2019 CBC and ACI 318-14, a "negligible" exposure to sulfate can be expected for concrete placed in contact with the onsite soils. Therefore, Type II cement or its equivalent may be used for this project. Based on the resistivity test results, it is estimated that the subsurface soils are moderately corrosive to buried metal pipe. It is recommended that any underground steel utilities be blasted and given protective coating. Should additional protective measures be warranted, a corrosion specialist should be consulted.

11.0 PRELIMINARY PAVEMENT DESIGN

Preliminary structural pavement sections are designed according to Caltran Highway Design Manual and an assumed "R"-value of 20. Upon completion of rough grading at the site, laboratory samples may be collected at subgrade level and tested for R-value in order to verify the recommended sections.

Based on the assumed "R"-Value of 20 and traffic indices of 4.0 for parking and 5.0 for drive areas, the following pavement section is recommended:

Location	Traffic index	Assumed Subgrade "R" value	Required Gravel Equivalent (inches)	AC Thickness (inches)	Aggregate Base Thickness (inches)
Parking area	4.0	20	14.6	3	7
Driveway	5.0	20	17.7	4	7

Upon completion of rough grading at the site, laboratory samples may be collected at sub-grade level and tested for R-value in order to verify the above-recommended sections. The subgrade materials should be brought to near optimum moisture content, and compacted at least 90 percent of ASTM D-1557-12. The Class 2 aggregate base materials should be brought to near optimum moisture content, and compacted to at least 95 percent of ASTM D-1557-12.

12.0 REMARKS

The conclusions and recommendations contained herein are based on the findings and observations at the exploratory locations. However, soil materials may vary in characteristics between locations of the exploratory locations. If conditions are encountered during construction,

which appear to be different from those disclosed by the exploratory work, this office should be notified so as to recommend the need for modifications.

This report has been prepared in accordance with generally accepted professional engineering principles and practice. No warranty is expressed or implied. This report is subject to review by controlling public agencies having jurisdiction.

13.0 REFERENCES

Seed, H.B., Tokimatsu, K., Harder, L.F., and Chung, R.M., (1985), "Influence of SPT Procedures in Soil Liquefaction Resistance Evaluations," Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, Vol. 111, No. GT12, pp. 1425-1445.

Tokimatsu, K., and Seed, H.B., (1987), "Evaluation of Settlements in Sands Due to Earthquake Shaking," Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, Vol. 113, No. 8, pp. 861-878.

Ishihara, K. and Yoshimine, M., (1992), "Evaluation of Settlements in Sand Deposits Following Liquefaction During Earthquakes", Japanese Society of Soil Mechanics and Foundation Engineering, Vol. 32, No. 1, pp. 173-188

Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117, Adopted by California State Mining and Geology Board in accordance with the Seismic Hazards Mapping Act of 1990, Revised and Re- adopted September 11, 2008 by the State Mining and Geology Board. http://www.conservation.ca.gov/cgs/shzp/pages/index.aspx

T.Y. Loud, I.M. Idriss, and et. al. (2001), "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils", Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, Vol. 127, No. GT10, pp. 817-833.

California Division of Mines and Geology, 1998, Seismic Hazard Zone Report for the Baldwin Park 7.5-minutes Quadrangle, Los Angeles County, California Seismic Hazard Zone Open File report 98-13.

EERC, "Recent Advances in Soil Liquefaction Engineering: A Unified and Consistent Framework", EERC Report No. 2003-06, 26th Annual ASCE Geotechnical Spring Seminar, Long Beach, April 30, 2003

Bray, J. D. and Sancio, R.B., (2006) "Assessment of liquefaction susceptibility of fine-graind soils," Jornal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 132, No. 9, pp. 1165-1177

"County of Los Angeles, Department of Public Works", GS 045.0, Revised 10/1/2014

"Guideline for Evaluating and Mitigating Seismic Hazards in California" SP-117A

"Earthquake Hazards Program, Seismic Design Maps and tools", ASCE 7-10 Standard

Thomas F. Blake, Liquefy 2, Version 1.50.
https://geohazards.usgs.gov/deaggint/2008/
http://eqint.cr.usgs.gov/deaggint/2008/index.php
www.conservation.ca.gov/cgs/rghm/psha/fault_parameters/pdf/Documents/B_flt.pdf
http://earthquake.usgs.gov/research/software/
http://earthquake.usgs.gov/hazards/qfaults/
http://www.conservation.ca.gov/cgs/shzp/pages/index.aspx

N

SCALE 1" = 2000'

LEGEND

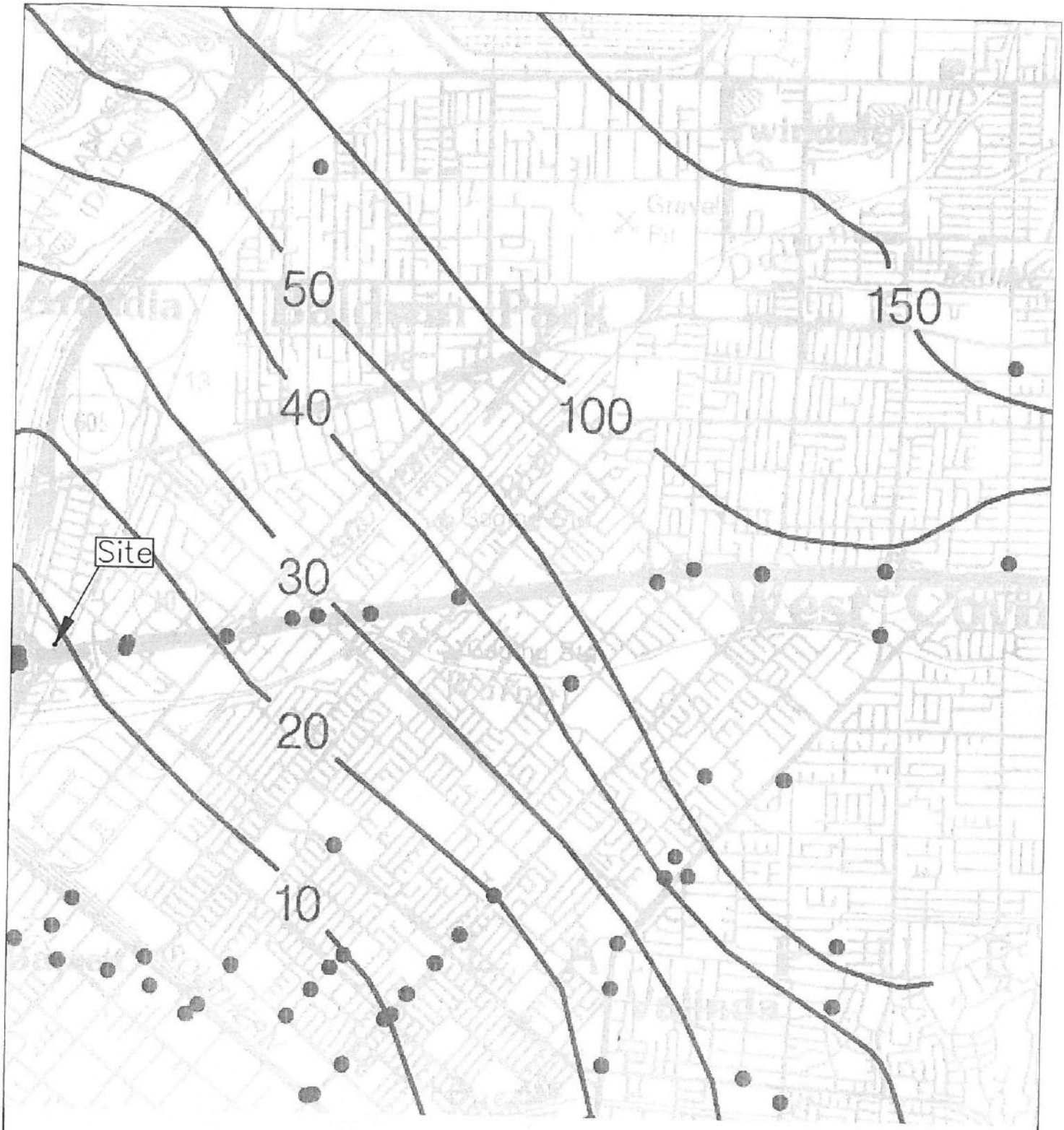
Maps modified from "Seismic Hazard Zones, Baldwin Park Quadrangle" by CDMG

CalLand Engineering, Inc. dba Quartech Consultants Geotechnical, Environmental & Civil Engineering Services	Project Address: APN: 8550-005-061 12793 Garvey Avenue Baldwin Park, California

Site Location Map

11/19

FIGURE 1



N

NOT TO SCALE

LEGEND

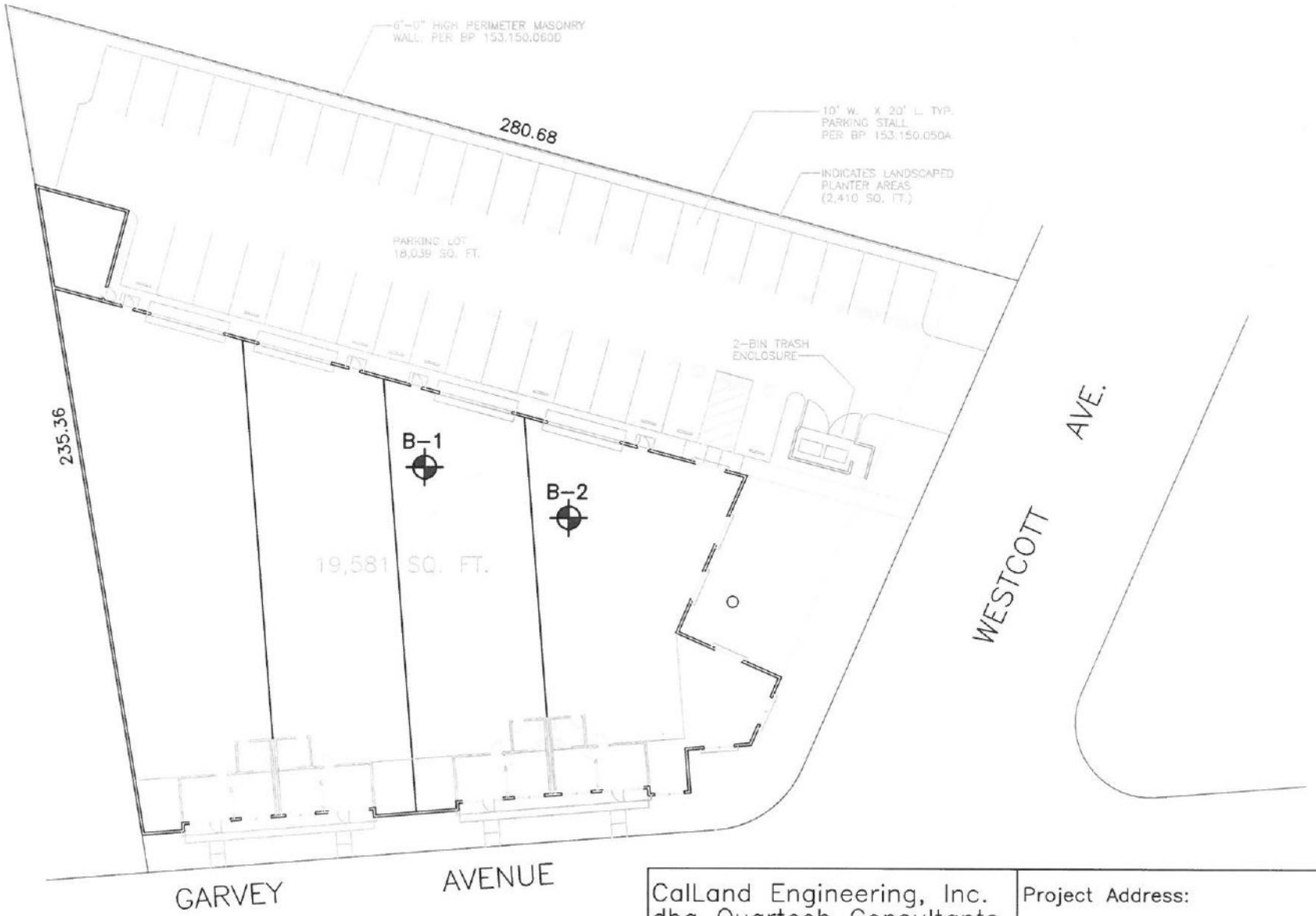
Maps modified from "Historically Highest Ground Water Contours and Borehole Log Data Locations, Baldwin Park Quadrangle" by CGS

CalLand Engineering, Inc. dba Quartech Consultants Geotechnical, Environmental & Civil Engineering Services	Project Address: APN: 8550-005-061 12793 Garvey Avenue Baldwin Park, California

Site Locational Map
Historical Highest Groundwater Level

11/19

FIGURE 1a



LEGEND

B-1 Approximate boring location

N

SCALE: 1" = 40'

CalLand Engineering, Inc. dba Quartech Consultants Geotechnical, Environmental & Civil Engineering Services	Project Address: APN: 8550-005-061 12793 Garvey Avenue Baldwin Park, California

SITE PLAN

11/19

FIGURE 2

APPENDIX A
FIELD INVESTIGATION

Subsurface conditions were explored by drilling two 8-inch diameter hollow stem auger boring to a maximum depth of 51.5 feet below the existing grade at the subject site at approximate locations shown on the enclosed Site Plan, Figure 2.

