



CT Warehouse Project

Initial Study/Mitigated Negative Declaration



Public Review Draft | March 2020

Prepared for:
City of Carson

Prepared by:

Michael Baker
INTERNATIONAL

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**PUBLIC REVIEW DRAFT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

CT Warehouse Project

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March 2020

JN 176054

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MITIGATED NEGATIVE DECLARATION AND TECHNICAL APPENDICES ON CD



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1.0 INTRODUCTION

The CT Warehouse Project (herein referenced as the “project”) is located on an approximately 6.58-acre property northwest of West Gardena Boulevard and South Broadway Intersection (Assessor’s Parcel Numbers [APNs] 6125-019-024, -041, -042, -043, -044, and -050) in the City of Carson (City), California. The project would demolish a former salvage yard and two residential dwellings (and associated ancillary structures) in order to construct a new 145,840-square foot warehouse facility with associated surface parking and landscaping. The facility would include distribution/warehousing/manufacturing uses with supporting office space; refer to Section 2.0, Project Description. Following a preliminary review of the proposed project, the City has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Section 21000-21177) and pursuant to California Code of Regulations Section 15063, the City of Carson, acting in the capacity of Lead Agency under CEQA, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Public Resources Code Section 21080(c)).

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

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

1.2 PURPOSE

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

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



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

1.3 CONSULTATION

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

1.4 INCORPORATION BY REFERENCE

The following documents were utilized during preparation of this Initial Study and are incorporated into this document by reference. The documents are available for review at the City of Carson, Community Development Department – Planning Division, 701 East Carson Street, Carson, California 90745.

- Carson General Plan (October 11, 2004). The *Carson General Plan (General Plan)*, adopted October 11, 2004, provides guidance to City decision-makers to evaluate land use changes, determine funding and budget recommendations and decisions, and to evaluate specific development proposals. The General Plan allows City staff to regulate building and development and to make recommendations on projects, as well as allowing residents, neighborhood groups, and the community to better understand the long-range plans and vision of the City. The General Plan includes the following elements: Land Use, Economic Development, Transportation and Infrastructure, Housing, Safety, Noise, Open Space and Conservation, Parks, Recreation and Human Services, and Air Quality.
- Carson General Plan Environmental Impact Report (July 11, 2003). The *Carson General Plan Environmental Impact Report (General Plan EIR)*, certified July 11, 2003, evaluates the impacts associated with implementation of the General Plan. The General Plan EIR evaluates potential environmental impacts and identifies mitigation measures to reduce or avoid possible environmental damage. Mitigation measures were identified for geologic and seismic hazards, hydrology and drainage, public health and safety, and cultural resources. With the application of feasible mitigation measures, some impacts could not be reduced to less-than-significant levels. Significant and unavoidable impacts were identified for transportation, air quality, noise, hydrology, school facilities, and public health and safety. It is acknowledged that the General Plan EIR was recirculated to provide additional information regarding potential impacts associated with a revised Land Use Plan considered as part of the proposed General Plan. This recirculated document was incorporated into the Final General Plan EIR.
- City of Carson Municipal Code (Current through Ordinance No. 19-1936, passed September 3, 2019). The Carson Municipal Code (Municipal Code) provides regulations for government administrative operations, construction, development, infrastructure, public safety, and business operations within the City. The Zoning Ordinance (Article IX of the Municipal Code) is intended to serve the public health, safety, comfort, convenience and general welfare by establishing land use districts designed to obtain the physical, environmental, economic, and social advantages resulting from planned use of land in accordance with the General Plan. The Zoning Ordinance provides a set of regulations which control the land uses; the density of population; the uses and locations of structures; the height of buildings and structures; the ground coverage and open spaces required for uses and structures; the appearance of certain uses and structures; the areas and dimensions of sites; the location, size, and illumination of signs and displays; requirements for off-street



parking and off-street loading facilities; provisions for street dedications and improvements; standards for water efficient landscaping; and procedures for administering and amending such regulations and requirements.



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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The City of Carson (City) is located in the South Bay/Harbor area of the County of Los Angeles (County), approximately 13 miles south of downtown Los Angeles; refer to [Exhibit 2-1, Regional Vicinity](#). The City consists of 19.2 square miles and is surrounded by the City of Los Angeles to the north, southeast, south, and northwest. The City of Torrance is located to the west, the City of Compton is located to the northeast, and the City of Long Beach is located to the east. Unincorporated portions of Los Angeles County are also located to the northwest.

The proposed CT Warehouse Project (project) site (333 West Gardena Boulevard) is located on a 6.58-acre property, northwest of the intersection of West Gardena Boulevard and South Broadway Intersection (Assessor's Parcel Numbers [APNs] 6125-019-024, -041, -042, -043, -044, and -050); refer to [Exhibit 2-2, Site Vicinity](#). Regional access to the site is provided via the Harbor Freeway (Interstate 110 [I-110]), State Route 91 (SR-91), and Interstate 405 (I-405). Local access to the site is provided via West Gardena Boulevard.

2.2 ENVIRONMENTAL SETTING

Currently, two residential dwellings (and associated ancillary structures) and a former salvage yard facility are present on-site; refer to [Table 2-1, Existing On-Site Development](#). The two residential dwellings encompass five buildings and are occupied. The remainder of the site is highly disturbed due to a former salvage yard. The salvage yard facility (which includes a former metal shop structure) currently has access from three driveways on West Gardena Boulevard, as well as three private gates on 164th Street to the west. On-site topography is relatively flat (approximately 44 to 47 feet above mean sea level [msl]), gently sloping to the south. Trees, low-lying grasses, and shrubs are dispersed throughout the site.

**Table 2-1
Existing On-Site Development**

Assessor's Parcel Number (Address)	Development	Size (square feet)
6125-019-044 (317 W. Gardena Boulevard)	Residential (Residential Building – One Story)	864
6125-019-043 (325 W. Gardena Boulevard)	Residential - Each One Story (Main Residential Building) (Garage) (Ancillary Residential Building) (Ancillary Storage Building)	4,148
Subtotal of Residential Square Footage		5,012



Table 2-1 (continued) Existing On-Site Development

Assessor's Parcel Number (Address)	Development	Size (square feet)
6125-019-042 (333 W. Gardena Boulevard)	Salvage Yard Facility (Former Metal Shop Building – One Story)	3,200
6125-019-041 (341 W. Gardena Boulevard)	Salvage Yard Facility (Vacant Land Used for Storage)	0
6125-019-024 (No Address)	Salvage Yard Facility (Vacant Land Used for Storage)	0
6125-019-050 (353 W. Gardena Boulevard)	Salvage Yard Facility (Vacant Land Used for Storage)	0
Subtotal of Industrial Square Footage		3,200
Total Square Footage		8,212

Source: Los Angeles County, Office of the Assessor, Los Angeles County Assessor Portal, <https://portal.assessor.lacounty.gov/>, accessed March 6, 2020, and Thienes Engineering, Inc., Alta/NSPS Land Title Survey, dated August 2019.

GENERAL PLAN LAND USE DESIGNATION AND ZONING

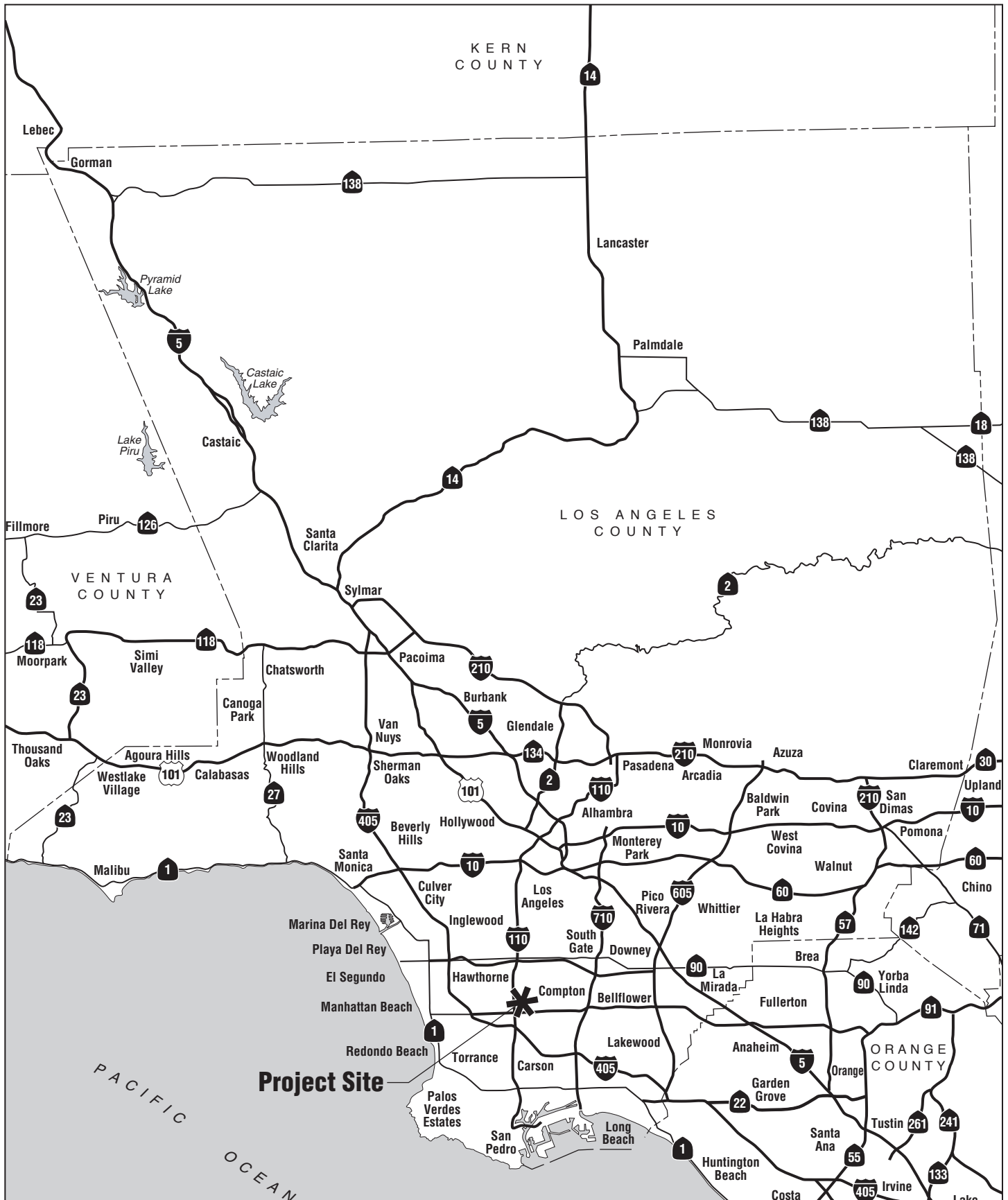
Based on the Carson General Plan (General Plan) Land Use Map, the project site is designated Light Industrial (LI). The LI designation is intended to provide for a wide variety of industrial uses and to limit those involving hazardous or nuisance effects. This designation typically includes manufacturing, research and development, wholesaling, and warehousing, with a very limited amount of supportive retail and services uses.

Based on the City of Carson Zoning Map, the project site is zoned Manufacturing, Light with a Design Overlay (ML-D). The ML zone is created primarily for small and medium size industrial uses which are not likely to have adverse effects upon each other or upon neighboring residential and commercial zones. The D Overlay allows for special site plan and design review for selected areas throughout the City.

SURROUNDING LAND USES

Surrounding land uses include a mixture of transportation, light industrial, commercial, and residential uses. The majority of the surrounding areas are designated as Light Industrial (LI) and zoned Manufacturing, Light (ML), with an area southeast designated as Heavy Industrial (HI) and zoned Manufacturing, Heavy (MH). Specifically, land uses surrounding the project site include:

- North: Light industrial and commercial uses (i.e., Golden State Water Company, Integrated Food Services, Pacific Tire Services, FOTORAMA Studio, etc.) are located to the north of the project site, south of Alondra Boulevard. Areas to the north, in the City of Carson, are designated as LI and zoned ML-D. Areas further north (across Alondra Boulevard) are within unincorporated community of West Rancho Dominguez-Victoria and are zoned for industrial uses, Light Manufacturing and Heavy Manufacturing (M-1-IP and M-2-IP, respectively).
- East: Light industrial and commercial uses (i.e., Advanced Glass, Enterprise Truck Rental, M.T. Mobile Field Services, Sunset Printing, etc.) are located to the east of the project site, west of South Broadway. Areas further east (across South Broadway) consist also of light industrial uses (i.e. AT&T Construction & Engineering, Harbor Distributing). Areas to the east are designated as LI and zoned ML-D.



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Regional Vicinity

Exhibit 2-1



Source: Google Earth Pro, December 2019

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— SUBJECT SITE

— OFF-SITE UTILITY AND ROADWAY IMPROVEMENTS

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Site Vicinity

Exhibit 2-2



- **South:** The site is bounded by West Gardena Boulevard in the south. Residential and light industrial uses (i.e., Action Contractors Inc., Fabulous Burgers, Prestige Motorcoach, Royola Pacific, etc.) are located to the south of the project site across West Gardena Boulevard. Areas to the south are designated LI and zoned ML-D. Heavy industrial uses (i.e., Cal-Western Manufacturers, Parquet by Dian) are located to the southeast of the site, in an area designated as HI and zoned MH.
- **West:** Light industrial and commercial uses (i.e., Ambit Pacific Recycling Center, First Choice Liquor, Sunpark Electronics, Valence Surface Technologies, etc.) are located to the west of the project site, east of South Figueroa Street. Areas to the west, in the City of Carson, are designated as LI and zoned ML-D. Areas further west (across Figueroa Street) consist of residential and commercial uses (i.e., Gardena Royale Apartments, Sinclair Gas Station), located within the City of Los Angeles, in the Harbor Gateway Community Plan Area. The Harbor Gateway Community Plan Area designates these uses as Medium Density Multiple Family Residential and Highway Oriented Commercial land uses.

2.3 BACKGROUND AND HISTORY

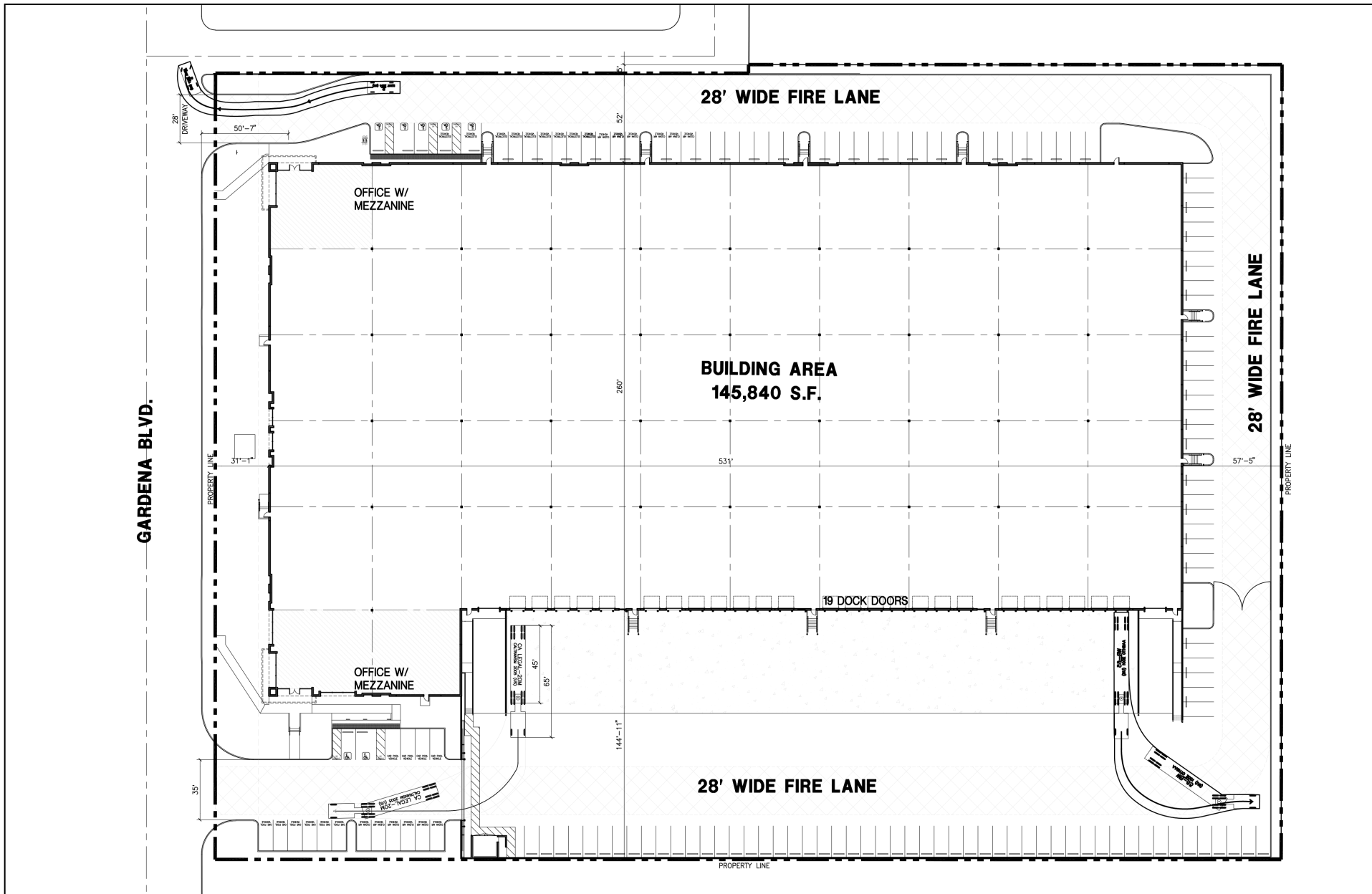
The project site has historically been recognized as agricultural land until circa 1940, at which time the project site was used as a salvage facility. Although present, the salvage facility is no longer in operation. The two existing residential dwellings are currently occupied on-site. It is acknowledged that groundwater monitoring wells are present on site. An adjacent property west-northwest of the site was a former ANCO Metal Improvement Company (ANCO) facility. The ANCO facility has a known release of tetrachloroethene (PCE) and volatile organic compounds (VOCs) to soil and groundwater. Remediation and monitoring activities are ongoing and are currently overseen by the Los Angeles Regional Water Quality Control Board (RWQCB). The project site is included in the surrounding area of investigation. As such, monitoring wells are currently operating on-site. Refer to [Section 4.9, Hazards and Hazardous Materials](#), for additional information regarding the site's and adjacent properties' former and current uses.