The drilling of the test borings was supervised by a QCI's engineer, who continuously logged the borings and visually classified the soils in accordance with the Unified Soil Classification System. Ring and SPT samples were taken at frequent intervals. These samples were obtained by driving a sampler with successive blows of 140-pound hammer dropping from a height of 30 inches.

Representative undisturbed samples of the subsurface soils were retained in a series of brass rings, each having an inside diameter of 2.42 inches and a height of 1.00 inch. All ring samples were transported to our laboratory. Bulk surface soil samples were also collected for additional classification and testing.

CalLand Engineering, Inc
dba Quartech Consultants

BORING LOG B-1

PROJECT LOCATION: 12793 Garvey Avenue, Baldwin Park, California
PROJECT NO.: 19-019-029

DATE DRILLED: 10/7/2019
SAMPLE METHOD: Hollow Stem
ELEVATION: N/A
LOGGED BY: MA

B: Bulk Bag
S: Standard Penetration Test
R: Ring Sample

Depth (ft)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/6"	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Description of Material
	B		7	SM		1.5	Silty sand, fine grained, medium brown, slightly moist, loose Percent of Fines: 12.2
2		R	10 14	SM	99.1	1.9	Silty sand, fine grained, medium brown, slightly moist, medium dense
5		R	8 13 15	SM	109.3	1.2	Silty sand, medium grained, light brown, slightly moist, medium dense Percent of Fines: 13.3
10		S	5 14 15	SP/SM		2.2	Sand and silty sand, medium grained, light brown, slightly moist, medium dense Percent of Fines: 7.9
15		R	20 30 50/5"	SP/SM	103.2	2.8	Sand and silty sand, light brown, slightly moist, very dense, gravel up to 1/2" in size. Percent of Fines: 10.2
20		S	11 17 19	SP/SM		2.9	Sand and silty sand with trace of gravel, medium grained, light brown, slightly moist, dense. Percent of Fines: 9.2
25		R	8 27 28	SP/SM	118.5	3.3	Sand and silty sand, coarse grained, light brown, slightly moist, dense Percent of Fines: 8.3
30		S	10 21 22	SP/SM		3.0	Sand and silty sand, medium grained, medium brown, slightly moist, dense Percent of Fines: 7.3
35		S	10 20 21	SM		1.9	Silty sand, fine grained, light brown, slightly moist, dense Percent of Fines: 13.8

CalLand Engineering, Inc
dba Quartech Consultants

BORING LOG B-1

PROJECT LOCATION: 12793 Garvey Avenue, Baldwin Park, California
PROJECT NO.: 19-019-029

DATE DRILLED: 10/7/2019
SAMPLE METHOD: Hollow Stem
ELEVATION: N/A
LOGGED BY: MA

B: Bulk Bag
S: Standard Penetration Test
R: Ring Sample

Depth (ft)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/6"	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Description of Material
40		S	15 18 19	SP/SM		2.7	Sand and silty sand, fine grained, light brown, slightly moist, dense Percent of Fines: 10.9
45		S	16 19 36	SP/SM		2.6	Sand and silty sand with gravel, fine grained, light brown, slightly moist, very dense. Percent of Fines: 9.3
50		S	12 23 38	SP		2.8	Sand with gravel, fine grained, light brown, slightly moist, very dense Percent of Fines: 3.9
55							Total Depth: 51.5 feet No Groundwater Hole Backfilled
60							Hammer Driving Weight: 140 lbs Hammer Driving Height: 30 inches
65							
70							
75							

CalLand Engineering, Inc
dba Quartech Consultants

BORING LOG B-2

PROJECT LOCATION: 12793 Garvey Avenue, Baldwin Park, California
PROJECT NO.: 19-019-029

DATE DRILLED: 10/7/2019
SAMPLE METHOD: Hollow Stem
ELEVATION: N/A
LOGGED BY: MA

B: Bulk Bag
S: Standard Penetration Test
R: Ring Sample

Depth (ft)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/6"	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Description of Material
	B		2	SM		1.2	Silty sand, fine grained, medium brown, slightly moist, loose
2		R	12 17	SM	99.8	1.4	Silty sand, fine grained, medium brown, slightly moist, medium dense
5		S	8 12 18	SM		2.1	Gravelly silty sand, medium grained, light brown, slightly moist, medium dense
10		R	12 20 21	SP/SM	104.5	1.8	Sand and silty sand, medium grained, light brown, slightly moist, medium dense
15		S	12 18 24	SP/SM		2.5	Sand and silty sand, fine grained, light brown, slightly moist, dense
20		R	12 24 29	SP/SM	112.7	2.7	Sand and silty sand, medium grained, light brown, slightly moist, dense
25							Total Depth: 21.5 feet No Groundwater Hole Backfilled Hammer Driving Weight: 140 lbs Hammer Driving Height: 30 inches
30							
35							

APPENDIX B
LABORATORY TESTING

During the subsurface exploration, QCI personnel collected relatively undisturbed ring samples and bulk samples. The following tests were performed on selected soil samples:

Moisture-Density

The moisture content and dry unit weight were determined for each relatively undisturbed soil sample obtained in the test borings in accordance with ASTM D2937 standard. The results of these tests are shown on the boring logs in Appendix A.

Shear Tests

Shear tests were performed in a direct shear machine of strain-control type in accordance with ASTM D3080 standard. The rate of deformation was 0.010 inch per minute. Selected samples were sheared under varying confining loads in order to determine the Coulomb shear strength parameters: internal friction angle and cohesion. The shear test results are presented in the attached plates.

Consolidation Tests

Consolidation tests were performed on selected undisturbed soil samples in accordance with ASTM D2435 standard. The consolidation apparatus is designed for a one-inch high soil filled brass ring. Loads are applied in several increments in a geometric progression and the resulting deformations are recorded at selected time intervals. Porous stones are placed in contact with the top and bottom of each specimen to permit addition and release of pore fluid. The samples were inundated with water at a load of two kilo-pounds (kips) per square foot, and the test results are shown on the attached Figures.

Expansion Index

Laboratory Expansion Index test was conducted on the existing onsite near surface materials sampled during QCI's field investigation to aid in evaluation of soil expansion potential. The test is performed in accordance with ASTM D-4829. The testing result is presented below:

Sample Location	Expansion Index	Expansion Potential
B-1 @ 0-4'	3	Very Low

Corrosion Potential

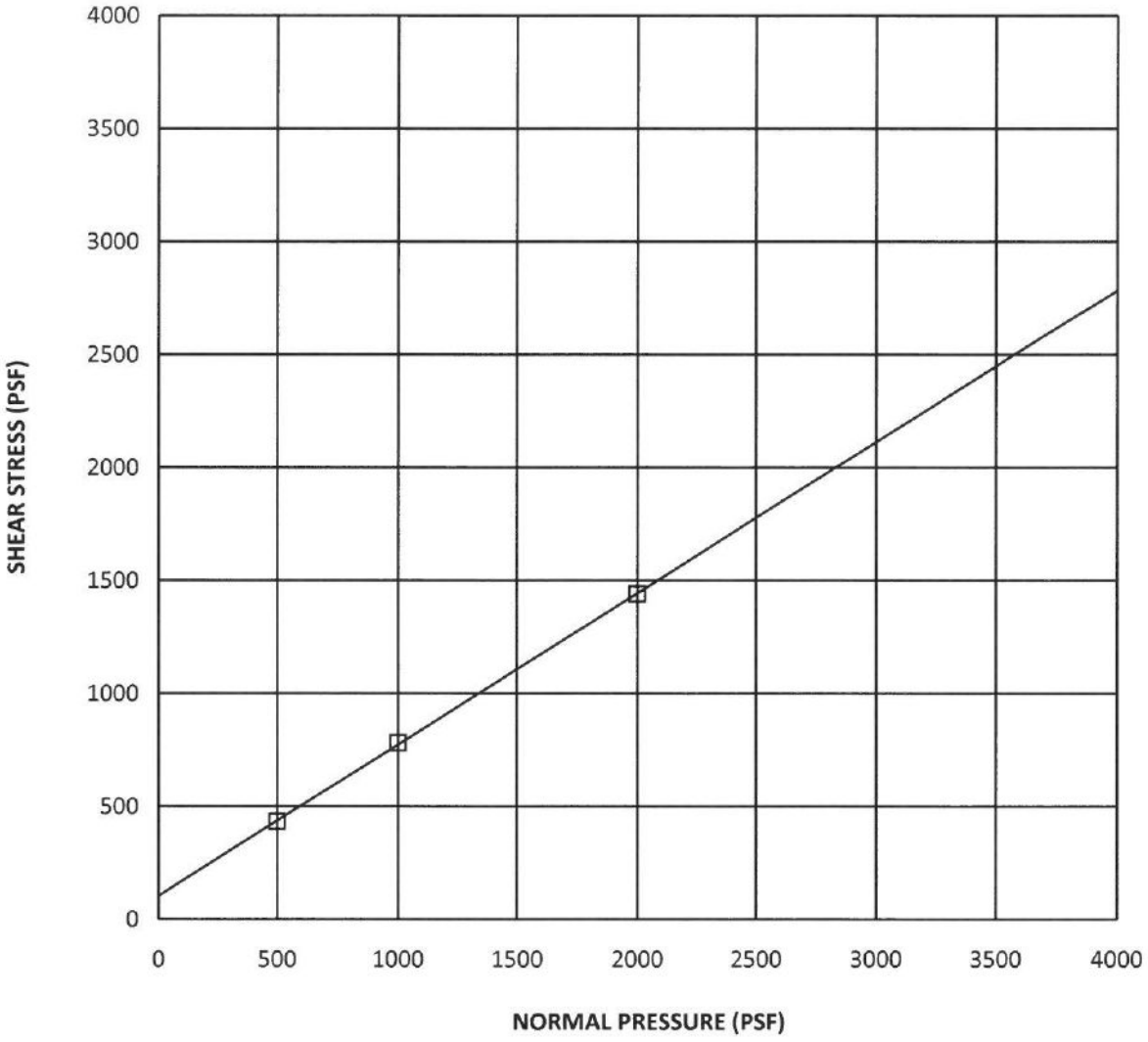
Chemical laboratory tests were conducted on the existing onsite near surface materials sampled during QCI's field investigation to aid in evaluation of soil corrosion potential and the attack on concrete by sulfate soils. These tests are performed in accordance with California Test Method 417, 422, 532, and 643. The testing results are presented below:

Sample Location	pH	Chloride (ppm)	Sulfate (% by weight)	Min. Resistivity (ohm-cm)
B-1 @ 0'-4'	8.28	140	0.0120	2,700

Percent Passing #200 Sieve

Percent of soil passing #200 sieve was determined for selected soil samples in accordance with ASTM D1140 standard. The test results are presented in the following table:

Sample Location	% Passing #200
B-1 @ 0-4'	12.2
B-1 @ 5'	13.3
B-1 @ 10'	7.9
B-1 @ 15'	10.2
B-1 @ 20'	9.2
B-1 @ 25'	8.3
B-1 @ 30'	7.3
B-1 @ 35'	13.8
B-1 @ 40'	10.9
B-1 @ 45'	9.3
B-1 @ 50'	3.9



SYMBOL	BORING NO.	SAMPLE NO.	DEPTH (FT)	SAMPLE TYPE	SOIL TYPE	COHESION (PSF)	FRICTION ANGLE (DEG)
□	B-1	N/A	2.0	RING	SM	100	33

Vertical Loads (PSF)	Moisture Content Before Test (%)	Moisture Content After Test (%)
500	1.9	25.8
1000	1.9	25.3
2000	1.9	25.1

CalLand Engineering, Inc
dba Quartech Consultants
Geotechnical, Environmental & Civil Engineering Services

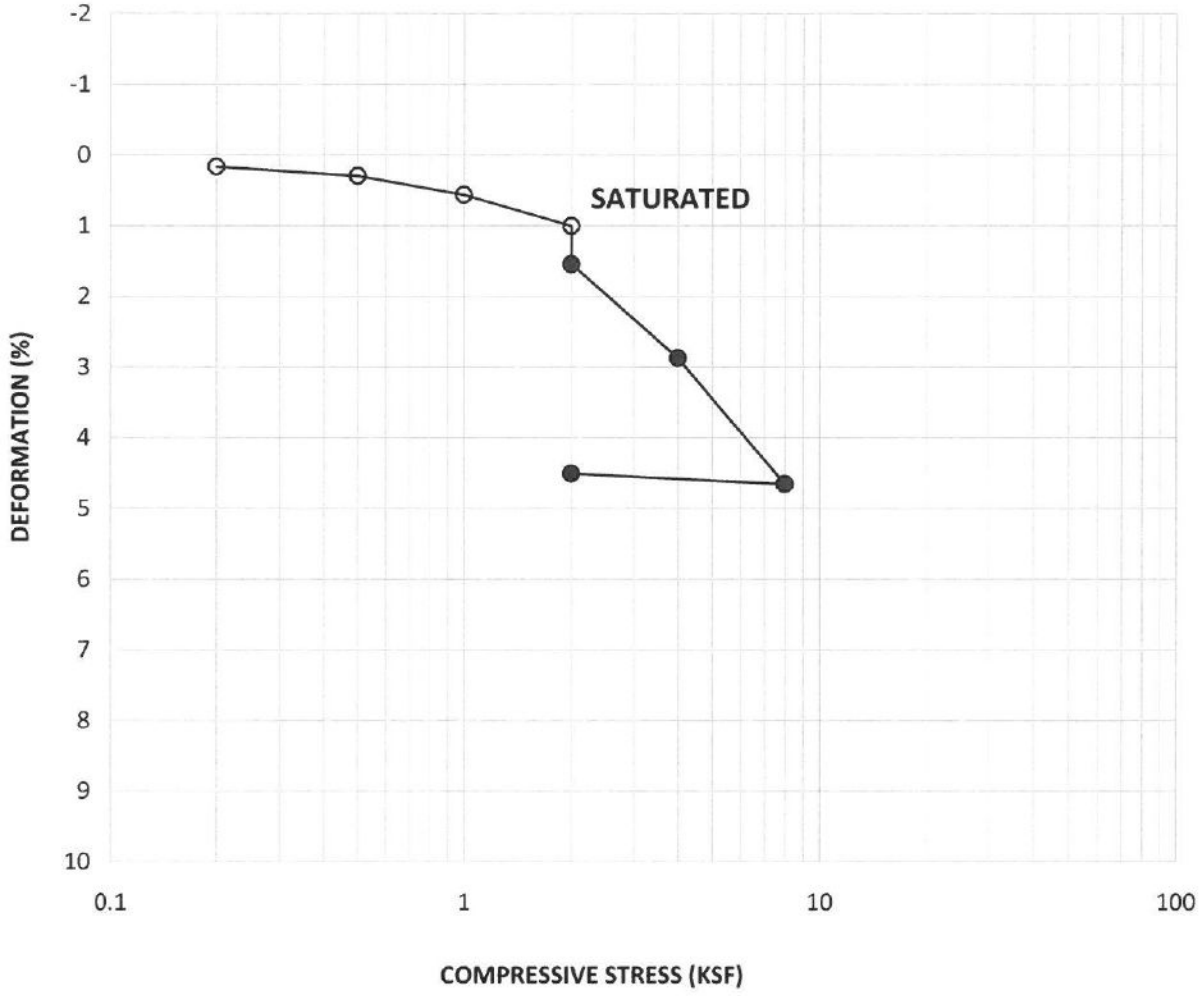
Project Address:
APN: 8550-005-061
12793 Garvey Avenue
Baldwin Park, California

DIRECT SHEAR

(ASTM D3080)

11/19

FIGURE 3



SYMBOL	BORING NO.	SAMPLE NO.	DEPTH (FT)	SOIL TYPE	INIT. MOISTURE CONTENT (%)	INIT. DRY DENSITY (PCF)	INIT. VOID RATIO
○	B-1	N/A	5	SM	1.2	109.3	0.541

CalLand Engineering, Inc
dba Quartech Consultants
Geotechnical, Environmental & Civil Engineering Services

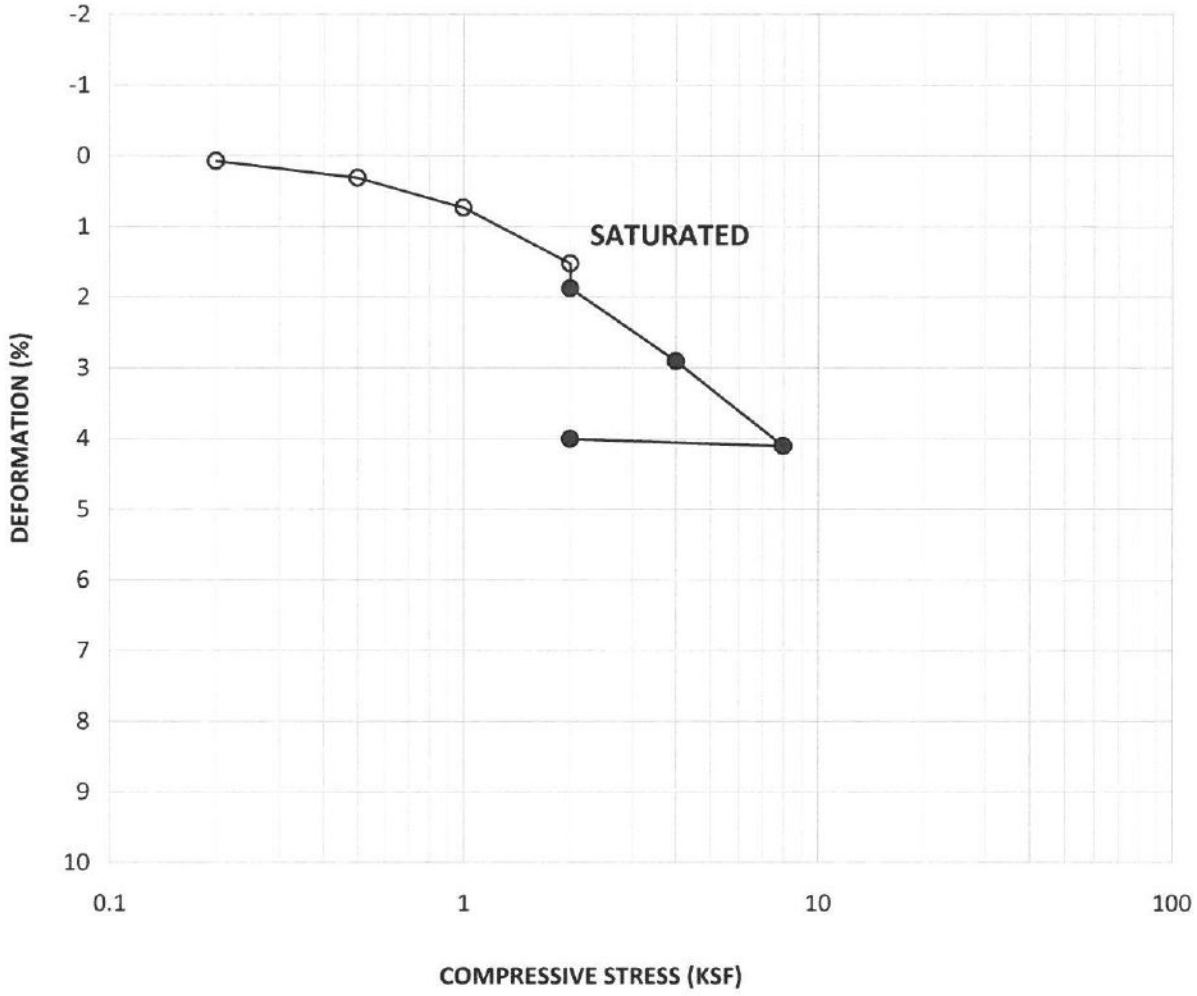
Project Address:
APN: 8550-005-061
12793 Garvey Avenue
Baldwin Park, California

CONSOLIDATION

(ASTM D2435)

4/17

FIGURE 4



SYMBOL	BORING NO.	SAMPLE NO.	DEPTH (FT)	SOIL TYPE	INIT. MOISTURE CONTENT (%)	INIT. DRY DENSITY (PCF)	INIT. VOID RATIO
○	B-1	N/A	15	SP/SM	2.8	103.2	0.633

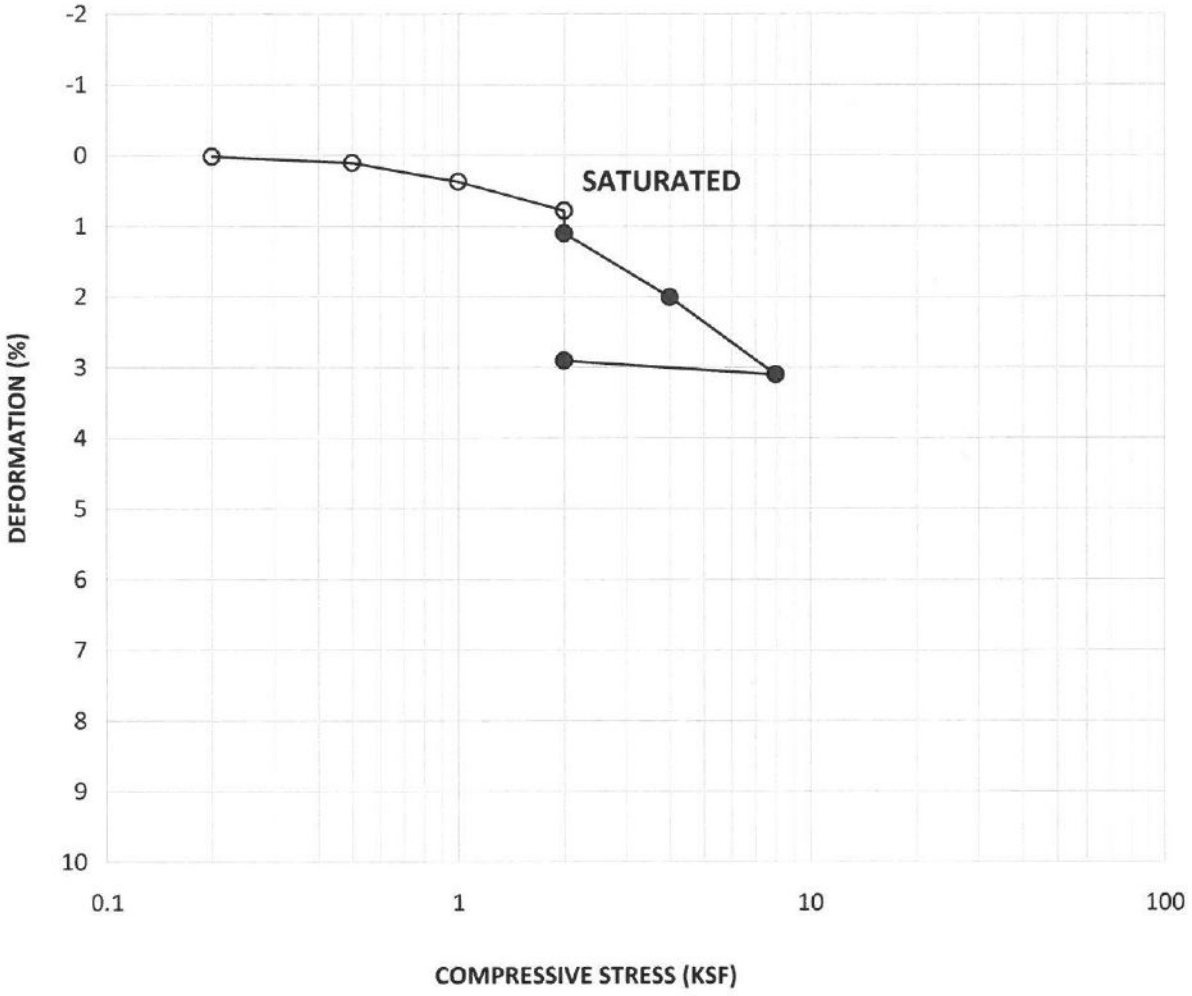
CalLand Engineering, Inc **dba Quartech Consultants** Geotechnical, Environmental & Civil Engineering Services	Project Address: APN: 8550-005-061 12793 Garvey Avenue Baldwin Park, California

CONSOLIDATION

(ASTM D2435)