2.4 PROJECT CHARACTERISTICS

The project proposes to demolish the existing salvage facility and residential structures and construct a 145,840-square foot warehouse facility with associated surface parking and landscaping. The facility would include distribution/warehousing/manufacturing uses with supporting office space. Truck loading docks for loading/unloading equipment and supplies would be located along the eastern perimeter of the facility. In addition, a stormwater detention basin would be located underground also along the eastern perimeter to detain on-site surface water runoff; refers to [Table 2-2, Proposed Development](#) and [Exhibit 2-3, Conceptual Site Plan](#).

**Table 2-2
Proposed Development**

Proposed Development	Size (square feet)
Office - 1 st Floor	6,000
Office - 2 nd Floor (Mezzanine)	2,500
Distribution/Manufacturing	137,340
Total	145,840



Source: HPA Architecture, January 9, 2020

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Conceptual Site Plan

Exhibit 2-3



A total of 146 parking spaces would be provided for employees and visitors in surface parking lots located along building perimeters, exceeding the City's 120 spaces requirement for the proposed development. A variety of parking spaces would be included: Standard, ADA Van, ADA Standard, ADA Electrical Vehicle (EV) Van, ADA EV Standard, and Connected and Automated Vehicle (CAV). A bike rack is proposed near the western driveway. Total of 25 truck loading docks would also be provided along the eastern perimeter.

ARCHITECTURAL DESIGN

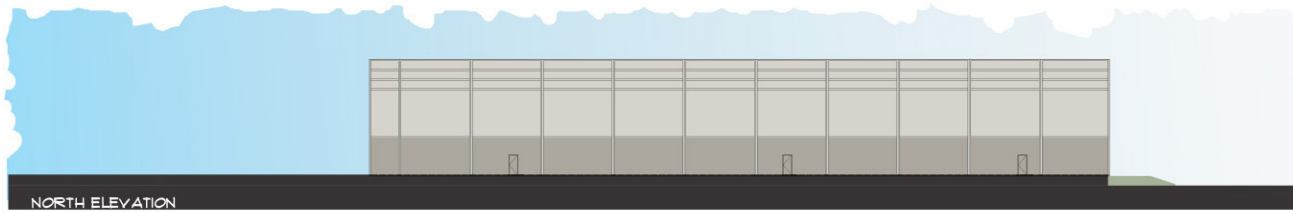
The proposed facility would range in height between 42 and 45 feet (± 3 feet for roof appurtenances), and would be constructed of concrete tilt-up panels, and tempered spandrel and vision glasses; refer to [Exhibit 2-4, *Conceptual Elevations*](#). The building's exterior color palette is proposed in various shades of white and grey with accents of orange; refer to [Exhibit 2-5, *Rendering from West Gardena Boulevard*](#). The proposed structure would have a front yard setback of 25 feet; side setback along the eastern perimeter of 94 feet and 11 inches; a western perimeter side setback of 52 feet; and a rear setback of approximately 57 feet and 5 inches. The landscaped frontage along West Gardena Boulevard, as well as the southern portion of the new building would screen the proposed truck loading docks and storage area along the eastern perimeter of the site from public views. Heating, ventilation, and air conditioning (HVAC) equipment would be roof-mounted, and also screened from public view via parapets.

LANDSCAPE DESIGN

The proposed project would include landscaping improvements, including variety of ornamental trees, shrubs, accents, and groundcover; refer to [Exhibit 2-6, *Conceptual Landscape Plan*](#). The street frontage along West Gardena Boulevard would include an approximately 20-foot swath of landscape area in addition to the reconstructed sidewalk. This swath of landscaping would include trees (i.e., Palo Verdes, London Plane Trees, Australian Willows, and Mondell Pines), as well as a variety of shrubs. The project's main entry, at the southeastern corner of the site, would also be landscaped with a variety of tree species (i.e., Holly Oaks, African Sumac, flowering accent trees) and assorted succulents. The perimeter of the site would be landscaped with Holly Oaks and shrubs and various opportunities for planters on-site would accommodate shrubs and African Sumacs. Landscaping would total approximately 21,798 square feet, or 7.6 percent of the site. It is acknowledged that construction of the project would require removal of all existing on-site trees, shrubs, and grasses, as well as six public street trees along West Gardena Boulevard. Removal of the public street trees would require a Tree Removal Permit.

ACCESS AND CIRCULATION

Roadway improvements are proposed to provide site access and circulation. Site access would be provided via two full access driveways along West Gardena Boulevard. The proposed loading dock and storage area (in the eastern portion of the project site) would be gated from the rest of the site via two 8-foot tubular steel gates, each with a knock-box. Internal access would be provided via the perimeter of the building, as depicted on [Exhibit 2-3](#). The proposed driveways and interior vehicular circulation are designed to meet the Los Angeles County Fire Department (LACoFD) turning radius requirements, as well as truck traffic. The project also proposes to widen and repave the existing alley to the west, as well as replace the existing sidewalk, curb, and gutter along the project's frontage at West Gardena Boulevard.



NORTH ELEVATION



WEST ELEVATION - W. 164TH ST.



SOUTH ELEVATION - GARDENA BLVD.



EAST ELEVATION

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Conceptual Elevations

Exhibit 2-4



DESIGN KEY NOTES:

- ① TYPICAL VERTICAL TREE ALONG PROPERTY LINE PER LEGEND.
- ② VERTICAL TREE AGAINST BLDG. PER LEGEND.
- ③ PARKING LOT CANOPY TREE PER LEGEND.
- ④ FENCE ALONG FIRE LANE PER ARCH. PLAN.
- ⑤ TYP. CONC. ENTRY PAVING AT BLDG. NATURAL CONC. WITH GRID PATTERN.
- ⑥ BACKDROP TREES ALONG BLDG. PER LEGEND.
- ⑦ CONC. SIDEWALK TO BE CONFIRMED WITH CIVIL.
- ⑧ PROPOSED STREET TREE PER LEGEND.
- ⑨ FLOWERING ACCENT TREES LOCATED WITH D.G. POCKETS AND ASSORTED SUCCULENTS.

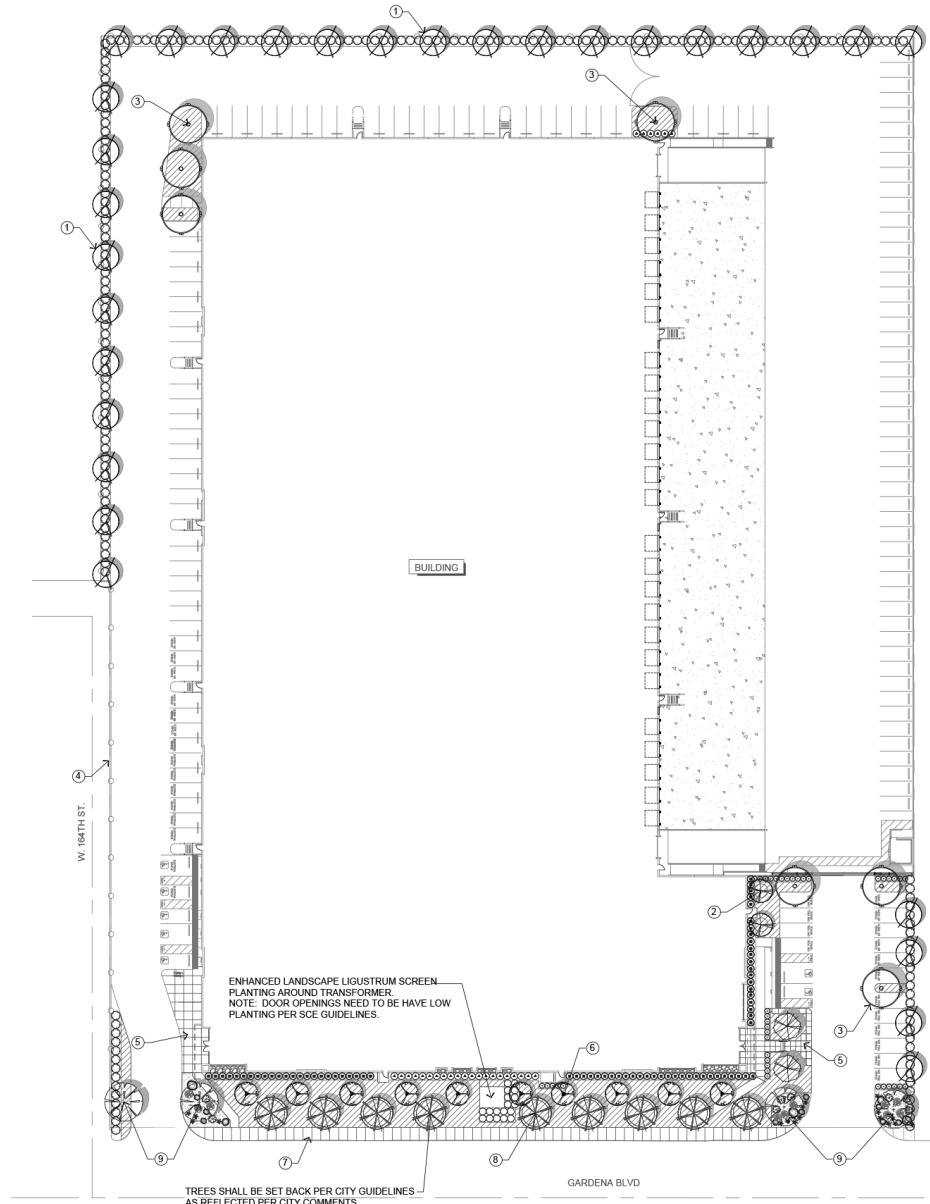
PLANTING LEGEND

TREES			
SYMBOL	TREE NAME	QTY.	WUCOLS
	TYP. STREET TREE ALONG GARDENA BLVD. PLATANUS ACERIFOLIA 'BLOODGOOD', LONDON PLANE TREE 24" BOX SIZE.	9	M
	FLOWERING ACCENT TREE CERCIDIA 'DESERT MUSEUM', PALO VERDE 36" BOX SIZE.	4	VL
	LAGERSTROEMIA 'WATERMELON RED', CRAPE MYRTLE 24" BOX SIZE.	2	M
	PARKING LOT SHADE TREE RHUS LANCEA, AFRICAN SUMAC 24" BOX SIZE.	8	L
	VERTICAL TREE AGAINST P.L. QUERCUS ILEX, HOLLY OAK 15 GAL. SIZE.	30	L
	VERTICAL TREE AGAINST BLDG. TRISTANIA CONFERTA, BRISBANE BOX 15 GAL. SIZE.	4	M
	EVERGREEN BACKDROP TREE PINUS ELABORICA, MONDELL PINE 24" BOX SIZE.	10	VL

SHRUBS		
SYMBOL	SHRUB NAME	WUCOLS
	DODONAEA VISCOSA 'PURPUREA', HOPSEED BUSH 5 GAL. SIZE.	L
	LEUCOPHYLLUM FRUTESCENS, TEXAS RANGER 5 GAL. SIZE.	L
	WESTRINGIA FRUTICOSA, COAST ROSEMARY 5 GAL. SIZE.	L
	CALLISTEMON 'LITTLE JOHN', DWARF BOTTLE BRUSH 5 GAL. SIZE.	L
	LIGUSTRUM TEXANUM, TEXAS PRIVET 5 GAL. SIZE.	M

GROUND COVER AND SHRUB MASSES - SHALL BE SELECTED FROM THE FOLLOWING:		
SYMBOL	GROUND COVER/SHRUB MASS NAME	WUCOLS
	ROSMARINUS O. 'PROSTRATUS', CREEPING ROSEMARY 1 GAL. SIZE @ 30" O.C.	VL
	LANTANA 'NEW GOLD', YELLOW LANTANA 1 GAL. SIZE @ 30" O.C.	VL
	SALVIA GREGGII, AUTUMN SAGE 1 GAL. SIZE @ 36" O.C.	L
	MUHLENBERGIA RIGENS, DEER GRASS 1 GAL. SIZE @ 42" O.C.	L
	SALVIA CLEVELANDII, CLEVELAND SAGE 5 GAL. SIZE @ 48" O.C.	VL
	DECOMPOSED GRANITE 3" DEPTH, CALIFORNIA 1/2" DESERT GOLD FROM SOUTHWEST BOULDER AND STONE.	

ACCENT SUCCULENT		
SYMBOL	TREE NAME	WUCOLS
	AGAVE AMERICANA 'CORNELIUS', CORNELIUS AGAVE 5 GAL. SIZE.	VL
	AGAVE 'BLUE GLOW', BLUE GLOW AGAVE 5 GAL. SIZE.	VL
	HESPERALOE PARVIFLORA, RED YUCCA 1 GAL. SIZE @ 24" O.C.	VL



Source: Scott Peterson Landscape Architect, Inc., February 20, 2020

NOT TO SCALE



02/2020 JN 176054

CT WAREHOUSE PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
Conceptual Landscape Plan

Exhibit 2-6



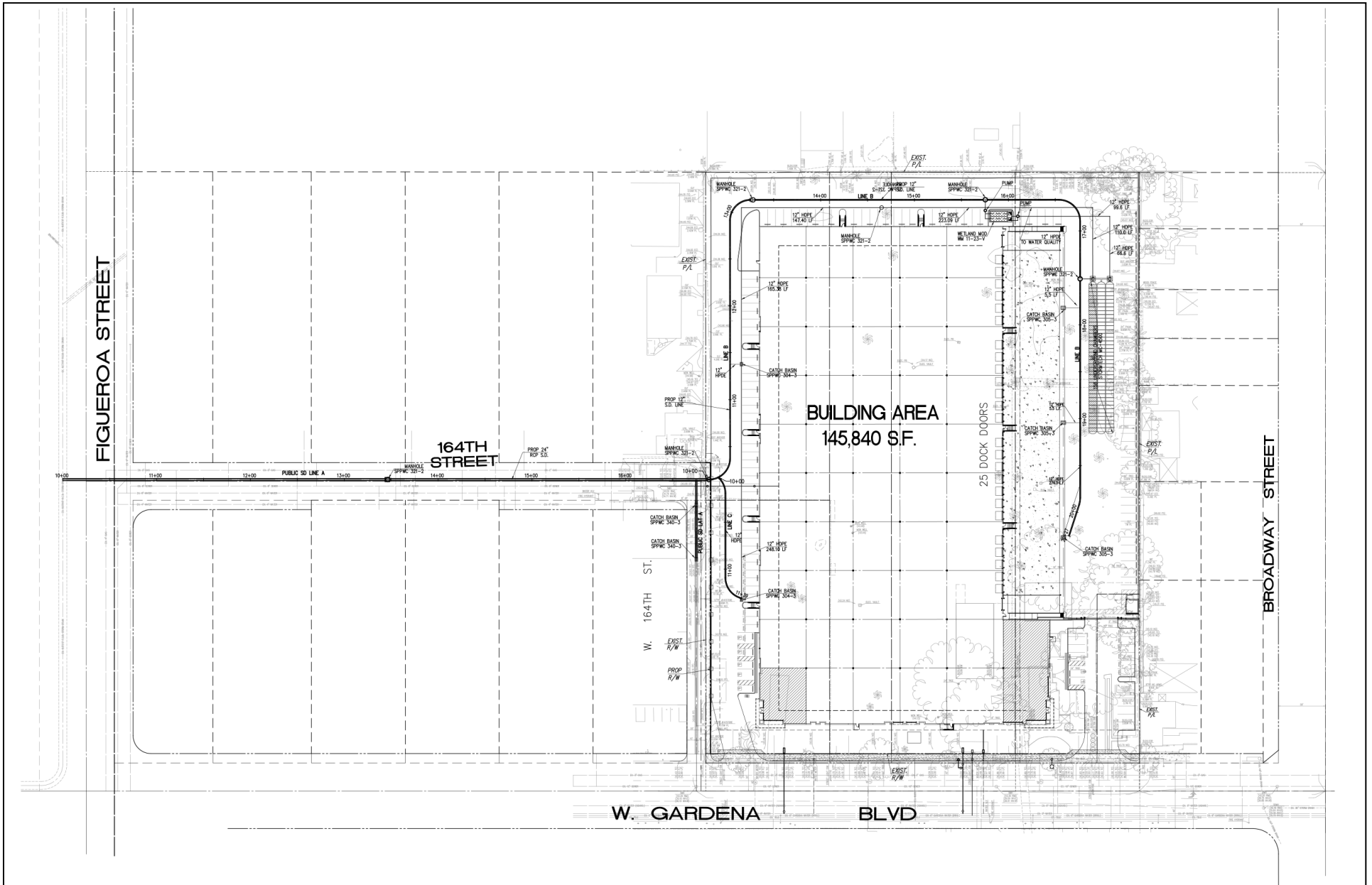
UTILITIES AND SERVICES

The project proposes utility infrastructure improvements and services necessary to serve the project's anticipated development, as follows:

- Water: Currently, the site is served via an existing 8-inch water main in West Gardena Bouvard and five existing 5/8-inch water laterals. The project would eliminate four of the existing water laterals in West Gardena Boulevard at the property line and install one new 3-inch water lateral, one new 2-inch water meter for domestic service with a 2-inch back flow preventor (BFP), and one new 3-inch water pipeline to serve the new building. The project would also install one 2-inch irrigation service line with an associated 1.5-inch meter and BFP. The new line would connect to an existing 6-inch irrigation main in West Gardena Boulevard. Irrigation systems would be controlled by a weather-based smart irrigation controller to minimize water usage and reduce irrigation runoff. Lastly, in order to accommodate necessary fire flow requirements, the project would install required fire hydrant(s) and two new 8-inch fire service laterals that would connect to the existing 8-inch water main in West Gardena Boulevard.
- Sewer: The project would construct a new private on-site sewer system consisting of 6-inch sewer lines that would connect to a new 6-inch (VCP) sewer lateral at the western portion of the site. The new sewer lateral would then flow westward to an existing 8-inch sewer line located west of the site in 164th Street.
- Drainage: There is no existing drainage system on-site and surface runoff drains southerly and westerly toward Gardena Boulevard and 164th Street, or pond at the western boundary of the site in the alley. Development of the proposed project would install a new storm drain system on-site that would ultimately connect to the existing 8.5-foot by 10-foot public reinforced concrete box (RCB) Storm Drain in Figueroa Street, approximately 640 feet west of the project site; refer to Exhibit 2-7, Proposed Storm Drain System. The project would construct a new network of 12-inch storm drain lines on-site that would ultimately connect to a new 24-inch public reinforced concrete pipe (RCP) in 164th Street. The new 24-inch public RCP would then connect to the existing 8.5-foot by 10-foot RCB Storm Drain in Figueroa Street, approximately 640 feet west of the project site.