11/19

FIGURE 5



SYMBOL	BORING NO.	SAMPLE NO.	DEPTH (FT)	SOIL TYPE	INIT. MOISTURE CONTENT (%)	INIT. DRY DENSITY (PCF)	INIT. VOID RATIO
○	B-1	N/A	25	SP/SM	3.3	118.5	0.422

CalLand Engineering, Inc
dba Quartech Consultants
Geotechnical, Environmental & Civil Engineering Services

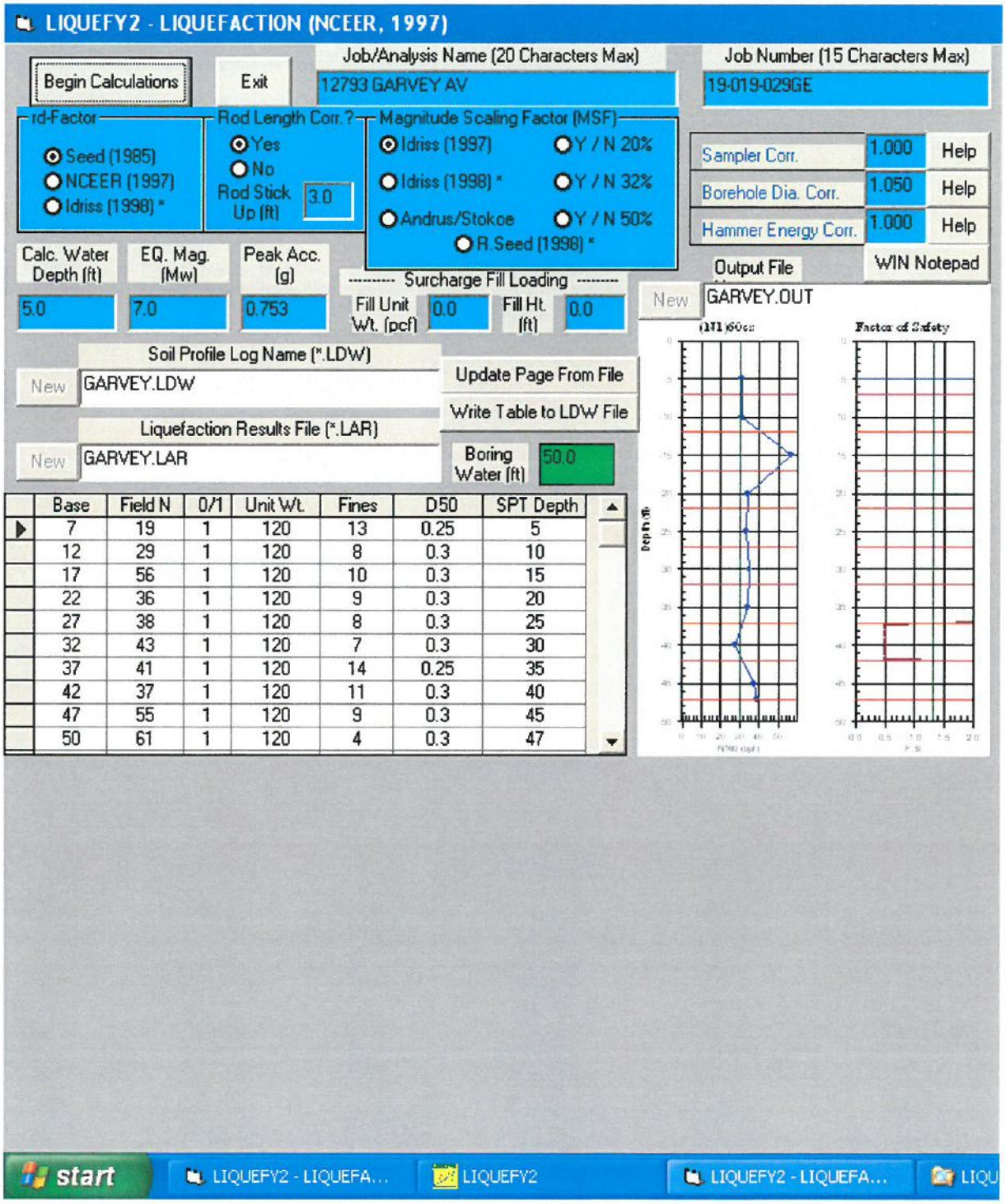
Project Address:
APN: 8550-005-061
12793 Garvey Avenue
Baldwin Park, California

CONSOLIDATION

(ASTM D2435)

11/19

FIGURE 6



	Base	Field N	0/1	Unit Wt.	Fines	D50	SPT Depth
▶	7	19	1	120	13	0.25	5
	12	29	1	120	8	0.3	10
	17	56	1	120	10	0.3	15
	22	36	1	120	9	0.3	20
	27	38	1	120	8	0.3	25
	32	43	1	120	7	0.3	30
	37	41	1	120	14	0.25	35
	42	37	1	120	11	0.3	40
	47	55	1	120	9	0.3	45
	50	61	1	120	4	0.3	47

```
*****************************
*                           *
*      L I Q U E F Y 2      *
*                           *
*       Version 1.50        *
*                           *
*****************************
```

EMPIRICAL PREDICTION OF
EARTHQUAKE-INDUCED LIQUEFACTION POTENTIAL

JOB NUMBER: 19-019-029GE DATE: 01-13-2020

JOB NAME: 12793 GARVEY AV

SOIL-PROFILE NAME: GARVEY.LDW

BORING GROUNDWATER DEPTH: 50.00 ft

CALCULATION GROUNDWATER DEPTH: 5.00 ft

DESIGN EARTHQUAKE MAGNITUDE: 7.00 Mw

SITE PEAK GROUND ACCELERATION: 0.753 g

BOREHOLE DIAMETER CORRECTION FACTOR: 1.05

SAMPLER SIZE CORRECTION FACTOR: 1.00

N60 HAMMER CORRECTION FACTOR: 1.00

MAGNITUDE SCALING FACTOR METHOD: Idriss (1997, in press)

Magnitude Scaling Factor: 1.193

rd-CORRECTION METHOD: Seed (1985)

FIELD SPT N-VALUES ARE CORRECTED FOR THE LENGTH OF THE DRIVE RODS.

Rod Stick-Up Above Ground: 3.0 ft

CN NORMALIZATION FACTOR: 1.044 tsf

MINIMUM CN VALUE: 0.6

NCEER [1997] Method — LIQUEFACTION ANALYSIS SUMMARY —

File Name: GARVEY.OUT

SOIL NO.	CALC. DEPTH (ft)	TOTAL STRESS (tsf)	EFF. STRESS (tsf)	FIELD N (B/ft)	FC DELTA N1_60	C N	CORR. (N1)60 (B/ft)	LIQUE. RESIST RATIO	r d	INDUC. STRESS RATIO	LIQUE. SAFETY FACTOR
1	0.25	0.015	0.015	19	2.92	*	*	*	*	*	**
1	0.75	0.045	0.045	19	2.92	*	*	*	*	*	**
1	1.25	0.075	0.075	19	2.92	*	*	*	*	*	**
1	1.75	0.105	0.105	19	2.92	*	*	*	*	*	**
1	2.25	0.135	0.135	19	2.92	*	*	*	*	*	**
1	2.75	0.165	0.165	19	2.92	*	*	*	*	*	**
1	3.25	0.195	0.195	19	2.92	*	*	*	*	*	**
1	3.75	0.225	0.225	19	2.92	*	*	*	*	*	**
1	4.25	0.255	0.255	19	2.92	*	*	*	*	*	**
1	4.75	0.285	0.285	19	2.92	*	*	*	*	*	**
1	5.25	0.315	0.307	19	2.92	1.865	30.8	Infin	0.990	0.497	NonLiq
1	5.75	0.345	0.322	19	2.92	1.865	30.8	Infin	0.989	0.519	NonLiq
1	6.25	0.375	0.336	19	2.92	1.865	30.8	Infin	0.987	0.539	NonLiq
1	6.75	0.405	0.350	19	2.92	1.865	30.8	Infin	0.986	0.558	NonLiq
2	7.25	0.435	0.365	29	0.68	1.319	30.8	Infin	0.985	0.575	NonLiq
2	7.75	0.465	0.379	29	0.68	1.319	30.8	Infin	0.984	0.591	NonLiq
2	8.25	0.495	0.394	29	0.68	1.319	30.8	Infin	0.983	0.605	NonLiq
2	8.75	0.525	0.408	29	0.68	1.319	30.8	Infin	0.982	0.618	NonLiq
2	9.25	0.555	0.422	29	0.68	1.319	30.8	Infin	0.981	0.631	NonLiq
2	9.75	0.585	0.437	29	0.68	1.319	30.8	Infin	0.980	0.642	NonLiq
2	10.25	0.615	0.451	29	0.68	1.319	30.8	Infin	0.979	0.653	NonLiq
2	10.75	0.645	0.466	29	0.68	1.319	30.8	Infin	0.978	0.663	NonLiq
2	11.25	0.675	0.480	29	0.68	1.319	30.8	Infin	0.977	0.672	NonLiq
2	11.75	0.705	0.494	29	0.68	1.319	30.8	Infin	0.976	0.681	NonLiq
3	12.25	0.735	0.509	56	2.05	1.077	56.8	Infin	0.974	0.689	NonLiq
3	12.75	0.765	0.523	56	2.05	1.077	56.8	Infin	0.973	0.697	NonLiq
3	13.25	0.795	0.538	56	2.05	1.077	56.8	Infin	0.972	0.704	NonLiq
3	13.75	0.825	0.552	56	2.05	1.077	56.8	Infin	0.971	0.711	NonLiq
3	14.25	0.855	0.566	56	2.05	1.077	56.8	Infin	0.970	0.717	NonLiq
3	14.75	0.885	0.581	56	2.05	1.077	56.8	Infin	0.969	0.723	NonLiq
3	15.25	0.915	0.595	56	2.05	1.077	56.8	Infin	0.968	0.728	NonLiq
3	15.75	0.945	0.610	56	2.05	1.077	56.8	Infin	0.967	0.734	NonLiq
3	16.25	0.975	0.624	56	2.05	1.077	56.8	Infin	0.966	0.739	NonLiq
3	16.75	1.005	0.638	56	2.05	1.077	56.8	Infin	0.965	0.743	NonLiq
4	17.25	1.035	0.653	36	1.12	0.933	34.0	Infin	0.964	0.748	NonLiq
4	17.75	1.065	0.667	36	1.12	0.933	34.0	Infin	0.963	0.752	NonLiq
4	18.25	1.095	0.682	36	1.12	0.933	34.0	Infin	0.961	0.756	NonLiq
4	18.75	1.125	0.696	36	1.12	0.933	34.0	Infin	0.960	0.760	NonLiq
4	19.25	1.155	0.710	36	1.12	0.933	34.0	Infin	0.959	0.763	NonLiq
4	19.75	1.185	0.725	36	1.12	0.933	34.0	Infin	0.958	0.766	NonLiq
4	20.25	1.215	0.739	36	1.12	0.933	34.0	Infin	0.956	0.769	NonLiq
4	20.75	1.245	0.754	36	1.12	0.933	34.0	Infin	0.955	0.772	NonLiq
4	21.25	1.275	0.768	36	1.12	0.933	34.0	Infin	0.954	0.775	NonLiq