It is acknowledged that runoff from the majority of the building roof, the northerly and easterly parking lot, and the truck loading dock and storage area would drain easterly towards the eastern portion of the project site, toward a proposed detention system; refer to Exhibit 2-7. The detention system would temporarily detain stormwater via underground chambers, then release flows toward a biofiltration unit to the north of the proposed building. This runoff would be treated via plants and engineered soil media within the biofiltration unit. Treated runoff would then discharge (via an outlet flow control) into one of the new 12-inch on-site storm drains that would then convey this stormwater westward toward 164th Street. Other areas of stormwater flow would enter the system via catch basins in the parking lot. Each catch basin would be equipped with a drain insert to filter pollutants prior to entering the storm drain system. The landscaped swath to the south of the new building would sheet flow to West Gardena Boulevard.

- Gas/Electric: Appropriate connections to the existing gas utilities, located near the southeastern corner of the project site, would be used to connect the new building. Two existing street lights along the southern boundary of the project site would be relocated to the western boundary. The project would also connect to existing electrical utilities. As part of the proposed project, overhead powerlines that traverse the project site would be underground. As part of the proposed undergrounding, six existing power poles along the north, east, and southern project boundaries would be protected-in-place, three perimeter poles (along the western project boundary) and five on-site poles would be removed, and two new poles along the western and southern boundaries would be constructed in order to accommodate undergrounding of on-site power lines. All undergrounding would be conducted in accordance with the applicable rules and regulations of the utility, as currently on file with the California Public Utilities Commission and utility providers.



Source: Thienes Engineering, Inc., January 28, 2020.

NOT TO SCALE

Michael Baker
INTERNATIONAL



02/2020 JN 176054

CT WAREHOUSE PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
Proposed Storm Drain System

Exhibit 2-7



2.5 PHASING/CONSTRUCTION

The project would be constructed in a single-phase, anticipated to begin in fall 2020 and take approximately ten months to complete. It is anticipated the project would be fully operational by 2021. Construction of the project would include demolition, grading, building construction, paving, and architectural coating. The proposed earthwork would involve approximately 15,071 cubic yards of cut and approximately 15,121 cubic yards of fill, resulting in approximately 50 cubic yards of import. In addition to on-site grading improvements, on- and off-site excavation would be required for utility installation, repaving the alley, and reconstructing sidewalk, curb, and gutter along West Gardena Boulevard at the southern boundary of the site.

2.6 AGREEMENTS, PERMITS, AND APPROVALS

The proposed project would require agreements, permits, and approvals from the City and other agencies prior to construction. These agreements, permits, and approvals are described below and may change as the project entitlement process proceeds.

City of Carson – Lead Agency

- California Environmental Quality Act Approval;
- Site Plan and Design Review; and
- Tree Removal Permit.

Los Angeles Regional Water Quality Control Board – Responsible Agency

- NPDES Permit; and
- Groundwater Monitoring Well Relocation.



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3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. **Project Title:**
CT Warehouse Project
2. **Lead Agency Name and Address:**
City of Carson
701 East Carson Street
Carson, California 90745
3. **Contact Person and Phone Number:**
Manraj Bhatia, Assistant Planner
City of Carson
310.952.1761 Ext. 1768
4. **Project Location:**
The proposed project is located at 333 West Gardena Boulevard in the City of Carson, California.
5. **Project Sponsor's Name and Address:**
CT Realty Investors
4343 Von Karman Avenue, Suite 200
Newport Beach, California 92660
6. **General Plan Designation:**
Light Industrial (LI)
7. **Zoning:**
Manufacturing, Light with a Design Overlay (ML-D)
8. **Description of Project:**
Refer to Section 2.4, *Project Characteristics*.
9. **Surrounding Land Uses and Setting:**
Surrounding land uses include a mixture of transportation, light industrial, commercial, and residential uses; refer to Section 2.2, *Environmental Setting*.
10. **Other public agencies whose approval is required:**
Los Angeles Regional Water Quality Control Board.
11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**
In compliance with AB 52, the City distributed letters to applicable Native American tribes informing them of the project on December 10, 2019. The Gabrieleno Band of Mission Indians – Kizh Nation requested consultation on January 3, 2020 and the City consulted with the tribe on February 25, 2020. Based on consultation with the Gabrieleno Band of Mission Indians – Kizh Nation, the project's proposed ground disturbance activities could



uncover previously undiscovered tribal cultural resources. Refer to Section 4.18, Tribal Cultural Resources, for additional information.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

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

- | | |
|---|---|
| <ul style="list-style-type: none"> • Aesthetics • Agriculture and Forestry Resources • Air Quality • Biological Resources • Cultural Resources • Energy • Geology and Soils • Greenhouse Gas Emissions • Hazards and Hazardous Materials • Hydrology and Water Quality • Land Use and Planning | <ul style="list-style-type: none"> • Mineral Resources • Noise • Population and Housing • Public Services • Recreation • Transportation • Tribal Cultural Resources • Utilities and Service Systems • Wildfire • Mandatory Findings of Significance |
|---|---|

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

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

- No Impact. The development will not have any measurable environmental impact on the environment.



- *Less Than Significant Impact.* The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- *Less Than Significant Impact With Mitigation Incorporated.* The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- *Potentially Significant Impact.* The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

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



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4.0 ENVIRONMENTAL ANALYSIS

4.1 AESTHETICS

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

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

No Impact. According to the General Plan EIR, there are no officially designated scenic vistas or visual resources within the City of Carson. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. There are no officially-designated State scenic highways in the City of Carson.¹ Further, the General Plan does not identify any scenic highways, roadways, or corridors within the City. The nearest scenic highway is State Route 1 (SR-1) (designated as eligible for listing), which is located over eight miles to the southeast of the project site. Thus, the project would not substantially damage scenic resources within a State scenic highway. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

¹ California Department of Transportation, *List of Eligible and Officially Designated State Scenic Highways*, updated March 2017.



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

Less Than Significant Impact. As discussed in Section 2.2, Environmental Setting, the project site is currently developed with two residential dwellings (and associated ancillary structures) and a former salvage yard facility. Surrounding land uses include a mixture of transportation, light industrial, commercial, and residential uses; refer to Exhibit 4.1-1, Existing Conditions Photographs. As the project is located in an urbanized area, the following analyzes the project’s potential to conflict with applicable zoning and other regulations governing scenic quality.

Municipal Code Article IX, Division 6, *Site Development Standards*, includes site development standards that aid in governing scenic quality. Table 4.1-1, Municipal Code Consistency Analysis Governing Scenic Quality, provides a consistency analysis of the proposed project and these relevant development standards. Refer to Section 4.11, Land Use and Planning, for a discussion concerning the project’s consistency with other applicable zoning requirements.

**Table 4.1-1
Municipal Code Consistency Analysis Governing Scenic Quality**

Relevant Section	Consistency Analysis
<p>9146.29 Encroachments: Every part of a required yard or open space shall be open and unobstructed from finished grade to the sky except for facilities and activities as follows:</p> <ul style="list-style-type: none"> A. Projections from buildings (such as eaves, awnings and shading devices; signs; architectural features; utility meters; conduits and pipes; unenclosed and unroofed stairways, landings, porches and balconies; chimneys; and mechanical equipment) may project into a required yard not more than one-half of the width of the required yard, except that only such projections permitted into a required front yard or a required side yard abutting a street shall be for eaves, awnings, shading devices, architectural features and signs. No projections are permitted into future right-of-way areas as determined under Municipal Code Section 9146.22. B. Free-standing mechanical equipment is not permitted in any required yard except those additional yard areas required because of building height. C. Utility-owned facilities are permitted in any required yard if also located in an approved utility easement. D. Signs are permitted in required yards other than in existing or future street rights-of-way if in accordance with the provisions of Municipal Code Section 9146.7. E. Swimming pools are permitted in required yards other than future right-of-way areas provided the pool is set back from the front lot line at least twenty-five (25) feet or twenty-five (25) percent of the lot depth, whichever is less, and is not less than five (5) feet from any other lot line. 	<p>Consistent. The proposed front, side, and rear setbacks would be free from the encroachments specified by Municipal Code Section 9146.29; refer to <u>Exhibit 2-3, Conceptual Site Plan</u>. The proposed project would be consistent with Municipal Code Section 9146.29 in this regard.</p> <p>The proposed project does not abut a residential zone and thus is not subject to the height requirements specified under Municipal Code Section 9146.29. As indicated in <u>Section 2.4, Project Characteristics</u>, a 8-foot concrete screen wall would be constructed along the eastern project boundary for both screening and security purposes. An 8-foot high tube steel fence is proposed along the remainder of the project boundary, to the north and west.</p> <p>As noted above, the project’s frontage along West Gardena Boulevard and main entry at the southeastern corner of the site would be landscaped; refer to <u>Exhibit 2-4, Conceptual Landscape Plan</u>. The proposed project would be consistent with Municipal Code Section 9146.29 in this regard.</p> <p>No parking is proposed within ten feet of existing or future street right-of-way; refer to <u>Exhibit 2-3</u>. The proposed project would be consistent with Municipal Code Section 9146.29 in this regard.</p>



Commercial uses (Enterprise Truck Rental) to the east of the project site.



View of West Gardena Boulevard and residential and light industrial uses south of the project site.



Existing on-site residential uses at the southeast corner of the project site.



Northeastern view of the project site.



Northern view of the unnamed alley to the west of the project site.



Northern view of salvage yard facility at the project site.



Table 4.1-1, continued
Municipal Code Consistency Analysis Governing Scenic Quality

Relevant Section	Consistency Analysis
<p>F. Fences, walls, and hedges shall not be higher than eight (8) feet above finished grade in a future right-of-way, front yard, or in a side or rear yard which abuts a residential zone. In a required front yard or abutting future right-of-way area, any portion of a fence, wall or hedge above three and one-half (3-1/2) feet in height shall not impair vision by obscuring more than ten (10) percent of the area in the vertical plane unless approved by the Director pursuant to the procedures and requirements for Site Plan and Design Review contained in Municipal Code Section 9172.23.</p> <p>G. Landscaping (other than hedges) is permitted in any required yard or open space.</p> <p>H. Outdoor display of goods. The following items may be displayed in any required yard area, but not in a required parking area:</p> <ul style="list-style-type: none"> • Vehicles (automobiles, motorcycles, motorscooters, bicycles, recreational vehicles, trucks, mobile homes, or other vehicles). • Boats. • Agricultural produce. • Nursery stock. • Flowers and plants. • Christmas trees. • Similar items as determined in accordance with the Interpretation procedure of Municipal Code Section 9172.24. <p>The following items may be displayed in yard areas other than a required front yard and any abutting future right-of-way area, but not in a required parking area:</p> <ul style="list-style-type: none"> • Garden equipment and supplies. • Building materials. • Monuments, tombstones, statuary. • Similar items as determined in accordance with the Interpretation procedure of Municipal Code Section 9172.24. • Items displayed must be in the form in which marketed (no raw materials or subassemblies). 	



Table 4.1-1, continued
Municipal Code Consistency Analysis Governing Scenic Quality

Relevant Section	Consistency Analysis
<p>I. Outdoor storage is permitted only in yards other than a required front yard and abutting future right-of-way area, but not in a required parking area.</p> <p>J. Outdoor storage areas shall be screened from view from any adjoining public street or walkway.</p> <p>K. Employee recreation and eating facilities (no buildings) are permitted in any yard other than a required front yard and adjacent future street right-of-way, but not in a required parking area.</p> <p>L. Parking is permitted in required yards except the area within ten (10) feet of an existing or future street right-of-way. (See Municipal Code Section 9162.52.)</p> <p>M. Railroad spur tracks are permitted in any yard other than a required yard adjacent to a street (front or side) and any adjacent future street right-of-way.</p>	
<p>9146.4 Trash Areas: Trash and recycling areas shall be provided in accordance with Division 4 of Part 6 of this Chapter. (Ord. 93-1013, § 3).</p>	<p>Consistent. The project's proposed trash and recycling area would be located and arranged both for convenient vehicular access and pick-up and shall not interfere with other pedestrian and vehicular traffic. The enclosure would be located at the southeast portion of the project site and would be constructed in accordance with City standards (Municipal Code Section 9164.3, <i>Nonresidential Trash Areas</i>). The proposed project would be consistent with Municipal Code Section 9146.4 in this regard.</p>
<p>9146.7 Signs*:</p> <p>A. Business signs are permitted, subject to the following:</p> <ol style="list-style-type: none"> 1. All business signs and sign structures shall be permitted in conformance with development plans which have been approved pursuant to the Site Plan and Design Review procedures (including the number of signs and sign structures to be permitted) as provided in Municipal Code Section 9172.23. All signs and sign structures shall also comply with the minimum requirements, as outlined in this Section of the Zoning Ordinance. 2. The total sign area per lot shall not exceed an area in square feet equal to two (2) times the linear feet of lot frontage on a public street or streets for the first one hundred (100) feet of frontage, plus one-half (1/2) times the frontage in excess of one hundred (100) feet. Window signage shall not exceed ten (10) percent of window area. Lot frontage on a freeway shall not be considered in computing this figure. 	<p>Consistent. Future tenants of the proposed warehouse facility are unknown at the time of this writing. The City would verify the positioning and size of future signage conforms with the design standards included in Municipal Code Section 9146.7 as part of the Site Plan and Design Review Process. A sign could also be applied under a separate permit, at which time the proposed sign would be reviewed for conformance with Municipal Code Section 9146.7. The proposed project would be consistent with Municipal Code Section 9146.7 in this regard.</p>



Table 4.1-1, continued
Municipal Code Consistency Analysis Governing Scenic Quality

Relevant Section	Consistency Analysis
<p>When the total frontage of a lot is less than the square root of the lot's area, said frontage shall be deemed to be equal to the square root of the lot's area for the purpose of determining the permitted sign area.</p> <p>Any primary use which is developed commercially may be permitted to have a sign area equal to that permitted by Municipal Code Section 9136.7(B)(2); provided, that a deed restriction is recorded in the offices of the County Recorder, restricting the use on the property to a commercial use, and proof of such recordation is submitted to the satisfaction of the Director.</p> <p>3. Repealed by Ord. 16-1602.</p> <p>4. A ground sign in excess of six (6) feet in height shall not be permitted. The distance between ground elevation and the bottom of a ground sign shall not exceed one (1) foot. Not more than one (1) ground sign shall be permitted on a lot. No ground sign shall be erected until written approval is obtained from the City Traffic Engineer. Such signs shall be in conformance with development plans which have been approved pursuant to the Site Plan and Design Review procedure as provided in Municipal Code Section 9172.23.</p> <p>5. A sign may be affixed to a building but shall not project above the height of the building wall or roof fascia.</p> <p>6. A sign shall not project into an existing or future right-of-way.</p> <p>7. No "A" frame or "sandwich" sign or scintillating, flashing or revolving sign shall be permitted.</p> <p>8. Electronic message center signs are permitted, subject to the following:</p> <p>(a) Such sign shall be at least one hundred (100) feet from a residential zone.</p> <p>(b) Such sign shall be at least five hundred (500) feet from any other electronic message center sign.</p>	



Table 4.1-1, continued
Municipal Code Consistency Analysis Governing Scenic Quality

Relevant Section	Consistency Analysis
<p>(c) Such sign shall be affixed to a pole and subject to the pole sign limitations of this Chapter.</p> <p>(d) A conditional use permit (CUP) shall be required for all electronic message center signs in accordance with provisions set forth in Municipal Code Section 9172.21. Approval shall not be granted if the Commission finds that the proposed sign would interfere with traffic signals, disrupt normal traffic flow or otherwise create a safety hazard.</p>	
<p>9146.8 Utilities: All new utility lines, other than major transmission lines, shall be placed underground. This requirement may be waived by the Commission where topography, soil, undue financial hardship or other conditions make such underground installation unreasonable or impractical. Undergrounding shall be in accordance with the applicable rules and regulations of the utility, as currently on file with the California Public Utilities Commission.</p> <p>All aboveground equipment (other than pole lines when permitted), such as transformers and pedestal terminals, which are visible from an adjacent public street or walkway, shall be within a solid enclosure or otherwise screened from public view. Such enclosure/screening shall be in accordance with the utility's service requirement.</p>	<p>Consistent. As elaborated in <u>Section 2.4</u>, the project proposes water, sewer, drainage, and gas/electric utility infrastructure improvements and services necessary to serve the project's anticipate development. All such project utility infrastructure improvements would be placed underground in conformance with Municipal Code requirements. In addition, the proposed project would underground the existing overhead power lines which traverse the project site. All undergrounding would be conducted in accordance with the applicable rules and regulations of the utility, as currently on file with the California Public Utilities Commission and utility providers. The project would be consistent with Municipal Code Section 9146.8 in this regard.</p>
<p>9146.9 Site Planning and Design. In the case of a commercial or industrial use located on a corner lot, no public pedestrian entrance from a side street shall be located less than one hundred (100) feet from any residential zone.</p> <p>Roof-mounted structures and equipment shall not extend more than ten (10) feet above the roof, measured from the point of attachment. If such roof projections are not incorporated in the building design as architectural features, they shall be screened from view from any adjoining public street or walkway.</p> <p>Mechanical equipment not enclosed within a building shall be screened from view from any adjoining public street or walkway.</p> <p>Within one hundred (100) feet of a residential zone, there shall be no opening in the wall of a nonresidential building where such wall faces a residential zone.</p> <p>Within any D (Design Overlay) designated area, all development subsequent to the date of such designation shall be in conformance with development plans which have been approved pursuant to the Site Plan and Design Review procedure as provided in Municipal Code Section 9172.23. No permit shall be issued for grading or construction involving significant exterior changes, as determined by the Director,</p>	<p>Consistent. The proposed project is not located on a corner lot and is not located within 100 feet from any residential zone.</p> <p>Heating, ventilation, and air conditioning (HVAC) equipment would be roof-mounted, and also screened from public view via parapets. HVAC equipment would not extend more than 10 feet above the roof.</p> <p>The project would install an electrical transformer along the project's frontage. As shown of <u>Exhibit 2-6</u>, the transformer would be screened via proposed plantings. No other mechanical equipment outside of the proposed structure would be readily visible by the public. As the proposed transformer would be screened via planting materials, the project would not have the potential to significantly impact views from adjoining public streets or walkways.</p> <p>Although residential structures are located to the south of the project site across West Gardena Boulevard, these areas are zoned Manufacturing, Light with a Design Overlay (ML-D).</p> <p>The proposed project is located within a Design Overlay designated area. As noted in <u>Section 2.6, <i>Agreements, Permits, and Approvals</i></u>, the proposed project would be</p>



Table 4.1-1, continued
Municipal Code Consistency Analysis Governing Scenic Quality

Relevant Section	Consistency Analysis
which is not in conformance with such approved development plans.	subject to the City's Site Plan and Design Review process. As a result, all development would be in conformance with the development plans which have been approved pursuant to the Site Plan and Design Review procedure. The proposed project would be consistent with Municipal Code Section 9146.9 in this regard
Source: City of Carson, <i>Carson Municipal Code</i> , current through Ordinance No. 19-1936, passed September 3, 2019.	

As indicated in Table 4.1-1, the proposed project would be consistent with applicable Municipal Code requirements that may govern scenic quality. Further, the project would be subject to special site plan and design review as required by the City's Design Overlay Review process. This regulatory procedure would verify that the proposed design of the warehouse facility is compatible with development in the surrounding vicinity. As a result, implementation of the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. A potentially significant impact would occur if a new source of substantial light or glare causes an adverse effect on day or nighttime views. Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprising highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point source lighting that contrasts with existing low ambient light conditions.

CONSTRUCTION

The project would be required to comply with the Municipal Code Section 4104(i) and 4101(j) for allowable construction hours, which are limited to between 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays. Construction is not allowed on Sundays and City holidays. Thus, as no construction activities would be permitted after 6:00 p.m., no short-term construction-related lighting impacts would result.

OPERATIONS

Existing lighting sources within the project boundaries include the two existing residential dwellings (and associated ancillary structures) and existing street lighting along the project's southern boundary. The project site is surrounded on all sides by urbanized uses which contribute to ambient lighting. Vehicles travelling along West Gardena Boulevard and the unnamed alley to the west of the project site also contribute to ambient lighting.

The proposed warehouse facility would increase lighting at the project site compared to existing conditions. Pursuant to Municipal Code Section 9147.1, *Exterior Lighting*, all lighting associated with the proposed warehouse facility, surface parking, and landscaping would be directed away from all adjoining and nearby residential property. Conformance with Municipal Code Section 9147.1 would reduce the project's operational lighting impacts to less than significant levels.



Vehicle headlights entering and exiting the project's driveways at West Gardena Boulevard could also result in increased lighting in the project vicinity, including towards sensitive residential uses to the south of the project site across West Gardena Boulevard. However, the landscaped frontage along West Gardena Boulevard, as well as the southern portion of the new building would screen the proposed truck loading docks along the eastern perimeter of the site from public views. As a result, vehicle headlights are not anticipated to result in a significant increase in lighting conditions in the immediate project vicinity.

The proposed project's exterior building materials would include constructed of concrete tilt-up panels, and tempered spandrel and vision glasses. Accent features would include metal canopies, aluminum storefront framing, and metal doors. If not properly treated, these materials could cause increased daytime glare. Notwithstanding, the project's landscaped frontage along West Gardena Boulevard would shield off-site uses from potential sources of daytime glare. The project would also be subject to special site plan and design review as required by the City's Design Overlay Review process. This regulatory procedure would review the project's building materials to ensure neighboring uses are not exposed to substantial daytime glare. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.



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4.2 AGRICULTURE AND FORESTRY RESOURCES

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

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

No Impact. The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.¹ No Farmland exists within the site vicinity. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

¹ California Department of Conservation, *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed January 3, 2020.



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

No Impact. The project site is zoned Manufacturing, Light with a Design Overlay (ML-D), and is not covered under an existing Williamson Act contract.² Thus, project implementation would not conflict with the existing zoning for agricultural use, or a Williamson Act contract. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. The project site is zoned ML-D and is not occupied or used by forest land or timberland. Project implementation would not result in the rezoning of forest land, timberland, or timberland zoned Timberland Production. No impacts would occur.

Mitigation Measures: No mitigation is required.

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

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

Mitigation Measures: No mitigation is required.

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

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

Mitigation Measures: No mitigation is required.

² California Department of Conservation, *Los Angeles County Williamson Act FY 2015/2016 Map*, updated 2016.



4.3 AIR QUALITY

<i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
c. Expose sensitive receptors to substantial pollutant concentrations?			✓	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

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

Less Than Significant Impact. The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). Project consistency with the SCAQMD’s 2016 Air Quality Management Plan for the South Coast Air Basin (2016 AQMP) is achieved when the project is found to be consistent with the goals, objectives, and assumptions set forth in the 2016 AQMP, which are designed to achieve Federal and State air quality standards. According to the SCAQMD’s 1993 CEQA Air Quality Handbook, in order to determine consistency with the 2016 AQMP, 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?

Since the consistency criteria identified under the first criterion pertains to pollutant concentrations, rather than to total regional emissions, an analysis of the project’s pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(c), localized concentrations of carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}) would be less than significant during project construction and operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations.¹

¹ Because reactive organic gases (ROGs) are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.



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

As discussed in Response 4.3(b), the proposed project would result in emissions that are below the SCAQMD thresholds. Therefore, the project would not have the potential to cause or contribute to new air quality violations.

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

The proposed project would result in less than significant impacts with regard to localized concentrations during project construction and operations; refer to Response 4.3(c). As such, the project would not delay the timely attainment of air quality standards or 2016 AQMP emissions reductions.

CRITERION 2:

With respect to the second criterion for determining consistency with SCAQMD and Southern California Association of Governments (SCAG) air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the 2016 AQMP. Determining whether a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

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

In the case of the 2016 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the *Carson General Plan* (General Plan), SCAG's *Growth Management Chapter of the Regional Comprehensive Plan* (RCP), and SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). The RTP/SCS also provides socioeconomic forecast projections of regional population growth.

The project site is designated Light Industrial (LI) by the General Plan and is zoned Manufacturing, Light with a Design Overlay (ML-D). The project would not conflict with the General Plans intended LI designation for the project site and would be consistent with the applicable ML zone development standards. Thus, the project would not conflict with population, housing, and employment growth projections in the 2016 AQMP, General Plan, RCP, and RTP/SCS.

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

The proposed project would result in less than significant air quality impacts. Compliance with all feasible emission reduction measures identified by the SCAQMD would be required as identified in Responses 4.3(b) and 4.3(c). As such, the proposed project would achieve this 2016 AQMP consistency criterion.

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

The proposed warehouse facility would be utilized for distribution, warehousing, and manufacturing uses with offices and truck loading docks. The project would be consistent with the General Plan LI designation and the ML zone development standards. Thus, the project would not conflict with land use planning strategies set forth in the 2016 AQMP. As such, the proposed project would achieve this 2016 AQMP consistency criterion.



In conclusion, the determination of project consistency with the 2016 AQMP is primarily concerned with the long-term influence of a project on Basin air quality. The project would not result in long-term impacts on the region's ability to meet State and Federal air quality standards. As discussed above, the proposed project would not conflict with the goals and policies of the 2016 AQMP, General Plan, RCP, and RTP/SCS. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact.

CRITERIA POLLUTANTS

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

Ozone (O₃). O₃ occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O₃ layer) extends upward from about ten to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O₃ is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen dioxide (NO_x), and sunlight to form; therefore, VOCs and NO_x are O₃ precursors. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O₃ concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O₃ in the upper atmosphere (stratosphere) protects the Earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ (in the troposphere) can adversely affect the human respiratory system and other tissues. O₃ is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O₃. Short-term exposure (lasting for a few hours) to O₃ at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO₂). NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃ and react in the atmosphere to form acid rain. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO₂ can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes and cause pulmonary dysfunction.



Coarse Particulate Matter (PM₁₀). PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

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

Sulfur Dioxide (SO₂). SO₂ is a colorless, irritating gas with a rotten egg smell that is primarily formed by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with sulfur oxides (SO_x). Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are criteria pollutants since they are precursors to O₃, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROG). Similar to VOC, ROG are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight. ROGs are criteria pollutants since they are precursors to O₃, which is a criteria pollutant.

SHORT-TERM CONSTRUCTION EMISSIONS

The project involves construction activities associated with demolition, site preparation, grading, building construction, paving, and architectural coating. The project would be constructed over approximately ten months. The proposed earthwork would involve approximately 15,071 cubic yards of cut and approximately 15,121 cubic yards of fill, resulting in approximately 50 cubic yards of import; refer to [Section 2.0, Project Description](#). Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared utilizing CalEEMod. Refer to [Appendix A, Air Quality/Greenhouse](#)



Gas/Energy Data, for the CalEEMod outputs and results. Table 4.3-1, Construction Emissions, presents the anticipated daily short-term construction emissions.

**Table 4.3-1
Construction Emissions**

Emissions Source	Pollutant (pounds/day) ^{1,2}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Emissions^{2,3}						
Year 1	7.61	82.96	61.50	0.13	6.76	3.72
Year 2	59.03	37.25	38.09	0.08	3.35	1.98
<i>SCAQMD Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gases; NO_x = nitrous oxides; CO = carbon monoxide; SO₂ = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter

1. Emissions were calculated using CalEEMod version 2016.3.2, as recommended by the SCAQMD.
2. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following; properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.
3. The project's 10-month construction schedule would occur over two calendar years.

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

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (including demolition as well as construction activities). Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, site preparation, and construction is expected to be short-term and would cease upon project completion. Most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM₁₀ generated as a part of fugitive dust emissions. PM₁₀ poses a serious health hazard alone or in combination with other pollutants. PM_{2.5} is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and SO_x combining with ammonia. PM_{2.5} components from material in the Earth's crust, such as dust, are also present, with the amount varying in different locations.

The project would implement all required SCAQMD dust control techniques (i.e., daily watering), limitations on construction hours, and adhere to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM₁₀ and PM_{2.5} concentrations. As depicted in Table 4.3-1, total PM₁₀



and PM_{2.5} emissions would not exceed SCAQMD thresholds during construction. Thus, construction air quality impacts would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, employee commutes to the project site, emissions produced on-site as equipment is used, and emissions from trucks transporting materials to/from the site. As presented in [Table 4.3-1](#), construction equipment and worker vehicle exhaust emissions would not exceed the established SCAQMD threshold for all criteria pollutants. Therefore, impacts in this regard would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O₃ precursors. In accordance with the methodology prescribed by the SCAQMD, the ROG emissions associated with paving and architectural coating have been quantified with the CalEEMod model. ROG emissions associated with the proposed project would be less than significant; refer to [Table 4.3-1](#).

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are human health hazards when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

LONG-TERM OPERATIONAL EMISSIONS

Long-term air quality impacts would consist of mobile source emissions generated from project-related traffic, and emissions from stationary area and energy sources. Emissions associated with each of these sources were calculated and are discussed below.

Mobile Source

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, SO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern (NO_x and ROG react with sunlight to form O₃ [photochemical smog], and wind currents readily transport SO_x, PM₁₀, and PM_{2.5}). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod. According to *333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis* (TIA) prepared by RK Engineering Group, Inc. (dated January 20,



2020), the proposed project would generate approximately 723 total daily trips. Since the proposed land use is industrial, it is expected to attract heavy vehicle traffic, mainly in the form of large multi-axle trucks. Large trucks generally occupy more space on the roadway; therefore, in order to show the equivalent impacts of project-generated trucks, the project trip generation is converted to passenger car equivalents (PCE). The operational air quality analysis has used the non-PCE adjusted trips to provide a worst-case scenario and acknowledge the mix of heavy truck traffic that would be generated by the project. Table 4.3-2, Long-Term Air Emissions, presents the anticipated mobile source emissions.

**Table 4.3-2
Long-Term Air Emissions**

Emissions Source	Pollutant (pounds/day) ¹					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project Summer Emissions						
Area	3.30	0.00	0.03	0.00	0.00	0.00
Energy	0.04	0.41	0.34	0.00	0.03	0.03
Mobile	1.45	7.47	20.74	0.08	6.18	1.69
Total Summer Emissions²	4.79	7.88	21.12	0.08	6.21	1.72
SCAQMD Threshold	55	55	550	150	150	55
Is Threshold Exceeded? (Significant Impact?)	No	No	No	No	No	No
Project Winter Emissions						
Area	3.30	0.00	0.03	0.00	0.00	0.00
Energy	0.04	0.41	0.34	0.00	0.03	0.03
Mobile	1.38	7.65	19.28	0.07	6.18	1.69
Total Winter Emissions³	4.72	8.06	19.65	0.07	6.21	1.72
SCAQMD Threshold	55	55	550	150	150	55
Is Threshold Exceeded? (Significant Impact?)	No	No	No	No	No	No

Notes:

1. Emissions were calculated using CalEEMod version 2016.3.2, as recommended by the SCAQMD.
2. The numbers may be slightly off due to rounding.

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

Area Source Emissions

Area source emissions would be generated due to an increased demand for natural gas associated with the development of the proposed project; refer to Table 4.3-2. The primary use of natural gas by the project would be for consumer products, architectural coating, and landscaping.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity and natural gas usage associated with the proposed project; refer to Table 4.3-2. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.



Total Operational Emissions

As shown in [Table 4.3-2](#) the total operational mitigated emissions for both summer and winter would not exceed established SCAQMD thresholds. Therefore, impacts in this regard would be less than significant.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O₃ precursors, VOCs and NO_x, affect air quality on a regional scale. Health effects related to O₃ are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants during construction would have negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the SCAQMD (April 6, 2015) for the *Sierra Club vs. County of Fresno*, the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD) (April 13, 2015) for the *Sierra Club vs. County of Fresno*, SJVAPCD acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from O₃, as an example, is correlated with the increases in ambient level of O₃ in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O₃ levels over the entire region. The SCAQMD further states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O₃ levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O₃-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

CUMULATIVE SHORT-TERM CONSTRUCTION IMPACTS

With respect to the proposed project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to Federal Clean Air Act mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements and implement all feasible SCAQMD rules to reduce construction air emissions to the extent feasible. Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. In addition, the proposed project would comply with adopted 2016 AQMP emissions control measures. Pursuant to SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects.



As discussed above, the project's short-term construction emissions would be below the SCAQMD thresholds and would result in less than significant air quality impacts. Thus, it can be reasonably inferred that the project's construction emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin. A less than significant impact would occur in this regard.

CUMULATIVE LONG-TERM OPERATIONAL IMPACTS

As discussed, the proposed project would not result in long-term operational air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, no cumulative operational impacts associated with implementation of the proposed project would result.

Mitigation Measures: No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

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

The nearest sensitive receptors to the project site are residences approximately 85 feet to the south of the project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds for construction and operations impacts (stationary sources only).

LOCALIZED SIGNIFICANCE THRESHOLDS

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project is located within Source Receptor Area (SRA) 4, South Los Angeles County Coastal.

Construction LST

The SCAQMD guidance on applying CalEEMod to LSTs specifies the number of acres a particular piece of equipment would likely disturb per day. SCAQMD provides LST thresholds for one-, two-, and five-acre site disturbance areas; SCAQMD does not provide LST thresholds for projects over five acres. The 6.46-acre project site would be graded over an approximate 25-day period. Based on the calculations obtained from CalEEMod, construction of the project is anticipated to disturb up to 112.5 acres of soil during the grading phase. Thus, for the purpose of this analysis, it is assumed that 4.5-acres would be graded per day (112.5 acres divided by 25 days). To be conservative, LST Thresholds for two-acre disturbance area were adopted. The closest sensitive receptors are residential uses approximately 85 feet (28 meters) to the south of the project site. These sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. As the nearest sensitive uses are approximately 85 feet (28 meters) to the south of project site, the LST values for 25 meters were used.