File Name: GARVEY.OUT

SOIL NO.	CALC. DEPTH (ft)	TOTAL STRESS (tsf)	EFF. STRESS (tsf)	FIELD N (B/ft)	FC DELTA N1_60	C N	CORR. (N1)60 (B/ft)	LIQUE. RESIST RATIO	r d	INDUC. STRESS RATIO	LIQUE. SAFETY FACTOR
4	21.75	1.305	0.782	36	1.12	0.933	34.0	Infin	0.952	0.777	NonLiq
5	22.25	1.335	0.797	38	0.71	0.834	33.4	Infin	0.951	0.780	NonLiq
5	22.75	1.365	0.811	38	0.71	0.834	33.4	Infin	0.949	0.782	NonLiq
5	23.25	1.395	0.826	38	0.71	0.834	33.4	Infin	0.948	0.784	NonLiq
5	23.75	1.425	0.840	38	0.71	0.834	33.4	Infin	0.946	0.786	NonLiq
5	24.25	1.455	0.854	38	0.71	0.834	33.4	Infin	0.945	0.787	NonLiq
5	24.75	1.485	0.869	38	0.71	0.834	33.4	Infin	0.943	0.789	NonLiq
5	25.25	1.515	0.883	38	0.71	0.834	33.4	Infin	0.941	0.790	NonLiq
5	25.75	1.545	0.898	38	0.71	0.834	33.4	Infin	0.939	0.791	NonLiq
5	26.25	1.575	0.912	38	0.71	0.834	33.4	Infin	0.938	0.792	NonLiq
5	26.75	1.605	0.926	38	0.71	0.834	33.4	Infin	0.936	0.793	NonLiq
6	27.25	1.635	0.941	43	0.41	0.762	34.8	Infin	0.934	0.794	NonLiq
6	27.75	1.665	0.955	43	0.41	0.762	34.8	Infin	0.931	0.795	NonLiq
6	28.25	1.695	0.970	43	0.41	0.762	34.8	Infin	0.929	0.795	NonLiq
6	28.75	1.725	0.984	43	0.41	0.762	34.8	Infin	0.927	0.795	NonLiq
6	29.25	1.755	0.998	43	0.41	0.762	34.8	Infin	0.925	0.796	NonLiq
6	29.75	1.785	1.013	43	0.41	0.762	34.8	Infin	0.922	0.796	NonLiq
6	30.25	1.815	1.027	43	0.41	0.762	34.8	Infin	0.920	0.795	NonLiq
6	30.75	1.845	1.042	43	0.41	0.762	34.8	Infin	0.917	0.795	NonLiq
6	31.25	1.875	1.056	43	0.41	0.762	34.8	Infin	0.914	0.795	NonLiq
6	31.75	1.905	1.070	43	0.41	0.762	34.8	Infin	0.912	0.794	NonLiq
7	32.25	1.935	1.085	41	3.49	0.705	33.8	Infin	0.909	0.793	NonLiq
7	32.75	1.965	1.099	41	3.49	0.705	33.8	Infin	0.906	0.792	NonLiq
7	33.25	1.995	1.114	41	3.49	0.705	33.8	Infin	0.903	0.791	NonLiq
7	33.75	2.025	1.128	41	3.49	0.705	33.8	Infin	0.899	0.790	NonLiq
7	34.25	2.055	1.142	41	3.49	0.705	33.8	Infin	0.896	0.789	NonLiq
7	34.75	2.085	1.157	41	3.49	0.705	33.8	Infin	0.893	0.788	NonLiq
7	35.25	2.115	1.171	41	3.49	0.705	33.8	Infin	0.889	0.786	NonLiq
7	35.75	2.145	1.186	41	3.49	0.705	33.8	Infin	0.886	0.784	NonLiq
7	36.25	2.175	1.200	41	3.49	0.705	33.8	Infin	0.882	0.783	NonLiq
7	36.75	2.205	1.214	41	3.49	0.705	33.8	Infin	0.878	0.781	NonLiq
8	37.25	2.235	1.229	37	1.89	0.660	27.5	0.323	0.874	0.779	0.50
8	37.75	2.265	1.243	37	1.89	0.660	27.5	0.323	0.871	0.776	0.50
8	38.25	2.295	1.258	37	1.89	0.660	27.5	0.323	0.866	0.774	0.50
8	38.75	2.325	1.272	37	1.89	0.660	27.5	0.323	0.862	0.771	0.50
8	39.25	2.355	1.286	37	1.89	0.660	27.5	0.323	0.858	0.769	0.50
8	39.75	2.385	1.301	37	1.89	0.660	27.5	0.323	0.854	0.766	0.50
8	40.25	2.415	1.315	37	1.89	0.660	27.5	0.323	0.849	0.763	0.51
8	40.75	2.445	1.330	37	1.89	0.660	27.5	0.323	0.845	0.760	0.51
8	41.25	2.475	1.344	37	1.89	0.660	27.5	0.323	0.840	0.757	0.51
8	41.75	2.505	1.358	37	1.89	0.660	27.5	0.323	0.836	0.754	0.51
9	42.25	2.535	1.373	55	1.17	0.622	37.1	Infin	0.831	0.751	NonLiq
9	42.75	2.565	1.387	55	1.17	0.622	37.1	Infin	0.826	0.748	NonLiq
9	43.25	2.595	1.402	55	1.17	0.622	37.1	Infin	0.822	0.744	NonLiq

File Name: GARVEY.OUT

SOIL NO.	CALC. DEPTH (ft)	TOTAL STRESS (tsf)	EFF. STRESS (tsf)	FIELD N (B/ft)	FC DELTA N1_60	C N	CORR. (N1)60 (B/ft)	LIQUE. RESIST RATIO	r d	INDUC. STRESS RATIO	LIQUE. SAFETY FACTOR
9	43.75	2.625	1.416	55	1.17	0.622	37.1	Infin	0.817	0.741	NonLiq
9	44.25	2.655	1.430	55	1.17	0.622	37.1	Infin	0.812	0.737	NonLiq
9	44.75	2.685	1.445	55	1.17	0.622	37.1	Infin	0.807	0.734	NonLiq
9	45.25	2.715	1.459	55	1.17	0.622	37.1	Infin	0.802	0.730	NonLiq
9	45.75	2.745	1.474	55	1.17	0.622	37.1	Infin	0.797	0.726	NonLiq
9	46.25	2.775	1.488	55	1.17	0.622	37.1	Infin	0.792	0.723	NonLiq
9	46.75	2.805	1.502	55	1.17	0.622	37.1	Infin	0.787	0.719	NonLiq
10	47.25	2.835	1.517	61	0.05	0.608	39.0	Infin	0.782	0.715	NonLiq
10	47.75	2.865	1.531	61	0.05	0.608	39.0	Infin	0.776	0.711	NonLiq
10	48.25	2.895	1.546	61	0.05	0.608	39.0	Infin	0.771	0.707	NonLiq
10	48.75	2.925	1.560	61	0.05	0.608	39.0	Infin	0.766	0.703	NonLiq
10	49.25	2.955	1.574	61	0.05	0.608	39.0	Infin	0.761	0.699	NonLiq
10	49.75	2.985	1.589	61	0.05	0.608	39.0	Infin	0.756	0.695	NonLiq

LIQUEFACTION INDUCED SETTLEMENT

References:

1. "Evaluation of Settlement in Sands Due to Earthquake Shaking", Seed, et. al., ASCE Journal of Geotechnical Engineering, Page 861 – 878, Vol. 113, No. 8, August 1987

2. "Manual for Evaluation and Mitigation of Liquefaction Hazard for Foundation Design", Workshop on Seismic Hazards Mapping Act, Los Angeles, January 1998

Recommended Fine Correction (Ref 2)

Percent of Fine	N_{corr}(Blow/ft)
10	1
25	2
50	4
75	5

Job # 19-019-029 Address: 12793 Garvey Ave., Baldwin Park, CA
January 13, 2020

From Liquefaction Study: **B-1**

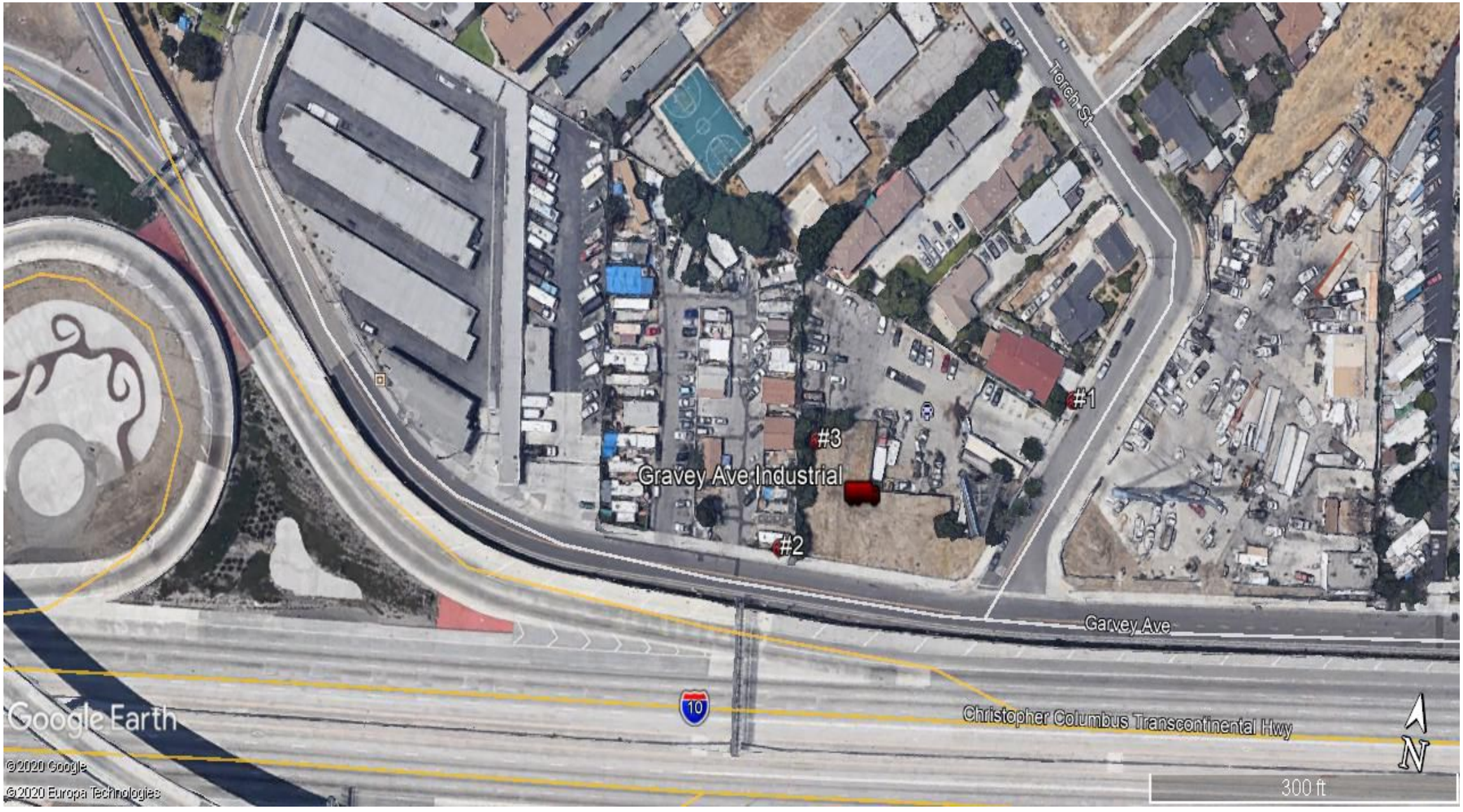
Soil Layer with FS < 1.30

From Reference 1: Earthquake Magnitude Correction
r_m = 0.65/(0.1(M-1)) = 0.65/(0.1(7.0-1)) = 1.08

Layer	Depth (feet)	τ/δ	Percent of Fine	(N1)	$(N1)_{60, corr}$	Volumetric Strain ε	Settlement (inch)
1	37-42	0.766	10.9	37	27.5	1.10%	0.66

Total Settlement: **0.66 Inches**

Differential Settlement
67% x total settlement = 0.67 x 0.66= **0.44 Inches**



Map Date: *8/24/2020*
Photo (or Base) Source: *Google Earth Pro*

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

12793 Garvey Avenue Industrial Baseline Noise Measurements

2020-106

Site Number: 1			
Recorded By: Lindsay Leigler			
Job Number: 2020-106			
Date: 8/27/2020			
Time: 9:20			
Location: On sidewalk along Wescott Avenue			
Source of Peak Noise: Construction/ truck noise from Hadley Tow Yard			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
71.1	52.0	89.5	123.7

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0005120**	**8/05/2019**	
	Microphone	**Larson Davis**	**377B02**	**174464**	**8/05/2019**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**042852**	**8/05/2019**	
	Calibrator	**Larson Davis**	**CAL200**	**14105**	**8/02/2019**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** Clear
	Note: dBA Offset = -0.05		**Sensor Height (ft):** 3.5 ft
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	1 mph	81	29.75

Photo of Measurement Location

N – Single family homes
S – Hadley Tow Yard, Wescott Ave.
E – Wescott Ave.
W – Single family home

Located ~5 feet west of Wescott Ave. on sidewalk. Lots of truck activity occurring in Hadley Tow Yard. Constant ambient noise from I-10 freeway.