Table 4.3-3, *Localized Significance of Emissions*, shows the localized construction-related emissions for NO_x, CO, PM₁₀, and PM_{2.5} compared to the LSTs for SRA 4. It is noted that the localized emissions presented in Table 4.3-3 are less than those in Table 4.3-1 since localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As shown in Table 4.3-3, the project's localized construction emissions would not exceed the LSTs for SRA 4. Therefore, localized significance impacts from construction would be less than significant.

**Table 4.3-3
Localized Significance of Emissions**

Source	Pollutant (pounds/day) ⁴			
	NO _x	CO	PM ₁₀	PM _{2.5}
Construction				
On-Site Emissions ^{1,2}	58.57	35.77	7.08	3.94
On-Site Emissions with SCAQMD Rules Applied ^{1,2,3}	58.57	25.77	4.17	1.92
Localized Significance Threshold ²	82	842	7	5
Thresholds Exceeded?	No	No	No	No

Notes:

1. The grading phase emissions are presented as the worst-case scenario for NO_x, CO, and PM₁₀.
2. The site preparation phase emissions are presented as the worst-case scenario for PM_{2.5}.
3. The reduction/credits for construction emissions applied in CalEEMod are based on the application of dust control techniques as required by SCAQMD Rule 403. The dust control techniques include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stock piles with tarps; water all haul roads three times daily; and limit speeds on unpaved roads to 15 miles per hour.
4. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO_x, CO, PM₁₀, and PM_{2.5}. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (4.5 acres; therefore the 2-acre threshold was used) and the source receptor area (SRA 4).

Refer to [Appendix A, Air Quality/Greenhouse Gas/Energy Data](#), for assumptions used in this analysis.

Operational LST

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). Since the proposed project is a warehouse, the operational phase LST protocol was applied. If emissions exceed the applicable operational LSTs for the project site, then additional dispersion modeling would need to be conducted to determine if there is an actual exceedance of the ambient air quality standards.

Although the project site is approximately 6.58 acres, the five-acre operational LST was utilized to provide a conservative estimate of operational LST impacts. Applicable localized thresholds from the SCAQMD's mass-rate LST lookup tables for a five-acre project site within SRA 4 are as follows:

- NO_x: 123 pounds per day;
- CO: 1,530 pounds per day;
- PM₁₀: 4 pounds per day; and/or
- PM_{2.5}: 2 pounds per day.



Table 4.3-4, *Localized Significance of Operational Emissions*, shows the calculated emissions for the project's operational activities compared to the applicable LSTs.

**Table 4.3-4
Localized Significance of Operational Emissions**

Source	Pollutant (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Operational				
Area Source Emissions	0.00	0.03	0.00	0.00
<i>Localized Significance Threshold¹</i>	123	1,530	4	2
Thresholds Exceeded?	No	No	No	No

Notes:

1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_x, CO, PM₁₀, and PM_{2.5}. The Localized Significance Threshold was based on the total acreage for operational (the 5-acre threshold was used), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 4).

Refer to Appendix A for assumptions used in this analysis.

As shown in Table 4.3-4, the project's operational area source emissions would be negligible and would not exceed the LSTs for SRA 4. Therefore, localized significance impacts from operations would be less than significant.

Although the project would not exceed the SCAQMD LST thresholds at the nearest sensitive receptors, the analysis below further discusses potential health risks associated with diesel particulate matter (DPM) from heavy trucks accessing and idling on-site during project operations.

HEALTH RISK ASSESSMENT

Health Risk Assessment Thresholds

In order to determine whether or not a proposed project would cause a significant health risk effect on the environment, the impact of the project must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the CEQA Guidelines, the SCAQMD recommends that the following air pollution thresholds be used by lead agencies in determining whether the proposed project is significant. If the lead agency finds that the proposed project has the potential to exceed the air pollution thresholds, the project should be considered significant. The thresholds for air toxic emissions are as follows.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of 1.0 in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per one million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

The SCAQMD has also established non-carcinogenic risk parameters for use in Health Risk Assessments (HRAs). Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below,



which health effects are not likely to occur. A hazard index of less than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

Health Risk Assessment Methodology

The air dispersion modeling for the HRA was performed using the Environmental Protection Agency (EPA) AERMOD dispersion model version 19191. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Long Beach Airport (LGB) Monitoring Station was selected as being the most representative meteorology based on proximity.²

On-site emission sources in the model include; four one-line volume source (comprised of 25 volume sources) to model truck idling at the 25 loading docks to the east of the warehouse and two one-line volume source modeled surrounding the warehouse (comprised of 106 volume sources) to model truck movement and maneuvering. The off-site emission sources in the model include 14 separate one-line volume sources along: Redondo Beach Boulevard, Figueroa Street, Broadway, West Gardena Boulevard, Main Street, and Albertoni Street. These off-site emissions sources are comprised of a total of 766 volume sources and represent the off-site truck movement on adjacent roadways. An emission rate for PM₁₀ (DPM) was calculated using the 2017 Emission FACtor model (EMFAC-2017)³ model run for Los Angeles County. Emissions from heavy trucks were assigned a release height of 4.6 meters (15 feet) in compliance with SCAQMD guidance. A release height of 4.6 meters is representative of the average stack height for a heavy-duty truck. Refer to Appendix D, Health Risk Assessment, for all emission calculations, EMFAC-2017 model runs, and AERMOD results.

The model was run to obtain the peak one-hour and period (annual) average concentration in micrograms per cubic meter [$\mu\text{g}/\text{m}^3$] at nearby sensitive receptors. According to the SCAQMD's Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588), air dispersion modeling is required to estimate (a) annual average concentrations to calculate the Maximum Individual Cancer Risk (MICR), the maximum chronic hazard index (HI), the zones of impact, and excess cancer burden; and (b) peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects. According to the SCAQMD, in order "to identify the maximum impacted receptors (i.e., peak cancer risk and peak hazard indices) a grid spacing of 100 meters or less must be used" (see page 16 of SCAQMD's Supplemental Guidelines). Due to the location and spacing of the sensitive receptors and the location of all truck hauling roads, receptors were modeled with a 50-meter (164 feet) by 50-meter (164 feet) grid spacing over the entire 3 kilometer (km) by 3 km site domain. In addition, the United States Geological Survey (USGS) 1/3 arc-second (about 10 meters) National Elevation Dataset (NED) terrain data was processed with AERMAP⁴ and imported into AERMOD for the project area. The modeling and analysis was prepared in accordance with the SCAQMD Guidelines.

The Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT) was employed to calculate the health risks of the project on the sensitive receptors near the project site. HARP2 was created for the purpose of assisting and supporting the local California Air Pollution Control and Air Quality Management Districts with implementing the requirements of AB 2588. Although designed to meet the programmatic requirements of the Air Toxics "Hot Spots" Program, HARP2 modules have also been used for preparing risk assessments for other air related programs (e.g., air toxic control measure development, facility permitting applications, roads, ambient monitoring evaluations, CEQA reviews). A health risk computation was performed to determine the potential risk using

² South Coast Air Quality Management District, *SCAQMD Meteorological Data for AERMOD*, <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>, accessed January 23, 2020.

³ California Air Resources Board, *EMFAC 2014 Web Database*, <https://www.arb.ca.gov/emfac/2017/>, accessed January 17, 2020.

⁴ U.S. Environmental Protection Agency, *User's Guide for the AERMOD Terrain Preprocessor (AERMAP)*, https://www3.epa.gov/ttn/scram/models/aermod/aermap/aermap_userguide_v18081.pdf, accessed January 23, 2020.



the maximum annual average and the risk of developing an excess cancer was calculated on a 30-year exposure scenario for nearby sensitive receptors. The chronic and carcinogenic health risk calculations are based on the office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (Guidance Manual). Only the risk associated with operations of the proposed project was assessed, as construction emissions would be negligible and short-term.

Note that the concentration estimate developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur as a result of the project any one point in time. Actual one-hour and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

Carcinogenic Risk

Based on the AERMOD outputs, the highest expected annual average DPM emission concentrations resulting from operation of the project (155 daily truck trips) at a discrete receptor grid point would be 0.0031 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). This level of concentration would be experienced directly north of the project site; refer to Appendix D. It is acknowledged that the calculations conservatively assume no cleaner technology with lower emissions would occur in future years. Cancer risk calculations are based on 30-year MICR exposure periods. As shown in Table 4.3-5, Project Maximum Individual Cancer Risk, the highest calculated carcinogenic risk from project implementation is 2.76 per million for 30-year exposure. As shown, impacts related to cancer risk and DPM concentrations from heavy trucks would be less than significant at the MICR.

**Table 4.3-5
Project Maximum Individual Cancer Risk**

Exposure Scenario	Maximum Individual Cancer Risk (Risk per Million) ^{1,2}	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
30-Year Exposure	2.76	10	No

Notes:

1. Refer to Appendix D, Health Risk Assessment.
2. The maximum cancer risk would be experienced at UTM NAD83 Zone 11S coordinate location 31655.62, 375001929 to the north of the project site.

Non-Carcinogenic Hazards

The significance thresholds for TAC exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the REL. The highest maximum chronic and acute hazard index associated with the emissions from the project at sensitive receptors would be 0.0095 and 0.0046 respectively; refer to Appendix D. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

As described, non-carcinogenic hazards resulting from the proposed project are calculated to be within acceptable limits. Additionally, impacts related to cancer risk and PM_{10} concentrations from warehouse operations would be less



than significant at the MICR. Therefore, impacts related to health risk from warehouse operations would be less than significant.

CARBON MONOXIDE HOTSPOTS

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

The SCAQMD requires a quantified assessment of CO hotspots when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization) by 0.02 (or two percent) for any intersection with an existing level of service LOS D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersections.

The Basin is designated as an attainment/maintenance area for the Federal CO standards and an attainment area for State standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on the nation's urban and rural roads have increased. On-road mobile source CO emissions have declined 24 percent between 1989 and 1998, despite a 23 percent rise in VMT over the same 10 years. California trends have been consistent with national trends; CO emissions declined 20 percent in California from 1985 through 1997 while VMT increased 18 percent in the 1990s. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A detailed CO analysis was conducted in the *Federal Attainment Plan for Carbon Monoxide (CO Plan)* for the SCAQMD's *2003 Air Quality Management Plan*.⁵ The locations selected for microscale modeling in the CO Plan are worst-case intersections in the Basin and would likely experience the highest CO concentrations. Thus, CO analysis within the CO Plan is utilized in a comparison to the proposed project, since it represents a worst-case scenario with heavy traffic volumes within the Basin.

Of these locations, the Wilshire Boulevard/Veteran Avenue intersection in Los Angeles experienced the highest CO concentration (4.6 parts per million [ppm]), which is well below the 35-ppm 1-hour CO Federal standard. The Wilshire Boulevard/Veteran Avenue intersection is one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection, it can be reasonably inferred that CO hotspots would not be experienced at any intersections near the project site due to net increase in volume of traffic of 918 passenger car equivalent (PCE) daily trips that would occur as a result of project implementation. Therefore, impacts would be less than significant in this regard.

AIR QUALITY HEALTH IMPACTS

As evaluated above, the project's air emissions would not exceed the SCAQMD's LST thresholds or health risk thresholds, and CO hotspots would not occur as a result of the proposed project. Therefore, the project would not exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_x, PM₁₀, or PM_{2.5}. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (i.e., children and the elderly) are protected. In other words, the ambient air quality standards are purposefully set in a stringent manner to protect children, elderly, and those with existing respiratory problems. Thus, air quality health impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

⁵ The CO Plan was not updated as part of the 2016 AQMP.



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

Less Than Significant Impact. According to the SCAQMD CEQA *Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project involves constructing a 145,840-square foot warehouse with associated surface parking and landscaping on the project site and does not include any uses identified by the SCAQMD as being associated with odors. Furthermore, the proposed project would be required to comply with the California Code of Regulations, Title 13, Sections 2485(C)(1) which limits the idling time of trucks to no more than five minutes and would further minimize emissions and possible odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce detectable odors from heavy-duty equipment exhaust. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.



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4.4 BIOLOGICAL RESOURCES

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

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

No Impact. According to the General Plan EIR, the City of Carson does not support any sensitive or special status species. The project area is a built out, industrial area of the City and the project site is heavily disturbed and mostly consists of developed, bare ground, and disturbed (non-native) habitat. The site is also developed with two residential dwellings and a former salvage yard. Thus, project implementation would not adversely affect any candidate, sensitive, or special status species. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.



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

No Impact. According to the General Plan EIR, riparian habitat within the City is limited to the Carson Harbor Village Mobile Home Park located at the northwest portion of the City approximately one mile southeast of the project site. The project site is heavily disturbed and is located within an urbanized area of the City with no riparian habitat or sensitive natural communities. Thus, project implementation would not adversely affect riparian habitat or other sensitive natural communities. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. According to the General Plan EIR, wetland habitat within the City is limited to the 17-acre wetland within Harbor Village Mobile Home Park located at the northwest portion of the City approximately one mile southeast of the project site. As discussed, the project site is heavily disturbed and consists mostly of developed, bare ground, and disturbed (non-native) habitat. The site does not support State or Federally protected wetlands and thus, project implementation would not adversely affect State or Federally protected wetlands. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Based on the lack of suitable habitat within the project site, project implementation would not interfere with the movement of any native resident, migratory fish, or wildlife species. The project site is fenced and does not function as a wildlife corridor or nursery site. However, the existing trees and shrubs on-site have the potential to provide suitable nesting habitat for birds. The Migratory Bird Treaty Act (MBTA) governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, or nests. Mandatory compliance with the MBTA would reduce the project's potential construction-related impacts to migratory birds. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Municipal Code Chapter 9, *City Tree Preservation and Protection*, preserves and protects the public street trees within Carson that are of aesthetic importance and provides for the replacement of trees in order to maintain the community's natural environment. Project development would require the removal of all existing on-site trees, shrubs, and grasses, as well as six public street trees along West Gardena Boulevard. Removal of the public street trees would require a Tree Removal Permit.

As shown on Exhibit 2-4, Conceptual Landscape Plan, the project proposes to plant 11 new street trees along the project frontage on West Gardena Boulevard. The street trees would be 24-inch box size London plane trees and would meet the planting specifications detailed in Municipal Code Sections 3905, *Planting*, 3907, *Planting and Staking*, and 3908, *Planting Specifications*. As detailed, the Applicant would be required to obtain a Tree Planting Permit prior to



planting of any trees within the City's right-of-way to ensure the proposed street trees comply with the City's planning specifications and Parkway Tree Master Plan.

Upon City approval of the Tree Removal Permit and Tree Planting Permit, project implementation would not conflict with any local policies or ordinances protecting biological resources. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. According to the General Plan EIR, no areas within Carson are located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Thus, project implementation would not conflict with the provisions of any such plans. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.



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4.5 CULTURAL RESOURCES

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

This section is primarily based upon the *Cultural Resources Study for the CT Warehouse Project, Carson, Los Angeles, County, California* (Cultural Resources Assessment) prepared by Anza Resource Consultants (dated January 15, 2020); refer to [Appendix B, Cultural Resources Assessment](#).

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

No Impact. The Cultural Resources Assessment involved a records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center. The CHRIS search included a review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic United States Geological Survey (USGS) 7.5-, 15-, and 30-minute quadrangle maps. The search was conducted to identify previously recorded cultural resources and previously conducted cultural resources studies within a 0.5-mile radius of the project site.

The SCCIC records search identified four cultural resources studies that were conducted within a 0.5-mile radius of the project site, one of which (LA-04512) included the project site; refer to Cultural Resources Assessment Table 1, *Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site*. The LA-04512 report was completed in 1977 and describes a records search and partial cultural resources survey of Carson and provides sensitivity assessments and management recommendations for resources within the City. Although this report shows the project site as at least partially surveyed for cultural resources, the report does not meet current professional standards and does not detail the level of effort conducted within the project site.

The SCCIC records search also identified two cultural resources previously recorded within a 0.5-mile radius of the project site; refer to Cultural Resources Assessment Table 2, *Previously Recorded Cultural Resources within 0.5-Mile of the Project Site*. Neither of these resources is within or adjacent to the project site. One of the resources (P-19-00088) is a prehistoric marine shell and lithic artifact site that was recorded in 1939 and mapped vaguely over a large area. The other resource (P-190077) is a historic period commercial building that was recommended not eligible for listing on the NRHP, CRHR, or local register.

On December 13, 2019, a pedestrian survey was conducted on the project site to examine all areas of exposed ground surface for prehistoric artifacts (e.g., chipped stone tools and production debris, stone milling tools, ceramics), historic



debris (e.g., metal, glass, ceramics), or soil discoloration that might indicate the presence of a cultural midden. Site characteristics and survey conditions were recorded. No archaeological resources were found on-site; however, six historic period buildings were identified as shown on Cultural Resources Assessment Figure 3, *Detail View of Numbered Building Locations*. The buildings are labeled Buildings 1, 2, 2a, 2b, 2c, and 3, based on fence lines and their presumed association and are evaluated individually below.

According to CEQA, a resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Building 1 (333 West Gardena Boulevard). This building is a large, approximately 3,200-square foot, utilitarian single-story commercial warehouse structure located in the central southern portion of the project site; refer to Cultural Resources Assessment Attachment B, *Photographs*. The exterior is clad in corrugated steel and the roof is metal. There is a single door and adjacent window covered by an awning on the south elevation, corrugated steel barn doors on north elevation, and large sections of elevated windows on the east and west elevations. The south elevation is painted "Gates Machine Shop," a reference to former occupant Floyd Gates, who moved out of the building in the 1970s. Since then, the building has been used for storage. The building is simple, utilitarian, and rectangular in footprint. The construction date of this building is presumed to be circa 1950 as it is visible on a 1952 aerial photograph and clearly depicted on the 1964 USGS Inglewood, California topographic map.