LXT – Data. 345

Measurement Report

Report Summary

Meter's File Name	LxT_Data.345	Computer's File Name	SLM_0005120_LxT_Data_345.00.ldbin
Meter	LxT SE		
Firmware	2.302		
User	Lindsay Liegler	Location	
Description	2020-106		
Note			
Start Time	2020-08-27 09:19:35	Duration	0:11:23.5
End Time	2020-08-27 09:30:59	Run Time	0:11:23.5
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	71.1 dB		
LAE	99.4 dB	SEA	133.7 dB
EA	972.6 µPa²h		
LZ_{peak}	123.7 dB	2020-08-27 09:20:17	
LAS_{max}	89.5 dB	2020-08-27 09:20:17	
LAS_{min}	52.0 dB	2020-08-27 09:19:35	
LA_{eq}	71.1 dB		
LC_{eq}	77.9 dB	LC_{eq} - LA_{eq}	6.8 dB
LAI_{eq}	78.6 dB	LAI_{eq} - LA_{eq}	7.5 dB

Exceedances	Count	Duration
LAS > 85.0 dB	1	0:00:01.8
LAS > 115.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	71.1 dB	71.1 dB	0.0 dB

	LDEN	LDay	LEve	LNight
	71.1 dB	71.1 dB	--- dB	--- dB

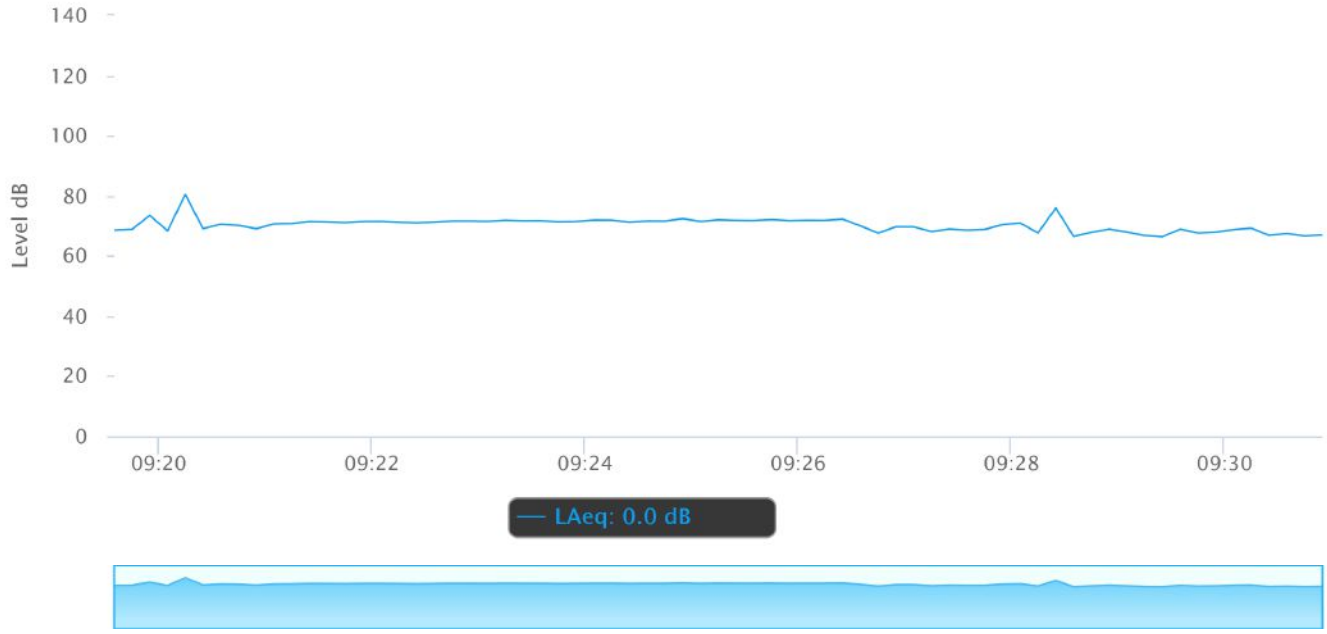
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	71.1 dB		77.9 dB		--- dB	
$Ls_{(max)}$	89.5 dB	2020-08-27 09:20:17	--- dB		--- dB	
$LS_{(min)}$	52.0 dB	2020-08-27 09:19:35	--- dB		--- dB	
$L_{Peak(max)}$	--- dB		--- dB		123.7 dB	2020-08-27 09:20:17

Overloads	Count	Duration	OBA Count	OBA Duration
	1	0:00:02.1	55	0:03:11.8

Statistics

LAS 5.0	72.3 dB
LAS 10.0	72.0 dB
LAS 33.3	71.4 dB
LAS 50.0	70.9 dB
LAS 66.6	68.8 dB
LAS 90.0	67.1 dB

Time History



Site Number: 2			
Recorded By: Lindsay Liegler			
Job Number: 2020-106			
Date: 8/27/2020			
Time: 9:33			
Location: 3 feet north of Garvey Ave. on sidewalk			
Source of Peak Noise: Cars along Garvey Ave., I-10 Freeway			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
68.7	65.7	78.4	112.7

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0005120**	**8/05/2019**	
	Microphone	**Larson Davis**	**377B02**	**174464**	**8/05/2019**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**042852**	**8/05/2019**	
	Calibrator	**Larson Davis**	**CAL200**	**14105**	**8/02/2019**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** clear
	Note: dBA Offset = -0.05		**Sensor Height (ft):** 3.5 ft
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	1 mph	82	29.75

Photo of Measurement Location

N – Vacant lot, single family home
S – Garvey Ave.
E – Vacant lot, Hadley Tow
W – Mobile home park

Located on sidewalk north of Garvey Ave. Ambient noise from freeway. A few cars and trucks passed on Garvey.

LZT – Data. 346

Measurement Report

Report Summary

Meter's File Name	LxT_Data.346	Computer's File Name	SLM_0005120_LxT_Data_346.00.ldbin
Meter	LxT SE		
Firmware	2.302		
User	Lindsay Liegler	Location	
Description	2020-106		
Note			
Start Time	2020-08-27 09:35:04	Duration	0:10:04.3
End Time	2020-08-27 09:45:08	Run Time	0:10:04.3
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	68.7 dB		
LAE	96.5 dB	SEA	--- dB
EA	500.1 µPa²h		
LZ_{peak}	112.7 dB	2020-08-27 09:35:06	
LAS_{max}	78.4 dB	2020-08-27 09:41:44	
LAS_{min}	65.7 dB	2020-08-27 09:35:04	
LA_{eq}	68.7 dB		
LC_{eq}	79.0 dB	LC_{eq} - LA_{eq}	10.3 dB
LAI_{eq}	70.4 dB	LAI_{eq} - LA_{eq}	1.6 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
68.7 dB	68.7 dB	0.0 dB

LDEN	LDay	LEve	LNight
68.7 dB	68.7 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	68.7 dB		79.0 dB		--- dB	
$Ls_{(max)}$	78.4 dB	2020-08-27 09:41:44	--- dB		--- dB	
$LS_{(min)}$	65.7 dB	2020-08-27 09:35:04	--- dB		--- dB	
$L_{Peak(max)}$	--- dB		--- dB		112.7 dB	2020-08-27 09:35:06

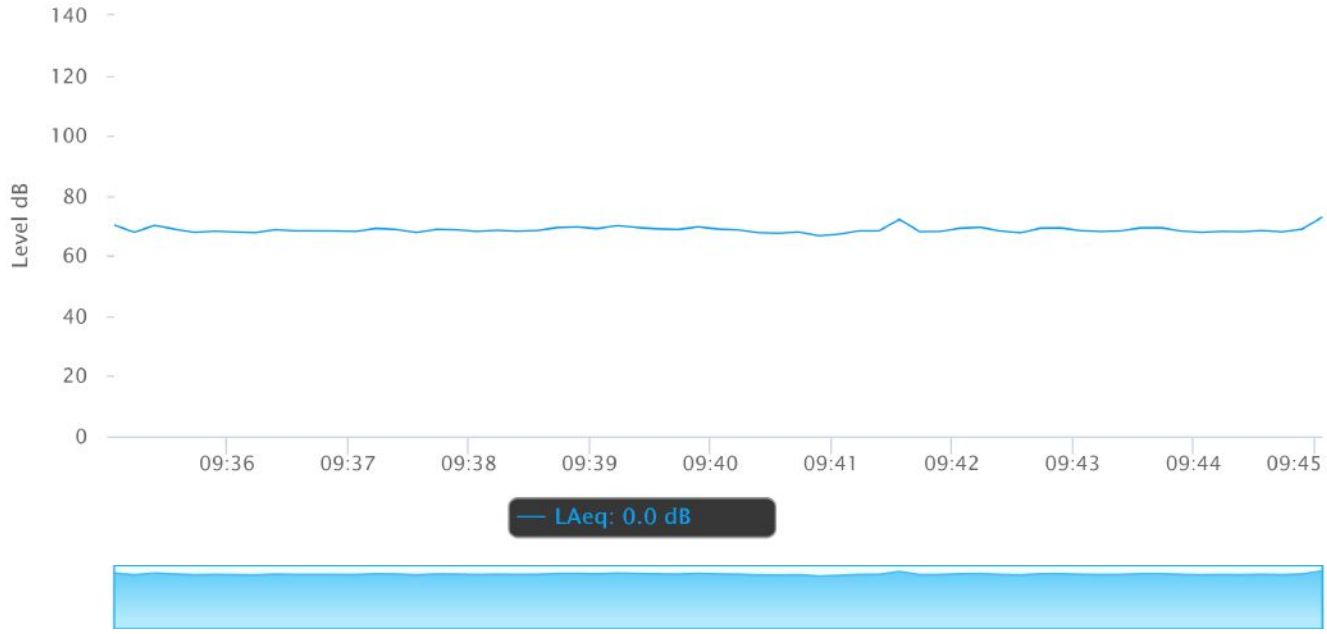
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	50	0:04:18.8

Statistics

LAS 5.0	70.1 dB
LAS 10.0	69.6 dB
LAS 33.3	68.8 dB
LAS 50.0	68.4 dB
LAS 66.6	68.1 dB
LAS 90.0	67.5 dB

Time History



Site Number: 3			
Recorded By: Lindsay Liegler			
Job Number: 2020-106			
Date: 8/27/2020			
Time: 9:47			
Location: Within mobile home park, west of project site			
Source of Peak Noise: I-10 Freeway; I-606 Freeway			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
60.4	55.4	74.8	107.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0005120**	**8/05/2019**	
	Microphone	**Larson Davis**	**377B02**	**174464**	**8/05/2019**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**042852**	**8/05/2019**	
	Calibrator	**Larson Davis**	**CAL200**	**14105**	**8/02/2019**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** clear
	Note: dBA Offset = -0.05		**Sensor Height (ft):** 3.5 ft.
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	1 mph	83	29.75

Photo of Measurement Location

N – Mobile homes
S – Mobile homes, Garvey Ave.
E – Mobile homes, Hadley Tow
W – Mobile homes, storage warehouse

Located in northwest portion of mobile home park west of project site. Fairly quiet except ambient noise from freeways.

LXT – Data. 347

Measurement Report

Report Summary

Meter's File Name	LxT_Data.347	Computer's File Name	SLM_0005120_LxT_Data_347.00.ldbin
Meter	LxT SE		
Firmware	2.302		
User	Lindsay Liegler	Location	
Description	2020-106		
Note			
Start Time	2020-08-27 09:48:02	Duration	0:10:10.0
End Time	2020-08-27 09:58:12	Run Time	0:10:10.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	60.4 dB		
LAE	88.2 dB	SEA	--- dB
EA	74.1 µPa²h		
LZ_{peak}	107.8 dB	2020-08-27 09:54:07	
LAS_{max}	74.8 dB	2020-08-27 09:54:07	
LAS_{min}	55.4 dB	2020-08-27 09:48:02	
LA_{eq}	60.4 dB		
LC_{eq}	71.9 dB	LC_{eq} - LA_{eq}	11.5 dB
LAI_{eq}	65.2 dB	LAI_{eq} - LA_{eq}	4.8 dB

Exceedances	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	60.4 dB	60.4 dB	0.0 dB

	LDEN	LDay	LEve	LNight
	60.4 dB	60.4 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	60.4 dB		71.9 dB		--- dB	
$Ls_{(max)}$	74.8 dB	2020-08-27 09:54:07	--- dB		--- dB	
$LS_{(min)}$	55.4 dB	2020-08-27 09:48:02	--- dB		--- dB	
$L_{Peak(max)}$	--- dB		--- dB		107.8 dB	2020-08-27 09:54:07

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	6	0:00:24.3

Statistics

LAS 5.0	62.1 dB
LAS 10.0	61.4 dB
LAS 33.3	60.3 dB
LAS 50.0	59.8 dB
LAS 66.6	59.3 dB
LAS 90.0	58.4 dB

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-106
Project Name: 12793 Garvey Ave. Industrial Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: KOA 2020
Community Noise Descriptor: L_{dn}: _____ CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Distance from Centerline of Roadway: CNEL at 100 Feet	Distance to Contour: 70 CNEL	65 CNEL	60 CNEL	55 CNEL
Buildout with Project												
Interstate 10												
Between I-605 Onramp and Frazier Offramp	10	18	222,000	45	0.5	1.8%	0.7%	**76.3**	264	569	1,227	2,643
Interstate 605												
Between I-10 Offramp and Ramona Blvd Offramp	7	30	197,000	35	0.5	1.8%	0.7%	**72.6**	149	320	689	1,485