Although a typical building during the post-World War II industrial boom of the region, this building has no direct identifiable association with important events in California history (does not meet CRHR Criterion 1). The building and project site were owned by Ed "Isky" Iskenderian, a legendary hot rodder and camshaft builder since the 1940s and notorious collector. However, Mr. Iskenderian only used the property for storage, had multiple similar properties, and the project site is not where his engineering development took place (does not meet CRHR Criterion 2). His existing business at 16020 South Broadway in the City of Gardena is best associated with his legacy and, similarly, possesses a storage yard full of metalworking equipment. Building 1 is utilitarian in design and does not embody a distinctive style of construction nor does it represent the work of a master (does not meet Criterion 3). Although this building and surrounding area are filled with historic-period equipment, the equipment was moved to Building 1 for storage only and are therefore, in secondary context lacking significant data potential (does not meet CRHR Criterion 4). As such, Building 1 (333 West Gardena Boulevard) is recommended not eligible for CRHR listing.

Buildings 2, 2a, 2b, and 2c (325 West Gardena Boulevard). This residential complex consists of an approximately 1,680-square foot single-family residence (Building 2) attached by a breezeway to a 520-square foot two-car garage (Building 2a) with a detached, approximately 680-square foot, single-story outbuilding or second garage behind (Building 2b), and a second, approximately 2,000-square foot, single-story outbuilding (Building 2c) behind Building 2b. Building 2 is a one and a half-story Vernacular style house with a cross-gabled, steep roof sheathed in rolled composition with attic windows on the east and west elevations. The walls are clad in horizontal siding and the fenestration appears to be a mixture of modern vinyl frame windows and older wood-frame sash windows on the north and west elevations. The condition of Building 2 is poor to fair, with rotted wood and exposed tar paper visible on the west and north elevations. Building 2 was constructed in 1926; however, the outbuildings (Buildings 2b and 2c) appear newer. The utilitarian outbuildings are visible on a 1952 aerial photograph.



When the house was constructed it was on the eastern outskirts of the community of Gardena when the area was primarily small farms. It remained in unincorporated Los Angeles County until becoming part of Carson when the City incorporated in 1968. The building complex has no direct association with important events in California history (does not meet CRHR Criterion 1). Although owned by Ed Iskenderian, he did not live nor conduct his engineering development at the residential complex and it is not associated with him or other persons important in California's past (does not meet Criterion 2). The heavily modified Vernacular residence has an incongruous mix of design elements and does not embody a distinctive style of construction nor does it represent the work of a master (does not meet Criterion 3). The utilitarian outbuildings similarly have no discernable style and do not meet CRHR Criterion 3. The building complex does not possess significant data potential (does not meet CRHR Criterion 4). Overall, Buildings 2, 2a, 2b, and 2c (325 West Gardena Boulevard) are recommended not eligible for CRHR listing.

Building 3 (317 West Gardena Boulevard). Building 3 is an approximately 945-square foot, single-family Bungalow located in the southeast corner of the project site; refer to Cultural Resources Assessment Attachment B, *Photographs*. The building has a long driveway on its west side, but no garage or outbuildings. The south elevation of the house has a porch accessed by three steps and the western half of the porch was enclosed during a later modification. The walls are clad in horizontal siding and the fenestration is a mixture of modern vinyl frame windows and older wood-frame sash windows. The roof is a split-gable design clad in composition shingle. The condition of the house is poor to fair, with rotted wood and structural sagging visible. Building 3 was constructed in 1925.

Similar to the Building 2 complex, Building 3 was constructed on the eastern outskirts of the community of Gardena when the area was primarily small farms. It remained in unincorporated Los Angeles County until becoming part of Carson when the City incorporated in 1968. The residence has no association with important events in California history (does not meet CRHR Criterion 1). Although owned by Ed Iskenderian, he did not live nor conduct his engineering development at Building 3 and it is not associated with him or other persons important in California's past (does not meet Criterion 2). The building minimally meets the Bungalow style but has since been modified and is in disrepair. The residence does not embody a distinctive style of construction nor does it represent the work of a master (does not meet Criterion 3). The residence also does not possess significant data potential (does not meet CRHR Criterion 4). Thus, Building 3 (317 West Gardena Boulevard) is recommended not eligible for CRHR listing.

Overall, none of the historic period buildings or objects within the project site are eligible for listing on the CRHR and therefore require no further consideration. No impacts to historical resources would occur with project development.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated. As detailed in the Cultural Resources Assessment, no archaeological resources were identified within or near the project site during the records search or pedestrian survey and the project site is not considered sensitive for buried archaeological resources. The proposed earthwork would involve approximately 15,071 cubic yards of cut and approximately 15,121 cubic yards of fill, resulting in approximately 50 cubic yards of import. In addition to on-site improvements, off-site excavation/grading would be required for utility installation, undergrounding of power lines, repaving the alley, and reconstructing sidewalk, curb, and gutter along West Gardena Boulevard at the southern boundary of the site. Thus, project excavation would encounter native soils which have the potential to support unknown buried archaeological resources. In the unlikely event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and recommends a course of action. With implementation of Mitigation Measure CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines, and impacts would be reduced to less than significant levels.



Mitigation Measures:

CUL-1 **Unanticipated Discovery of Cultural Resources.** If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted to mitigate any significant impacts. In the event that an identified cultural resources is of Native American origin, the qualified archaeologist shall consult with the project owner and City of Carson to implement Native American consultation procedures. Construction shall not resume until the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological resources.

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

Less Than Significant Impact. Due to the level of disturbance on the project site and in the site vicinity, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or ground-disturbing activities. Nonetheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with the aforementioned regulations, impacts related to the disturbance of human remains are less than significant.

Mitigation Measures: No mitigation is required.



4.6 ENERGY

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

SENATE BILL 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. The bill requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board, and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and State board to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of the policy.

CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24)

The *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings* (California Code of Regulations, Title 24, Part 6), commonly referred to as “Title 24,” became effective on January 1, 2020. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Under 2019 Title 24 standards, nonresidential buildings will use about 30 percent less energy (mainly due to lighting upgrades) when compared to 2016 Title 24 standards.¹ The standards require installation of energy efficient windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN)

California Green Building Standards (CALGreen) is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California’s landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. The 2019 California

¹ California Energy Commission, *2019 Building Energy Efficiency Standards*, https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf, accessed January 23, 2020.



Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2020. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g. lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.²

CITY OF CARSON ENERGY EFFICIENCY CLIMATE ACTION PLAN

The *City of Carson 2015 Energy Efficiency Climate Action Plan* (EECAP) includes goals and policies to incorporate environmental responsibility into its daily management of its community and municipal operations. The EECAP includes a list of emission reduction actions organized by sector and a time frame for implementation. The EECAP classifies the reduction targets into two separate categories, community and municipal emissions. Energy efficiency strategies are outlined in the EECAP with goals and measures defined for each of the two categories.

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

Less Than Significant Impact.

This analysis focuses on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with project construction and operations. The analysis of operational electricity is based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) modeling results for the project. The project's estimated electricity consumption is based primarily on CalEEMod's default settings for Los Angeles County, and consumption factors provided by Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas), who are the electricity and natural gas providers for the City and the project site. The results of the CalEEMod modeling are included in Appendix A, Air Quality/Greenhouse Gas/Energy Data. The amount of operational fuel consumption was estimated using the California Air Resources Board (CARB) Emissions Factor 2017 (EMFAC2017) computer program which provides projections for typical daily fuel (i.e. diesel and gasoline) usage in Los Angeles County, and the project's annual vehicle miles traveled (VMT) outputs from CalEEMod. The estimated construction fuel consumption is based on the project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips.

The project's estimated energy consumption is summarized in Table 4.6-1, Project and Countywide Energy Consumption. As shown in Table 4.6-1, the project's electricity usage would constitute an approximate 0.0025 percent increase over Los Angeles County's typical annual electricity and an approximate 0.0004 percent increase over Los Angeles County's typical annual natural gas consumption. The project's construction and operational vehicle fuel consumption would increase Los Angeles County's consumption by 0.0072 percent and 0.0042 percent, respectively.

² U.S. Green Building Council, *Green Building Costs and Savings*, <https://www.usgbc.org/articles/green-building-costs-and-savings>, accessed January 23, 2020.



Table 4.6-1
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption ¹	Los Angeles County Annual Energy Consumption ²	Percentage Increase Countywide ²
Electricity Consumption	1,718 MWh	68,486,000 MWh	0.0025
Natural Gas Consumption	10,798 therms	2,921,000,000 therms	0.0004
Fuel Consumption			
• Construction Fuel Consumption ³	38,593 gallons	533,800,838 gallons	0.0072
• Operational Automotive Fuel Consumption ³	165,171 gallons	3,975,480,911 gallons	0.0042

Notes:

1. As modeled in CalEEMod version 2016.3.2.
2. The project increases in electricity and natural gas consumption are compared to the total consumption in Los Angeles County in 2018. The project increases in automotive fuel consumption are compared with the projected Countywide fuel consumption in 2020.
Los Angeles County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>, accessed January 23, 2020.
Los Angeles County natural gas consumption data source: California Energy Commission, *Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>, accessed January 23, 2020.
3. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2017 model.
Refer to [Appendix A](#) for assumptions used in this analysis.

Construction Energy Consumption

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

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during demolition, site clearing, grading, paving, building construction, and architectural coatings. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that heavy-duty diesel equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business. As indicated in [Table 4.6-1](#), the project's fuel consumption from construction would be approximately 38,593 gallons, which would increase fuel use in the County by 0.0072 percent. As such, construction would have a nominal effect on the local and regional energy supplies. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption



would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. As such, a less than significant impact would occur in this regard.

Operational Energy Consumption

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Table 4.6-1 provides an estimate of the daily fuel consumed by vehicles traveling to and from the project site. As indicated in Table 4.6-1, project operations are estimated to consume approximately 165,171 gallons of fuel per year, which would increase Los Angeles County's automotive fuel consumption by 0.0042 percent. The project would not result in any unusual characteristics that would result in excessive operational fuel consumption associated with vehicular travel. Fuel consumption associated with project-related vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. As such, a less than significant impact would occur in this regard.

Electricity Demand

The project would consume energy for interior and exterior lighting, heating/ventilation and air conditioning (HVAC), electronics systems, appliances, and security systems, among other common light industrial features. The project would be required to comply with Title 24 standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 50 percent of total procurement by 2030. As indicated in Table 4.6-1, operational energy consumption would represent an approximate 0.0025 percent increase in electricity consumption over the current Countywide usage. Therefore, the project would not result in the inefficient, wasteful, or unnecessary consumption of building energy, and impacts in this regard would be less than significant.

As depicted in Table 4.6-1, operational energy consumption would represent an approximate 0.0025 percent increase in electricity consumption and a 0.0004 percent increase in natural gas consumption over the current Countywide usage. The project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards. Additionally, the project would not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure. The project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The project would comply with all applicable goals and measures identified in the City's EECAP, as listed in Table 4.6-2, Community-Oriented EECAP Strategies. The EECAP contains energy efficient goals and measures that would help implement energy efficient measures and would subsequently reduce GHG emissions within the City. Compliance with Title 24 and CALGreen standards would ensure the project incorporates energy efficient windows, insulation, lighting, ventilation systems, as well as water efficient fixtures and electric vehicles charging infrastructure. Adherence to the Title 24 energy requirements will ensure conformance with the State's goal



of promoting energy and lighting efficiency, and the City’s EECAP. Therefore, the proposed project would result in less than significant impacts associated with renewable energy or energy efficiency plans.

Table 4.6-2
Community-Oriented EECAP Strategies

Goal	Measure	Project Compliance
Goal 4: Increase Energy Efficiency in New Commercial Development	Measure 2.1: Encourage or Require Energy Efficiency Standards Exceeding Title 24	As the 2013 Title 24 standards went into effect on July 1, 2014, the 2015 EECAP utilized efficiency measures outlined in the 2013 Title standards. Since then, the 2016 Title 24 and 2019 Title 24 standards were adopted. The 2016 Title 24 standards, which took effect on January 1, 2017, were 5 percent more efficient than the 2013 Title 24 standards for non-residential construction. Further, the 2019 Title 24 standards, which took effect on January 1, 2020, uses 30 percent less energy than non-residential buildings built under the 2016 standards primarily due to more efficient lighting standards. Therefore, as the project would comply with 2019 Title 24 standards, the project would achieve an increased reduction in energy usage when compared to the 2013 Title 24 standards required by the EECAP Measure 2.1.
	Measure 5.1: Promote or Require Water Efficiency through The Water Conservation Act of 2009 (SB X7-7)	
Goal 5: Increase Energy Efficiency through Water Efficiency	Measure 5.2: Promote WE Standards Exceeding SB X7-7	The project’s irrigation systems would be controlled by a weather-based smart irrigation controller to minimize water usage and reduce irrigation runoff. Further, the project would comply with outdoor water conservation measures outlined per California water regulations (AB 1881) and local water efficient landscape ordinances.
	Measure 6.1: Promote Tree Planting for Shading and Energy Efficiency	
Goal 6: Decrease Energy Demand through Reducing Urban Heat Island Effect	Measure 6.2: Incentivize or Require Light-Reflecting Surfaces	The proposed project would include landscaping improvements, including a variety of ornamental trees, shrubs, accents, and groundcover. Tree species may include Palo Verdes, London Plane Trees, Australian Willows, Mondell Pines, Holly Oaks, African Sumac, and flowering accent trees.

Sources:

City of Carson, *Energy Efficiency Climate Action Plan*, December 2015.

California Energy Commission, 2019 *Building Energy Efficiency Standards*, https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf, accessed January 23, 2020.

Mitigation Measures: No mitigation is required.



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4.7 GEOLOGY AND SOILS

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

This section is primarily based upon the *Geotechnical and Infiltration Evaluation, Proposed Industrial Building, 333 West Gardena Boulevard, Carson, Los Angeles County, California* (Geotechnical Investigation) prepared by GeoTek, Inc. (dated August 9, 2019); refer to Appendix C, Geotechnical Investigation.



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

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

No Impact. Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Earthquake Fault Zone. According to the Geotechnical Investigation, the project site is not located within an Alquist-Priolo Earthquake Fault Zone. According to the Geotechnical Investigation, no active or potentially active fault is known to exist in the site vicinity. The closest fault zone to the project site is the Newport-Inglewood Fault zone, located in the northernmost portion of the City, approximately 1.2 miles east of the project site; refer to [Appendix C](#). Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation is required.

2) **Strong seismic ground shaking?**

Less Than Significant Impact. Southern California has numerous active seismic faults subjecting people to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for people and structures, categorized either as primary or secondary hazards. Primary hazards are caused by the direct interaction of seismic energy with the ground; examples include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Secondary hazards are consequences of the shaking; examples include ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

According to the Geotechnical Investigation, nearby faults include the Palos Verdes Fault and the Puente Hills Blind Thrust Fault, located approximately 6.9 miles and 9 miles away, respectively. Based on the site's proximity to several known active faults, ground shaking would be expected during the project's lifetime. According to the Geotechnical Investigation, the project site would be subject to a peak ground acceleration (PGA_M) of 0.61g.

In conformance with the existing seismic design requirements of the California Building Standards Code and Municipal Code Section 8100, *Adoption of Building Code*, the project would be subject to the site-specific seismic design recommendations identified in the Geotechnical Investigation to minimize the potential for damage and major injury during a seismic event; refer to Geotechnical Investigation [Section 6.0, Geotechnical Considerations and Recommendations](#). Following conformance with the seismic design recommendations identified in the Geotechnical Investigation, as required by the Municipal Code, impacts related to seismic ground shaking would be less than significant.

Mitigation Measures: No mitigation is required.

3) **Seismic-related ground failure, including liquefaction?**

No Impact. Liquefaction and seismically-induced settlement or ground failure is generally related to strong seismic shaking events where the groundwater occurs at shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless deposits. Liquefaction typically results in the loss of shear strength of a soil, which occurs due to the increase of pore water pressure caused by the rearrangement of soil particles induced by shaking or vibration. During liquefaction, soil strata behave similarly to a heavy liquid. According to the Geotechnical Investigation, the potential for liquefaction at the project site is considered low. No impacts are anticipated in this regard.



Mitigation Measures: No mitigation is required.

4) Landslides?

No Impact. Based on the Geotechnical Investigation, the possibility for landslides is extremely remote as there is no evidence of ancient landslides or slope instability at the project site. Further, according to the General Plan EIR, there are no areas known to exist within the City where previous occurrence of landslide movement has occurred. No impacts would result in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact.

CONSTRUCTION

Grading, earthwork, and landscape/hardscape installation activities associated with project construction could expose soils to potential short-term erosion by wind and water. The project site is generally flat; thus, significant erosion by water is unlikely. All demolition and construction activities associated with the project would be required to implement Best Management Practices (BMPs) to prevent sedimentation from stormwater runoff and winds; refer to Section 4.10, Hydrology and Water Quality. These BMPs would be included in a Stormwater Pollution Prevention Plan (SWPPP) as part of the required National Pollutant Discharge Elimination System (NPDES) General Construction Permit. Compliance with the General Construction Permit would minimize the potential of erosion and loss of topsoil at the project site during construction activities to a less than significant level.

OPERATIONS

According to Section 4.10, operations of the proposed project would not result in substantial soil erosion or the loss of topsoil, as the majority of the project site would be impervious. Any unpaved area would be improved with landscaping to minimize the potential for erosion or siltation on- or off-site. In addition, the proposed project would include operational best management practices (BMPs) in conformance with the County's *2014 Low Impact Development (LID) Standards Manual* and Municipal Code Section 5809, *Storm Water Pollution Control Measures for New Development and Redevelopment Projects*, requirements in order to reduce long-term water quality impacts (including sediment) to less than significant levels. Compliance with the County's LID requirements and Municipal Code Section 5809 would reduce the project's operational impacts with regards to erosion or loss of topsoil to less than significant levels.

Mitigation Measures: No mitigation is required.

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

No Impact. Refer to Responses 4.7(a)(3), 4.7(a)(4), and 4.7(d) for a discussion concerning liquefaction, landslides, and collapse (from expansive soils).

LATERAL SPREADING

The General Plan EIR defines lateral spreading as limited displacement ground failure, often associated with liquefaction. Lateral spreading is typically exemplified by the formation of vertical cracks on the surface of liquefied soils, and usually takes place on gently sloping ground or level ground with nearby free surface such as a drainage or



stream channel. According to the Geotechnical Investigation, the potential for lateral spreading at the project site is considered low as liquefaction is not anticipated to occur on-site. No impact is anticipated in this regard.

SUBSIDENCE

According to the Geotechnical Investigation, site balance areas should be available in order to adjust project grades, depending on actual field conditions at the conclusion of earthwork, and the project site is susceptible to less than 0.1 foot as a result of underlying soils. Given this nominal potential for subsidence of on-site soils, no impacts are anticipated in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking (and potentially collapsing) when dry. Soil expansion can damage structures by cracking foundations, causing settlement and collapse, and distorting structural elements. According to the Geotechnical Investigation, subsurface soils on-site are comprised of dense/stiff soils such as alluvial gravel, sand, and clay, which have “very low” to “low” expansion potential. As stated above, the proposed project would be designed and constructed in accordance with the seismic safety design requirements of the City’s and County’s building codes, California Building Standards Code, and Geotechnical Investigation. As such, no impacts are anticipated in this regard.

Mitigation Measures: No mitigation is required.

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

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

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated. According to the General Plan EIR, there are no known paleontological resources or unique geologic features within the City. As a result, paleontological resources are not expected to be encountered during project construction. Nonetheless, in the unlikely event that paleontological resources are encountered during project construction, Mitigation Measure GEO-1 would require all project construction activities to halt until a paleontologist identifies the paleontological significance of the find and recommends a course of action. Thus, following implementation of Mitigation Measure GEO-1, impacts would be less than significant.



Mitigation Measures:

GEO-1 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Carson Community Development Director. With direction from the Community Development Director, a paleontologist certified by the County of Los Angeles shall evaluate the find prior to resuming grading in the immediate vicinity of the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.



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4.8 GREENHOUSE GAS EMISSIONS

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

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

Less Than Significant Impact.

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 424 million tons of carbon dioxide (CO₂) per year.¹ Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. Methane (CH₄) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect and increase the Earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in observational records. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO₂, CH₄, and nitrous oxide (N₂O) from before the start of industrialization (approximately 1750) to over 650,000 years ago. For that period, it was found that CO₂ concentrations ranged from 180 to 300 parts per million. For the period from approximately 1750 to the present, global CO₂ concentrations increased from a pre-industrialization period concentration of 280 to 379 parts per million in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.²

REGULATORY FRAMEWORK

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million carbon dioxide equivalent (CO₂eq)³ concentration is required to keep global warming below two degrees Celsius, which in turn is assumed to be necessary to avoid dangerous climate change.

¹ California Environmental Protection Agency, California Greenhouse Gas Emissions for 2000 to 2017, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf, accessed January 28, 2020.

² Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, September 2007.

³ Carbon Dioxide Equivalent (CO₂eq) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.



State

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation is necessary to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

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

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

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

Senate Bill 32. Signed into law on September 2016, Senate Bill (SB) 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030.

California Building Energy Efficiency Standards (Title 24). The *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings* (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2020. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Under 2019 Title 24 standards, nonresidential buildings would use about 30 percent less energy (mainly due to lighting upgrades) when compared to 2016 Title 24 standards.⁴ The standards require installation of energy efficient windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

CARB Scoping Plan. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California implement; to reduce CO₂eq emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million MT CO₂eq under a business as usual (BAU)⁵ scenario. This is a reduction of 42 million MT CO₂eq, or almost ten

⁴ California Energy Commission, *2019 Building Energy Efficiency Standards*, https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf, accessed January 23, 2020.

⁵ "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to <http://www.arb.ca.gov/cc/inventory/data/bau.htm>. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.



percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

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

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that “a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal.”

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

Local

City of Carson Climate Action Plan

In December 2017, the City adopted the *City of Carson Climate Action Plan (CAP)*. The CAP was created in partnership with the South Bay Cities Council of Governments and Southern California Edison (SCE) and was prepared to follow the guidance of California’s *Long Term Energy Efficiency Strategic Plan*. The CAP identifies a comprehensive set of electricity-related energy efficiency targets, goals, policies, and actions to help the community and the City become more energy efficient. The CAP also provides policies and actions to assist with the implementation of energy efficiency strategies and summarizes the policies, benefits, implementation time frame, and responsible departments for implementing the components of each energy efficiency strategy. The CAP’s energy reduction targets set the groundwork for any GHG reduction targets found in a future climate action plan; however, the City has not yet adopted a qualified GHG reduction plan under CEQA that would be applicable to the proposed project.

City of Carson Energy Efficiency Climate Action Plan

The *City of Carson 2015 Energy Efficiency Climate Action Plan (EECAP)* includes goals and policies to incorporate environmental responsibility into its daily management of its community and municipal operations. The EECAP includes a list of emission reduction actions organized by sector and a time frame for implementation. The EECAP classifies the reduction targets into two separate categories, community and municipal emissions. Energy efficiency strategies are outlined in the EECAP with goals and measures defined for each of the two categories.

SIGNIFICANCE THRESHOLDS

The following thresholds of significance are based on CEQA Guidelines Appendix G. For the purposes of this analysis, implementation of the proposed project would be considered to have a significant impact on GHG emissions if it would do any of the following:

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



2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City currently does not have thresholds of significance for GHG emissions. However, the SCAQMD has adopted a threshold to address significance of GHG emissions from industrial projects: 10,000 metric tons of CO₂e per year.⁶ Thus, the 10,000 MTCO₂eq per year threshold has been selected as the significance threshold, as it is most applicable to the proposed project. The 10,000 MTCO₂eq per year threshold is used in addition to the qualitative thresholds of significance set forth below from section VII of Appendix G to the CEQA Guidelines.

PROJECT-RELATED SOURCES OF GREENHOUSE GASES

Project-related GHG emissions would include emissions from direct and indirect sources. The proposed project would result in direct and indirect emissions of CO₂, CH₄, and N₂O, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project-related GHG emissions include emissions from construction activities, while indirect sources include emissions from electricity consumption.

**Table 4.8-1
Estimated Greenhouse Gas Emissions**

Source	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ eq ^{2,3}
	Metric Tons/yr ¹	Metric Tons/yr ¹	Metric Tons of CO ₂ eq ¹	Metric Tons/yr ¹	Metric Tons of CO ₂ eq ¹	
Direct Emissions						
Construction (amortized over 30 years)	12.92	0.00	0.08	0.00	0.00	13.00
Area Source	0.01	0.00	0.00	0.00	0.00	0.01
Mobile Source	1,225.89	0.06	1.48	0.00	0.00	1,227.36
Indirect Emissions						
Energy	457.45	0.02	0.59	0.00	1.71	459.75
Water Demand	91.91	0.88	22.10	0.02	6.47	120.48
Solid Waste	9.18	0.54	13.56	0.00	0.00	22.74
Total Project-Related Emissions²	1,843.43 MTCO₂eq/yr					
SCAQMD GHG Threshold	10,000 MTCO₂eq/yr					
Project Exceed SCAQMD GHG Threshold?	No					

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxides, MTCO₂eq/yr = metric tons of carbon dioxide equivalent per year

1. Emissions were calculated using CalEEMod version 2016.3.2, as recommended by the SCAQMD.
2. Totals may be slightly off due to rounding.
3. Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency, *Greenhouse Gas Equivalencies Calculator*, <http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>, accessed January 28, 2020.

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

The proposed warehouse facility would be utilized for distribution, warehousing, and manufacturing uses with offices and truck loading docks. Operational energy GHG estimations are based on electricity factors from SCE. The California Emissions Estimator Model version 2016.3.2 (CalEEMod) was utilized to calculate the project's construction GHG emissions. Table 4.8-1, Estimated Greenhouse Gas Emissions, presents the estimated CO₂, CH₄,

⁶ South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, revised April 2019, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>, accessed February 4, 2020.



and N₂O emissions of the proposed project. The CalEEMod outputs are contained within the Appendix A, Air Quality/Greenhouse Gas /Energy Data.

Direct Project-Related Sources of Greenhouse Gases

Construction Emissions. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.⁷ As seen in Table 4.8-1, the proposed project would result in 13.00 MTCO₂eq when amortized over 30 years.

Area Source. Area source emissions were calculated using CalEEMod and project-specific land use data. As noted in Table 4.8-1, the proposed project would result in 0.01 MTCO₂eq/yr of area source GHG emissions.

Mobile Source. The CalEEMod model relies upon trip data within the *333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis* (TIA) prepared by RK Engineering Group, Inc. (dated January 20, 2020) and project-specific land use data to calculate mobile source emissions. According to the TIA the project would generate approximately 723 total daily trips. Since the proposed land use is industrial, it is expected to attract heavy vehicle traffic, mainly in the form of large multi-axle trucks. Large trucks generally occupy more space on the roadway; therefore, in order to show the equivalent impacts of project-generated trucks, the project trip generation is converted to passenger car equivalents (PCE). The operational air quality analysis has used the non-PCE adjusted trips to provide a worst-case scenario and acknowledge the mix of heavy truck traffic that would be generated by the project. The project would directly result in 1,227.36 MTCO₂eq/yr of mobile source-generated GHG emissions; refer to Table 4.8-1.

Indirect Project-Related Sources of Greenhouse Gases

Energy Consumption. Energy Consumption emissions were calculated using emission factors (lb/MWh) from the SCE 2018 Sustainability Report and CalEEMod; refer to Appendix A. The project would indirectly result in 459.75 MTCO₂eq/year due to energy consumption; refer to Table 4.8-1.

Water Demand. The project operations would result in a demand of approximately 34.35 million gallons of water per year. Emissions from indirect energy impacts due to water supply would result in 120.48 MTCO₂eq/yr; refer to Table 4.8-1.

Solid Waste. Solid waste associated with operations of the proposed project would result in 22.74 MTCO₂eq/yr; refer to Table 4.8-1.

CONCLUSION

As shown in Table 4.8-1, the total amount of proposed project related GHG emissions from direct and indirect sources combined would total 1,843.43 MTCO₂eq/yr, which is below the SCAQMD GHG threshold of 10,000 MTCO₂eq/yr. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. As detailed in Section 4.6, Energy, the EECAP includes goals and policies to incorporate environmental responsibility into its daily management of its community and municipal operations. The EECAP includes a list of energy efficiency goals and measures that would help reduce Citywide GHG emissions. As

⁷ The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008).



shown in Section 4.6, the project would be consistent with the goals and policies of the EECAP. The project would also be consistent with the 2017 Scoping Plan measures listed in Table 4.8-2, Project Consistency with 2017 Scoping Plan, and would be subject to future applicable Federal, State, and local regulatory requirements for GHG emissions. Furthermore, the project would be consistent with the following CAP goals and measures listed in Table 4.8-3, Project Consistency with CAP.

Overall, the project would not conflict with or impede implementation of reduction goals identified in the EECAP, CAP, 2017 Scoping Plan, and other Federal, State, and Regional strategies to help reduce GHG emissions. As such, the project would not conflict with an applicable GHG reduction plan, policy, or regulation. Further, as shown in Table 4.8-1, the project would not exceed the SCAQMD GHG screening threshold of 10,000 MTCO₂eq/yr. Impacts would be less than significant in this regard.

**Table 4.8-2
Project Consistency with 2017 Scoping Plan**

Sector / Source	Category / Description	Project Consistency Analysis
Energy		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires 50 percent by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	No Conflict. The project would utilize energy from SCE, which is required to meet the 2020, 2030, 2045, and 2050 performance standards. In 2017, 29 percent of SCE's electricity came from renewable resources. ² By 2030, SCE plans to achieve 80 percent carbon-free energy. ³ The project would also meet the applicable requirements of the <i>2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings</i> (Title 24 Standards) and the California Green Building Standards (CALGreen).
CCR, Title 24, Building Standards Code	Energy Efficiency Standards for Residential and Nonresidential Buildings.	Mandatory Compliance. The project must demonstrate that it will meet the applicable requirements of the 2019 Title 24 Standards and CALGreen prior to approval of the building permits.
Assembly Bill 1109 (AB 1109)	The Lighting Efficiency and Toxics Reduction Act (AB 1109) prohibits manufacturing specified general purpose lights that contain levels of hazardous substances prohibited by the European Union. AB 1109 also requires a reduction in average Statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018.	No Conflict. According to the California Energy Commission, energy savings from AB 1109 are achieved through codes and standards. Energy savings from AB 1109 are calculated as part of codes and standards savings. ⁴ As discussed above, the project would meet the applicable requirements of the 2019 Title 24 Standards and CALGreen, which include energy efficient lighting.
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	Mandatory Compliance. The project construction plans must demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment and would meet the applicable energy standards in the 2019 Title 24 Standards and



Table 4.8-2
Project Consistency with 2017 Scoping Plan

Sector / Source	Category / Description	Project Consistency Analysis
		CALGreen prior to approval of the building permits.
	HVAC Systems will be designed to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	Mandatory Compliance. The project construction plans must demonstrate that energy efficiency appliances and equipment and would meet the applicable energy standards in ASHRAE 90.1-2013 Appendix G and the 2019 Title 24 Standards and CALGreen prior to approval of the building permits.
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	Mandatory Compliance. The project must demonstrate compliance with CALGreen prior to approval of the building permits.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. The project must demonstrate compliance with the requirement of MERV 13 or higher as part of the 2019 CALGreen Nonresidential Mandatory Measure 5.504.5.3, <i>Filters</i> , prior to approval of the building permits.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	Mandatory Compliance. The project must meet this requirement as part of its compliance with the CALGreen prior to approval of the building permits.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces will be designed for such vehicles.	Mandatory Compliance. The project would meet this requirement as part of its compliance the CALGreen. Per the 2019 CALGreen Nonresidential Mandatory Measure 5.106.5.2, the project would designate a minimum of 16 parking spaces for carpool and/or alternative-fueled vehicles. In addition, the project would be required to install a minimum of ten electric vehicle (EV) charging spaces per the 2019 CALGreen Nonresidential Mandatory Measure 5.106.5.3.3. Furthermore, the project would include Connected and Automated Vehicles (CAVs).
	Long-term and short-term bike parking shall be provided for up to five percent of vehicle trips.	Consistent. The project would meet this requirement by providing bicycle parking spaces equivalent to five percent of the tenant vehicular parking spaces as part of its compliance with the 2019 CALGreen Nonresidential Mandatory Measure 5.106.4.1.2.
	Requires use of low VOC coatings consistent with AQMD Rule 1168.	Consistent. The project would be consistent with this regulation and would meet the low VOC coating requirements.



Table 4.8-2
Project Consistency with 2017 Scoping Plan

Sector / Source	Category / Description	Project Consistency Analysis
SB 1368, CCR Title 20, Cap-and-Trade Program	The Cap-and-Trade Program places an economy-wide “cap” on major sources of greenhouse gas emissions (i.e. refineries, power plants, industrial facilities and transportation fuels) and minimizes the compliance costs of achieving AB 32 goals. Electricity generators and large industrial facilities emitting 25,000 MTCO ₂ e or more annually are subject to the Cap-and-Trade Program. Each year the cap is lowered by approximately 3 percent, ensuring that California is reducing greenhouse gases.	Not Applicable. As shown in Table 4.8-2 , the proposed project would generate approximately 1,843.43 MTCO ₂ e/yr, which is below the 25,000 MTCO ₂ e/yr Cap-and-Trade screening level. As such, the proposed project would not be subject to the requirements of the Cap-and-Trade Program.
Mobile Sources		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled.	Consistent. The project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles. The project would designate a minimum of 16 parking spaces for carpool and/or alternative-fueled vehicles. In addition, the project would be required to install a minimum of ten EV charging spaces. Furthermore, the project would include CAVs.
AB 1493 (Pavley Regulations)	Reduces GHG emissions in new passenger vehicles from model year 2012 through 2016 (Phase I) and model years 2017–2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	Not Applicable. These regulations apply to automobile manufacturers, not individual land uses. Mobile emissions associated with the project in Table 4.8-1 reflect compliance with this regulation. GHG emissions related to vehicular travel by the project would benefit from this regulation because vehicle trips associated with the project would be affected by AB 1493. Mobile source emissions generated by the project would be reduced with implementation of AB 1493 consistent with reduction of GHG emissions under AB 32.
Low Carbon Fuel Standard (Executive Order S-01-07)	Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels. This executive order establishes a Statewide goal to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020	Not Applicable. The Low Carbon Fuel Standard applies to manufacturers of automotive fuels, not to individual land uses. Mobile emissions associated with the project in Table 4.8-1 reflect compliance with this regulation. GHG emissions related to vehicular travel by the project would benefit from this regulation and mobile source emissions generated by the project would be reduced with implementation of the Low Carbon Fuel



Table 4.8-2
Project Consistency with 2017 Scoping Plan

Sector / Source	Category / Description	Project Consistency Analysis
		Standard consistent with reduction of GHG emissions under AB 32.
Advanced Clean Cars Program	In 2012, CARB adopted the Advanced Clean Cars (ACC) program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.	Not Applicable. The standards would apply to manufacturers of vehicles used by visitors and employees associated with the project. The project would designate a minimum of 16 parking spaces for carpool and/or alternative-fueled vehicles. In addition, the project would be required to install a minimum of ten EV charging spaces. Furthermore, the project would include CAVs.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. The project would be consistent with Southern California Association of Government (SCAG) SCAG's <i>2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)</i> . goals and objectives under SB 375 to implement "smart growth." The project would provide employment opportunities in close proximity to off-site residential and other job centers in Carson where people can live and work and have access to modes of transportation that provide options for reducing reliance on automobiles and minimizing associated air pollutant emissions. As the project would comply with the RTP/SCS, the project would be consistent with SB 375.
Water		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non- residential uses.	Mandatory Compliance. The project would be required to comply with the Chapter 5, <i>division 5.3 – Water Efficiency and Conservation</i> of the 2019 Title 24 Standards. This includes compliance with the Model Water Efficient Landscape Ordinance (MWEL0).