Cumulative Plus Project Conditions

Cumulative Plus Project Conditions

Cumulative Plus Project Conditions

[1] Distance is from the centerline of the roadway segment to the receptor location.
"-" = contour is located within the roadway right-of-way.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/1/2020
Case Description: Site Preparation

Description	**Land Use**
Mobile Home Park	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**	**Estimated Shielding (dBA)**
Front End Loader	No	40		79.1	65	0

Results

Calculated (dBA)

Equipment		***Lmax**	**Leq**
Front End Loader		76.8	72.9
	Total	**76.8**	**72.9**

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/1/2020
Case Description: Grading

Description	**Land Use**
Mobile Home Park	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**	**Estimated Shielding (dBA)**
Front End Loader	No	40		79.1	65	0
Backhoe	No	40		77.6	65	0
Excavator	No	40		80.7	65	0

Results

Calculated (dBA)

Equipment		***Lmax**	**Leq**
Front End Loader		76.8	72.9
Backhoe		75.3	71.3
Excavator		78.4	74.5
	Total	**78.4**	**77.8**

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/1/2020
Case Description: Building Const., Paving, Arch. Coating

Description	**Land Use**
Mobile Home Park	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**	**Estimated Shielding (dBA)**
Crane	No	16		80.6	65	0
Gradall	No	40		83.4	65	0
Backhoe	No	40		77.6	65	0
Gradall	No	40		83.4	65	0
Backhoe	No	40		77.6	65	0
Concrete Mixer Truck	No	40		78.8	65	0
Concrete Mixer Truck	No	40		78.8	65	0
Concrete Mixer Truck	No	40		78.8	65	0
Concrete Mixer Truck	No	40		78.8	65	0
Paver	No	50		77.2	65	0
Roller	No	20		80	65	0
Backhoe	No	40		77.6	65	0
Compressor (air)	No	40		77.7	65	0

Results

Calculated (dBA)

Equipment	***Lmax**	**Leq**
Crane	78.3	70.3
Gradall	81.1	77.1
Backhoe	75.3	71.3
Gradall	81.1	77.1
Backhoe	75.3	71.3
Concrete Mixer Truck	76.5	72.5
Concrete Mixer Truck	76.5	72.5
Concrete Mixer Truck	76.5	72.5
Concrete Mixer Truck	76.5	72.5
Paver	74.9	71.9
Roller	77.7	70.7
Backhoe	75.3	71.3
Compressor (air)	75.4	71.4
Total	**81.1**	**84.3**

*Calculated Lmax is the Loudest value.

TRAFFIC IMPACT STUDY

12793 Garvey Avenue
Baldwin Park, CA

October 2020

Prepared For:

ECORP Consulting, Inc.
2861 Pullman Street.
Santa Ana, CA 92705

JC01111

Rev. 2

Prepared by:

1100 Corporate Center
Drive, Suite 201
Monterey Park, CA 91754
(323) 260-4703

TABLE OF CONTENTS

1. INTRODUCTION 1

2. EXISTING CONDITIONS 3

2.1 SPEED SURVEY 3
2.2 AVERAGE DAILY TRAFFIC 3

3. PROJECT TRIPS 4

3.1 PROJECT TRIP GENERATION 4
3.2 SIGHT DISTANCE AT DRIVEWAY/WESTCOTT AVENUE INTERSECTION 4
3.3 REQUIRED AND PROVIDED PARKING 5
3.4 VEHICLE MILES TRAVELED 5

4. ANALYSIS SUMMARY AND CONCLUSION 7

FIGURES

FIGURE 1- PROJECT SITE PLAN 2

TABLES

TABLE 1 – PROJECT TRIP GENERATION 4

APPENDICES

APPENDIX A – SPEED SURVEY AND TRAFFIC VOLUME DATA

1. INTRODUCTION

The proposed Project is a warehouse use to be located at 12793 Garvey Avenue, within the City of Baldwin Park. KOA Corporation has been retained by ECORP Consulting, Inc. to analyze the potential traffic impacts associated with the Project. The scope and methodologies used for this traffic study were defined by the project CEQA analysis request for proposals documentation issued by the City of Baldwin Park.

The new 20,847 square foot proposed warehouse project consists of a total of 3,308 square feet of office space, and 17,539 square feet of warehousing/ storage space.

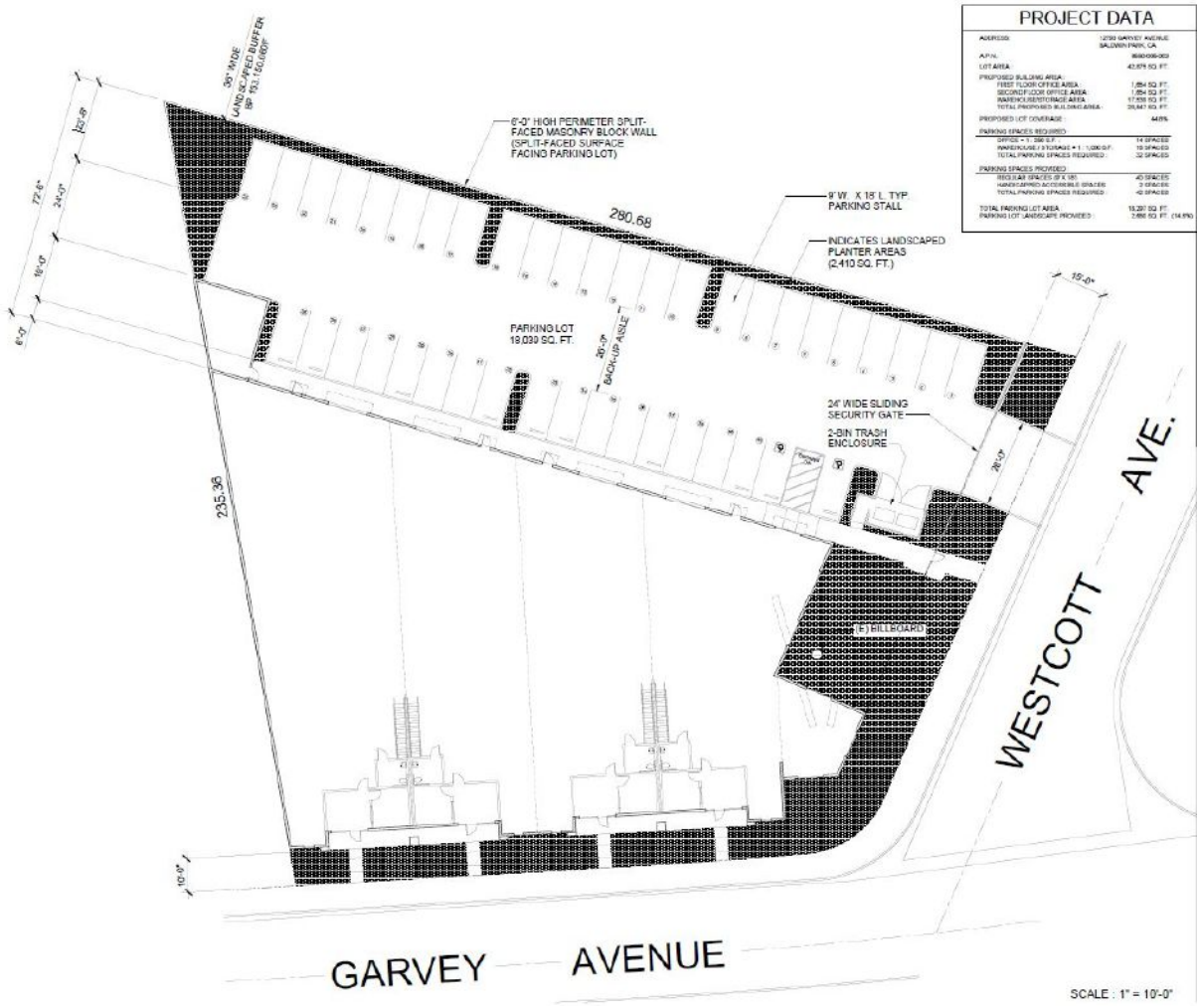
A total of 32 off-street parking spaces are required for the proposed Project and a total of 42 off-street parking spaces will be provided. On-site parking access would be provided with access on Westcott Avenue. The proposed Project site plan is illustrated on **Figure 1**.

The existing roadway speeds and daily traffic volumes on Garvey Avenue at the Project site were reviewed, and sight distance issues were also reviewed for this report. Project trip generation was calculated from rates defined by the 10th Edition of the Institute of Transportation Engineers' *Trip Generation*.

For CEQA compliance, a review of exemptions was conducted and the proposed Project was determined to be exempt from CEQA analysis based on the estimated daily vehicle trips total.

Traffic analysis items are discussed in Section 3.

Figure 1- Project Site Plan



2. EXISTING CONDITIONS

This section describes the existing conditions within the study area in terms of roadway facilities.

Currently, the site is divided in two areas by chain-link fencing. The southern side is vacant while the northern portion of the site serves as an operational vehicle-towing storage facility. The overall lot size is 42,875 square feet.

Garvey Avenue provides one travel lane in each direction. The speed limit is 35 miles per hour (prima facie). On-street parking is generally permitted on both sides of the roadway with the exception of the 2nd and 4th Thursdays of each month from Noon to 4PM.

2.1 SPEED SURVEY

Speed survey results on Garvey Avenue indicate that the 85th percentile combined speed is 42 MPH. With a current design speed of 40 mph, 42 mph is not a significant deviation that denotes any major speeding issues.

2.2 AVERAGE DAILY TRAFFIC

Garvey Avenue has a combined (bi-directional) 24-hour average daily traffic count (ADT) of 960 vehicles. During the AM peak hour there is a volume of 50 vehicles in both directions, and during the PM peak hour there is a volume of 70 vehicles in both directions.

3. PROJECT TRIPS

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution and trip assignment.

3.1 PROJECT TRIP GENERATION

Trip generation of the Project was derived from rates defined by *Trip Generation, 10th Edition,* published by the Institute of Transportation Engineers. The project trip calculations are provided in Table 1.

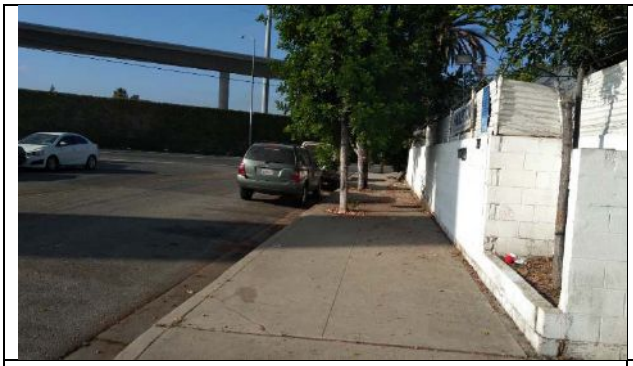
Table 1 – Project Trip Generation

				Weekday						
				Daily	AM Peak Hour			PM Peak Hour		
ITE Code	Land Use	Intensity	Units	Rate	Rate	In	Out	Rate	In	Out
Trip Generation Rates										
150	Warehousing	-	KSF	1.74	0.17	77%	23%	0.19	27%	73%
710	General Office	-	KSF	9.74	1.16	86%	14%	1.15	16%	84%
Trip Generation Totals-New Use										
150	Warehousing	17.539	KSF	31	3	2	1	3	1	2
710	General Office	3.308	KSF	32	4	3	1	4	1	3
Total		**20.847**	**KSF**	**63**	**7**	**6**	**1**	**7**	**2**	**6**

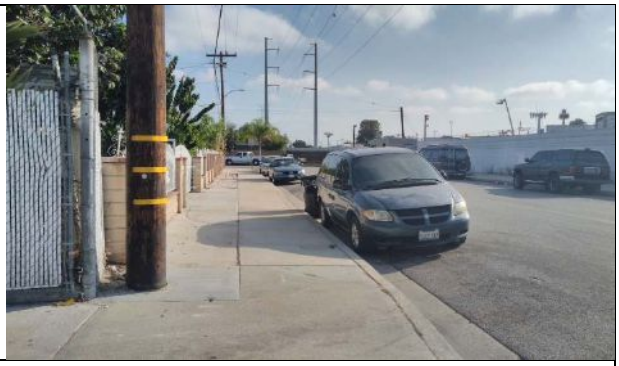
The project is estimated to generate 63 daily trips, including 7 vehicle trips during the a.m. peak-hour (6 inbound trips and 1 outbound trips) and 7 vehicle trips during the p.m. peak hour (2 inbound trips and 6 outbound trips). These additional trips would have a negligible effect on area roadway operations and significant traffic impacts would not occur.

3.2 SIGHT DISTANCE AT DRIVEWAY/WESTCOTT AVENUE INTERSECTION

Sight distance conditions at the driveway intersection with Westcott Avenue, the primary project site access point to the local roadway system, was analyzed based on standards in the Caltrans Highway Design Manual. The project driveway is on a road that has a 25 mile per hour speed limit (prima facie speed applies, as regulatory signs are not posted in the vicinity). The photos below provide views of typical sight distance for a vehicle, for both directions of Westcott Avenue, at this location.



View from driveway intersection, towards the south on Westcott Avenue unto the Stop-controlled intersection with Garvey Avenue



View from driveway intersection, Towards the north on Westcott Avenue. View meets the 200 foot required stopping distance from the driveway

The Highway Design Manual, in Table 201.1 Sight Distance Standards, defines the sight distance for roadways based on design speeds. Based on the 25 mph speed limit (prima facie) on Westcott Avenue, the design speed would be 30 mph. The stopping distance related to the 30 mph speed is 200 feet.

From the project driveway, the 200-foot distance would not extend to any horizontal curves or major permanent obstructions to the north or south of the driveway. Neither would there be any horizontal curves or major obstructions within 200 feet east or west of Garvey Avenue/Westcott Avenue. The project trip generation is also not expected to increase by a large amount and the driveway on Westcott Avenue will operate in the same manner with the project as it does under existing conditions.

3.3 REQUIRED AND PROVIDED PARKING

Currently there are six parking spaces provided on site at the existing site facility. The proposed project requires 32 spaces, and 42 spaces of off-street parking would be provided with two stalls being ADA parking stalls.

3.4 VEHICLE MILES TRAVELED

The vehicle miles traveled analysis was based on current published CEQA guidelines and the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, of December 2018. Senate Bill (SB) 743 has defined VMT as the primary metric for CEQA transportation impact analysis, and the Technical Advisory was created to guide CEQA transportation analysis efforts.

The analysis provided below indicates that the Project is exempt from a CEQA transportation analysis, based on its estimated trip generation being below a 110-trip threshold.

There are four screening thresholds for land use projects that are defined by the Technical Advisory. These were applied to the project characteristics and location to determine if a project exemption from CEQA analysis would be the recommended course of action:

1) Screening Threshold for Small Projects
2) Map-Based Screening for Residential and Office Projects
3) Presumption of Less than Significant Impact Near Transit Stations
4) Presumption of Less Than Significant Impact for Affordable Residential Development

Thresholds 2 and 4 are removed from consideration here, as residential and dedicated office uses, and affordable residential uses, are not proposed at the Project site. Thresholds 1 and 3 are therefore reviewed below.

<u>Criterion #1 – Small Projects</u>

This criterion states that a project can be determined to have a less than significant impact due to project location, size, or land use type. The screening threshold is defined as follows:

> "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact."

As the Project has been estimated to generate 63 trips on a daily basis, it is exempt from CEQA analysis based on this criterion.

Criterion #3 – Presumption of Less than Significant Impact near Transit Stations

This criterion defines an exemption for projects located within a Transit Priority Area (TPA), which are defined by both OPR and the Southern California Association of Governments (SCAG). The Project site is not located within a TPA, which is generally defined by the presence of a station or stop on a major bus or rail line.

4. ANALYSIS SUMMARY AND CONCLUSION

The following summarizes the traffic study conclusions and recommendations:

Project Background

- The new 20,847 square foot proposed warehouse project consists of a total of 3,308 square feet of office space, and 17,539 square feet of warehousing/ storage space.

- A total of 42 parking spaces would be provided for the Project.

Project Trip Generation

- Trip generation of the Project was derived from the 10th Edition of the Institute of Transportation Engineers' *Trip Generation*.

- The project is expected to generate 63 daily trips, including 7 vehicle trips during the a.m. peak-hour (6 inbound trips and 1 outbound trips) and 7 vehicle trips during the p.m. peak hour (2 inbound trips and 6 outbound trips). These additional trips would have a negligible effect on area roadway operations and significant traffic impacts would not occur.

Traffic Impacts

- Based on the current number of project trips, the proposed Project would not likely create any significant traffic impacts on nearby roadways.

- For CEQA compliance, a review of exemptions was conducted and the proposed Project was determined to be exempt from CEQA analysis based on the estimated daily vehicle trips total.

Vehicle Speeds

- Speed survey results on Garvey Avenue indicate that the 85th percentile combined speed is 42 MPH. With a current design speed of 40 mph, 42 mph is not a significant deviation that denotes any major speeding issues.

Sight Distance

- From the project driveway, a 200-foot sight distance would not extend to any horizontal curves or major permanent obstructions to the north or south of the driveway.

- The project trip generation is also not expected to increase by a large amount and the driveway on Westcott Avenue will operate in the same manner with the project as it does under existing conditions.

Provided Parking

- Currently there are six parking spaces provided for the active use on the project site. The proposed project requires 32 spaces of parking and 42 spaces of parking would be provided with two stalls being ADA parking stalls.

APPENDIX A Speed Survey and Traffic Volume Data

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Baldwin Park
Garvey Avenue
Near 12793 Garvey Avenue
24 Hour Directional Speed Survey

BNPGA12793
Site Code: 041-20275

Eastbound, Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
07/29/20	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
01:00	1	3	0	0	0	3	1	0	0	0	0	0	0	0	8
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	2	1	1	0	0	0	0	0	0	0	5
04:00	0	0	1	4	2	5	5	5	0	0	0	0	0	0	22
05:00	0	2	2	1	0	5	3	1	1	0	0	0	0	0	15
06:00	0	4	2	3	11	9	9	2	1	0	0	0	0	0	41
07:00	1	3	4	4	1	10	3	3	1	0	0	0	0	0	30
08:00	1	5	10	5	8	14	6	1	0	0	0	0	0	0	50
09:00	0	1	1	6	12	19	2	7	0	0	0	0	0	0	48
10:00	1	3	1	3	9	8	6	1	0	0	0	0	0	0	32
11:00	2	2	5	8	11	10	9	3	1	0	0	0	0	0	51
12 PM	1	1	1	12	12	14	8	4	2	0	0	0	0	0	55
13:00	0	4	3	6	16	10	7	3	2	0	0	0	0	0	51
14:00	0	4	4	11	17	13	5	3	0	0	0	0	0	0	57
15:00	0	4	4	5	15	17	11	8	3	1	0	0	0	0	68
16:00	0	5	9	7	14	13	10	3	0	0	0	0	0	0	61
17:00	0	1	7	5	14	18	13	2	1	0	0	0	0	0	61
18:00	2	3	6	11	12	13	11	8	3	1	0	0	0	0	70
19:00	0	8	10	7	17	18	7	4	0	0	1	0	0	0	72
20:00	1	4	10	14	16	15	4	4	1	0	0	0	1	0	70
21:00	1	8	4	8	7	9	6	1	1	0	0	0	1	0	46
22:00	0	0	2	4	4	8	5	0	0	0	0	0	0	0	23
23:00	0	1	0	1	3	9	6	0	0	0	0	0	0	0	20
Total	11	67	87	125	204	242	139	63	17	2	1	0	2	0	960
Grand Total	11	67	87	125	204	242	139	63	17	2	1	0	2	0	960

	15th Percentile :	23 MPH
	50th Percentile :	34 MPH
	85th Percentile :	42 MPH
	95th Percentile :	47 MPH
Statistics	Mean Speed(Average) :	34 MPH
	10 MPH Pace Speed :	31-40 MPH
	Number in Pace :	446
	Percent in Pace :	46.5%
	Number of Vehicles > 55 MPH :	5
	Percent of Vehicles > 55 MPH :	0.5%

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Baldwin Park
Garvey Avenue
Near 12793 Garvey Avenue
24 Hour Directional Speed Survey

BNPGA12793
Site Code: 041-20275

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
07/29/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	1	0	1	0	0	0	0	0	0	0	3
04:00	0	0	1	2	1	3	4	5	0	0	0	0	0	0	16
05:00	0	2	1	1	0	5	3	1	1	0	0	0	0	0	14
06:00	0	1	2	2	6	6	6	0	0	0	0	0	0	0	23
07:00	0	3	2	3	1	8	2	3	1	0	0	0	0	0	23
08:00	0	4	5	4	7	6	4	0	0	0	0	0	0	0	30
09:00	0	0	0	5	7	8	2	6	0	0	0	0	0	0	28
10:00	1	1	0	3	3	5	4	1	0	0	0	0	0	0	18
11:00	0	2	3	3	3	8	3	1	1	0	0	0	0	0	24
12 PM	0	0	0	9	4	8	5	2	2	0	0	0	0	0	30
13:00	0	2	2	4	6	2	2	3	0	0	0	0	0	0	21
14:00	0	1	2	3	7	5	2	2	0	0	0	0	0	0	22
15:00	0	1	3	2	10	5	9	4	3	0	0	0	0	0	37
16:00	0	2	8	5	6	5	3	1	0	0	0	0	0	0	30
17:00	0	0	4	2	4	6	5	2	0	0	0	0	0	0	23
18:00	0	2	2	6	5	5	1	4	1	0	0	0	0	0	26
19:00	0	5	5	4	6	9	2	1	0	0	0	0	0	0	32
20:00	0	1	4	9	8	4	4	2	1	0	0	0	1	0	34
21:00	0	4	2	4	5	1	3	1	1	0	0	0	1	0	22
22:00	0	0	1	1	2	4	3	0	0	0	0	0	0	0	11
23:00	0	0	0	0	1	3	5	0	0	0	0	0	0	0	9
Total	1	34	47	72	93	107	73	39	11	0	0	0	2	0	479
Grand Total	1	34	47	72	93	107	73	39	11	0	0	0	2	0	479

15th Percentile :	23 MPH
50th Percentile :	34 MPH
85th Percentile :	43 MPH
95th Percentile :	48 MPH

Statistics

Mean Speed(Average) :	35 MPH
10 MPH Pace Speed :	31-40 MPH
Number in Pace :	200
Percent in Pace :	41.8%
Number of Vehicles > 55 MPH :	2
Percent of Vehicles > 55 MPH :	0.4%

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Baldwin Park
Garvey Avenue
Near 12793 Garvey Avenue
24 Hour Directional Speed Survey

BNPGA12793
Site Code: 041-20275

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
07/29/20	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
01:00	1	1	0	0	0	3	1	0	0	0	0	0	0	0	6
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
04:00	0	0	0	2	1	2	1	0	0	0	0	0	0	0	6
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	3	0	1	5	3	3	2	1	0	0	0	0	0	18
07:00	1	0	2	1	0	2	1	0	0	0	0	0	0	0	7
08:00	1	1	5	1	1	8	2	1	0	0	0	0	0	0	20
09:00	0	1	1	1	5	11	0	1	0	0	0	0	0	0	20
10:00	0	2	1	0	6	3	2	0	0	0	0	0	0	0	14
11:00	2	0	2	5	8	2	6	2	0	0	0	0	0	0	27
12 PM	1	1	1	3	8	6	3	2	0	0	0	0	0	0	25
13:00	0	2	1	2	10	8	5	0	2	0	0	0	0	0	30
14:00	0	3	2	8	10	8	3	1	0	0	0	0	0	0	35
15:00	0	3	1	3	5	12	2	4	0	1	0	0	0	0	31
16:00	0	3	1	2	8	8	7	2	0	0	0	0	0	0	31
17:00	0	1	3	3	10	12	8	0	1	0	0	0	0	0	38
18:00	2	1	4	5	7	8	10	4	2	1	0	0	0	0	44
19:00	0	3	5	3	11	9	5	3	0	0	1	0	0	0	40
20:00	1	3	6	5	8	11	0	2	0	0	0	0	0	0	36
21:00	1	4	2	4	2	8	3	0	0	0	0	0	0	0	24
22:00	0	0	1	3	2	4	2	0	0	0	0	0	0	0	12
23:00	0	1	0	1	2	6	1	0	0	0	0	0	0	0	11
Total	10	33	40	53	111	135	66	24	6	2	1	0	0	0	481
Grand Total	10	33	40	53	111	135	66	24	6	2	1	0	0	0	481

15th Percentile :	23 MPH
50th Percentile :	34 MPH
85th Percentile :	42 MPH
95th Percentile :	46 MPH

Statistics

Mean Speed(Average) :	34 MPH
10 MPH Pace Speed :	31-40 MPH
Number in Pace :	246
Percent in Pace :	51.1%
Number of Vehicles > 55 MPH :	3
Percent of Vehicles > 55 MPH :	0.6%