Table 4.8-2
Project Consistency with 2017 Scoping Plan

Sector / Source	Category / Description	Project Consistency Analysis
Senate Bill X7-7:	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment.	Consistent. The project would consume water from water suppliers that would comply with Senate Bill X7-7 and the Water Sector of the AB 32 Scoping Plan. In addition, the project's irrigation systems would be controlled by a weather-based smart irrigation controller to minimize water usage and reduce irrigation runoff. Further, the project would comply with outdoor water conservation measures outlined per California water regulations (AB 1881) and local water efficient landscape ordinances.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandated that state agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50 percent of their solid waste from disposal facilities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Not Applicable. These regulations apply to municipal agencies who are responsible for reducing landfill disposal of solid wastes collected in their jurisdictions. GHG emissions related to solid waste generation from the project would benefit from this regulation as it would decrease the overall amount of solid waste disposed of at landfills. The decrease in solid waste would then in return decrease the amount of methane released from the decomposing solid waste. Project-related GHG emissions from solid waste generation provided in Table 4.8-1 include a 50-percent reduction in solid waste generation source emissions.

Notes:

California Air Resources Board, *California's 2017 Climate Change Scoping Plan, Figure 4: California 2013 Anthropogenic Black Carbon Emission Sources*, November 2017.

California Energy Commission, *2017 Power Content Label Southern California Edison*, https://www.sce.com/sites/default/files/inline-files/2017PCL_0.pdf, accessed January 28, 2020.

Southern California Edison, *The Clean Power and Electrification Pathway*, https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20187/g17-pathway-to-2030-white-paper.pdf, accessed January 28, 2020.

California Energy Commission, *2013 California Energy Efficiency Potential and Goals Study, Appendix Volume I*, August 15, 2013.

Source: California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.



Table 4.8-3
Project Consistency with CAP

Goal	Measure	Project Compliance
Goal EE: D – Increase Energy Efficiency in New commercial Developments	Measure EE: D1 – Encourage or require EE Standards Exceeding Title 24:	The project would comply with the 2019 Title 24 standards. The 2019 Title 24 standards, which took effect on January 1, 2020, uses 30 percent less energy than non-residential buildings built under the 2016 standards primarily due to more efficient lighting standards. Furthermore, the project would include cool roofing over the office areas.
Goal EE: E – Increase Energy Efficiency through Water Efficiency (WE)	Measure EE: E1 - Promote or Require Water Efficiency through SB X7-7.	The project would consume water from water suppliers that would comply with Senate Bill X7-7 and the Water Sector of the AB 32 Scoping Plan.
	Measure EE: E2 – Promoting Water Efficiency Standards Exceeding SB X7-7.	In addition, the project’s irrigation systems would be controlled by a weather-based smart irrigation controller to minimize water usage and reduce irrigation runoff. Further, the project would comply with outdoor water conservation measures outlined per California water regulations (AB 1881) and local water efficient landscape ordinances.
Goal EE: F – Decrease energy demand through reducing urban heat island effect.	Measure EE: F1 – Promote Tree Planting for Shading and Energy Efficiency.	The proposed project would include landscaping improvements, including a variety of ornamental trees, shrubs, accents, and groundcover. Tree species may include Palo Verdes, London Plane Trees, Australian Willows, Mondell Pines, Holly Oaks, African Sumac, and flowering accent trees.

Source: City of Carson, *Climate Action Plan*, December 2017.

Mitigation Measures: No mitigation is required.



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4.9 HAZARDS AND HAZARDOUS MATERIALS

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

This section is based on the following hazardous material documentation (refer to [Appendix E, Hazardous Material Documentation](#)):

- *Phase I Environmental Site Assessment 317 to 353 West Gardena Boulevard, Carson, California* (Phase I ESA) prepared by Stantec Consulting Services Inc., dated July 1, 2019.
- *Continued Phase II Environmental Site Assessment Report 317 to 353 West Gardena Boulevard, Carson, California* (Phase II ESA) prepared by Stantec Consulting Services Inc., dated October 30, 2019.
- *Vapor Intrusion Human Health Risk Assessment Report, 317 to 353 West Gardena Boulevard, Carson, California* (VIR) prepared by Stantec Consulting Services Inc., dated February 28, 2020.



For the purpose of this analysis, the term “hazardous material” refers to both hazardous substances and hazardous waste. A material is defined as “hazardous” if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as “hazardous” by such an agency. A “hazardous waste” is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity).

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

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

CONSTRUCTION

Project construction could expose construction workers and the public to temporary hazards related to the transport, use, and maintenance of construction materials (i.e., oil, diesel fuel, transmission fluid, etc.). However, these activities would be short-term, and the materials used would not be in such quantities, or stored in such a manner, as to pose a significant safety hazard. All project construction activities would demonstrate compliance with the applicable laws and regulations governing the use, storage, and transportation of hazardous materials, ensuring that all potentially hazardous materials are used and handled in an appropriate manner. Impacts concerning the routine transport, use, or disposal of hazardous materials during project construction would be less than significant.

OPERATIONS

The project proposes the construction of a warehouse facility with distribution/warehousing/manufacturing uses and supporting office uses. Although the end user of the buildings is not known at this time, long-term operation of the project may involve the routine transport, use, or disposal of hazardous materials. The types and quantities of hazardous substances utilized by the various types of potential future users at the project site would vary and, as a result, the nature of potential hazards would vary.

The proposed project would be subject to compliance with existing regulations, standards, and guidelines established by the U.S. Environmental Protection Agency (EPA), State, County of Los Angeles, and the City of Carson related to the transport, use, and disposal of hazardous materials. The project is subject to compliance with the existing hazardous materials regulations, which are codified in California Code of Regulations Titles 8, 22, and 26, and their enabling legislations set forth in Health and Safety Code Chapter 6.95 as well as California Code of Regulations Title 49. Both the Federal and State governments require any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a Risk Management Plan. The Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses would be required to submit their plans to the Certified Unified Program Agency (CUPA) (Los Angeles County Fire Department, or LACoFD), which would make the plans available to emergency response personnel.

While the risk of exposure to hazardous materials cannot be eliminated, best management practices (BMPs) can be implemented to reduce risk to acceptable levels. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner, and would minimize the potential for safety impacts to occur. Impacts regarding the routine transport, use, or disposal of hazardous materials during project operations would be less than significant.



Mitigation Measures: No mitigation is required.

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

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

SHORT-TERM IMPACTS

Construction Equipment

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law. Impacts would be less than significant in this regard.

Construction Activities

Construction activities could also result in accidental conditions involving existing on-site contamination. The following analysis considers current and past uses of the project site and its vicinity, which may have resulted in existing on-site soil, soil vapor, and/or groundwater, of which could cause accidental conditions during site disturbance activities.

Historical Uses

Based on the Phase I ESA, the project site appears to have supported agricultural uses (i.e., trees or planted crops) until circa 1940, and was formerly a salvage yard that might have supported some dismantling, maintenance, or salvaging operations. It is noted that past agricultural uses of the site could represent a potential concern due to possible pesticide and herbicide residues presence in soil. Historical usage of the site as a salvage yard and current observation of miscellaneous “junk” materials throughout the site also represent potential concerns for the presence of petroleum, volatile organic compounds (VOCs), and heavy metals in soil. The Phase II ESA subsurface investigations indicated the presence of minor total petroleum hydrocarbons (TPH) concentrations below commercial/industrial regulatory thresholds in shallow soil on the southwestern portion of the project site. However, previous subsurface investigations detected elevated TPH concentrations across the project site. Given the historical industrial use of the project site, the Phase II ESA stated that TPH-impacted soil is likely present at various locations across the project site and may be encountered during project construction activities.

Therefore, the project would be required to implement a Soil Management Plan (SMP) during grading and excavation activities (Mitigation Measure HAZ-1). The SMP would provide guidelines for safety measures, soil management, and handling of disturbed soils. The SMP would also be required to present a decision framework and specific risk management measures for managing soil in a manner protective of human health and consistent with applicable regulatory requirements. Should any soils be disposed of at an off-site location, the construction contractor would be required to verify that all exported soils are not contaminated with hazardous materials above regulatory thresholds in



consultation with a Phase II/Site Characterization Specialist. The SMP would include a decision framework and specific risk management measures for managing soil, including any soil import/export activities. If export soils are determined to be contaminated above regulatory thresholds, the Phase II/Site Characterization Specialist would recommend proper handling, use, and/or disposal of these soils. In addition, any transport of contaminated soil would be required to comply with existing Federal, State, and local laws and regulations pertaining to transport and disposal.

Following compliance with existing Federal, State, and local laws and regulations as well as implementation of Mitigation Measures HAZ-1, impacts in this regard would be reduced to less than significant levels.

Groundwater Contamination from Former ANCO Metal Improvement Facility

Based on the Phase I ESA, ANCO Metal Improvement Facility (ANCO site) formerly operated on an adjacent property to the northwest of the project site. The ANCO site has historically performed anodizing, plating, and painting metal parts for the aircraft and zero space industry from 1967 to 1994. As a result of ANCO site operations, soil vapor and groundwater beneath the project site have been impacted by chlorinated solvents (i.e., tetrachloroethene [PCE], trichloroethene [TCE]), and hexavalent chromium (CrVI).

The Phase II ESA subsurface investigations were conducted at the project site in 2019. Soil vapor concentrations in excess of regulatory screening levels for commercial uses were detected in the southwestern portion of the project site. Furthermore, elevated groundwater PCE concentrations indicated the presence of a significant PCE mass in groundwater beneath the project site. Active remediation systems related to the chlorinated solvent release, including soil vapor extraction (SVE), groundwater monitoring, and groundwater extraction (also described as pump and treat) are currently being performed on both the ANCO property and project site. The remediation system includes numerous soil vapor and groundwater monitoring and extraction wells, including four groundwater extraction wells and six groundwater monitoring wells on the project site.

Groundwater analytical data collected from on-site and off-site groundwater monitoring and extraction wells indicate that the contaminant mass is being reduced by remedial activities. Historic depth-to-water measurements indicate that the groundwater treatment system has created and maintained a groundwater depression beneath the ANCO site and extends down-gradient beneath the project site. The groundwater extraction and resulting depression of the water table appears to have resulted in drawing in a gasoline plume from an unknown source into groundwater beneath the project site. As a result, previously unreported concentrations of gasoline constituents, including methyl-tert butyl ether (MTBE) and tert-butyl alcohol (TBA), began appearing in an on-site extraction well (i.e. GE-6) in 2018. Monitoring and remediation of groundwater contamination is ongoing and under the oversight of the Los Angeles Regional Water Quality Control Board (RWQCB).

As groundwater in the vicinity of the project site is reported at approximately 40 to 42 feet below ground surface (bgs), proposed construction activities are not anticipated to encounter groundwater. However, construction workers could be exposed to contaminated soil vapors during excavation activities (i.e., stormwater detention basin and utility improvements). Therefore, the project would be required to adhere to Mitigation Measure HAZ-2, which would require the project Applicant to retain a qualified Phase II/Site Characterization Specialist to conduct verification soil vapor sampling on the site in areas of deeper excavation pits per OSHA requirements. Should any samples determine that residual contamination in soil vapor present a risk to construction workers during excavation activities, the Phase II/Site Characterization Specialist would have the authority to temporarily suspend construction activity at that location for the protection of workers or the public.

Further, implementation of the proposed project requires the relocation of existing on-site monitoring wells and remedial equipment. The project would be required to comply with Mitigation Measure HAZ-3, which would require the project Applicant to submit documentation as proof, to the City of Carson Engineer, that the relocation of any monitoring wells or remedial equipment has been conducted in accordance to the standards and regulations established by the RWQCB.



With implementation of Mitigation Measures HAZ-2 through HAZ-3, impacts in this regard would be reduced to less than significant levels in this regard.

Demolition of Existing Structures

The project site is currently occupied by two single-story residential structures in the southeastern portion. Due to the age of these buildings (constructed prior to circa 1950s), there is the potential for asbestos-containing materials (ACMs) and lead-based paint (LBP), as well as other potential hazardous materials to be present in association with the building materials. Demolition of the structures could expose construction personnel and the public to ACMs or LBPs. All renovation and demolition of structures that could result in the release of ACMs or LBPs must be conducted according to Federal and State regulations and standards. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition (Mitigation Measure HAZ-4). If ACM material is found, abatement of asbestos would be required prior to any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional (Mitigation Measure HAZ-5). If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Compliance with Mitigation Measures HAZ-4 and HAZ-5, as well as compliance to South Coast Air Quality Management District (SCAQMD) Rule 1403, would reduce potential impacts in this regard to less than significant levels.

In conclusion, implementation of Mitigation Measures HAZ-1 through HAZ-5 would reduce potential impacts pertaining to disturbance of existing potential soil and soil gas contamination, as well as potential hazardous building materials during demolition. Further, in the event that unknown waste materials or suspect materials are discovered during construction, the contractor would be required to take immediate and appropriate measures in reducing potential risks from hazardous contaminants to construction workers and the public (Mitigation Measure HAZ-1).

LONG-TERM IMPACTS (OPERATIONAL)

Groundwater Contamination

Refer to Response 4.9(a), above, for a description of impacts related to proposed operations at the project site and regulatory framework related to chemical safety. As discussed, the southwestern portion of the project site could be susceptible to vapor intrusion as a result of the existing contaminated soil vapor and groundwater. Based on the VIR, in order to ensure that potential accidental conditions involving exposure of future users to vapor intrusion does not occur, the project Applicant would be required to install a vapor barrier (Mitigation Measure HAZ-6). Vapor barrier design activities would be required to include consideration of the materials and methods to be used, by a qualified remediation specialist, during vapor barrier installation. The vapor barriers would be installed prior to emplacement of concrete floor slabs and footings. For the passive vapor barrier beneath the office portions of the proposed building, below-ground ventilation lines would also be required to be constructed, prior to concrete work, such that chemical vapors would not be trapped below the concrete floor slabs. The ventilation lines would be required to be open to the exterior of the structure, preferably at least 8 feet above the ground surface, or as otherwise directed by a qualified environmental professional with Site Characterization/Remedial experience. The remainder of the warehouse portions of the building foundation would include appropriate vapor barrier without passive venting, as recommended by a qualified remediation specialist. Upon adherence to existing regulations related to chemical safety and the implementation of Mitigation Measures HAZ-6, impacts pertaining to the potential for accidental conditions during project operations would be reduced to less than significant levels.



Accidental Conditions from Operations

Refer to Response 4.9(a), above, for a description of impacts related to proposed operations at the project site. Upon adherence to existing regulations related to chemical safety, impacts pertaining to the potential for accidental conditions during project operations would be less than significant.

Mitigation Measures:

- HAZ-1 Soil Management Plan. Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall be made available to the contractor and the City of Carson Engineer for use during grading and excavation activities. The SMP shall include guidelines for safety measures and soil management in the event that soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a decision framework and specific risk management measures for managing soil, including any soil import/export activities, in a manner protective of human health and consistent with applicable regulatory requirements. Should any soils be disposed of at an off-site location, the construction contractor would verify that all exported soils are not contaminated with hazardous materials above regulatory thresholds in consultation with a Phase II/Site Characterization Specialist. If export soils are determined to be contaminated above regulatory thresholds, the Phase II/Site Characterization Specialist would recommend proper handling, use, and/or disposal of these soils.
- HAZ-2 Soil Vapor Sampling. The Applicant shall retain a qualified Phase II/Site Characterization Specialist to conduct verification soil vapor sampling during any excavation activities at depth that which would present a concern to worker safety. Should any samples determine that residual contamination in soil vapor present a risk to construction workers during excavation activities, the Phase II/Site Characterization Specialist shall have the authority to either implement additional safety precautions and/or temporarily suspend construction activity at said location for the protection of workers or the public.
- HAZ-3 Monitoring Wells Relocation. Prior to issuance of a Certificate of Occupancy, the project Applicant shall submit documentation as proof, to the Director of Community Development or City of Carson Engineer, that the closure/relocation of any monitoring wells or remedial equipment has been conducted in accordance to the standards and regulations established by the Los Angeles Regional Water Quality Control Board (RWQCB) and Los Angeles County Department of Public Health Environmental Health Division (LADPH).
- HAZ-4 Asbestos Survey. Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and California Division of Occupational Safety and Health (Cal/OSHA) certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.
- HAZ-5 Lead-Based Paint Handling. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City of Carson Engineer.



HAZ-6 Vapor Barrier(s) Installation. The project Applicant shall install a passive vapor barrier beneath the office portions of the future warehouse structure, where chemical concentrations were detected in excess of regulatory screening levels. Vapor barrier design activities shall be required to include consideration of the materials and methods to be used, by a qualified remediation specialist, during vapor barrier installation. The vapor barrier shall be installed prior to emplacement of concrete floor slabs and footings. For the passive vapor barrier under the office portions of the building, below-ground ventilation lines shall also be required to be constructed, prior to concrete work, such that chemical vapors would not be trapped below the concrete floor slabs. The ventilation lines shall be required to be open to the exterior of the structure, preferably at least 8 feet above the ground surface, or as otherwise directed by a qualified environmental professional with Site Characterization/Remedial experience. The remainder of the warehouse portions of the building foundation shall include appropriate vapor barrier without passive venting, as recommended by a qualified remediation specialist.

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

No Impact. The project site is not located within one-quarter mile of a school. The nearest school to the project site is Gardena Elementary School (647 West Gardena Boulevard, Gardena), located approximately 0.3-mile to the west of the project site. Therefore, the project would not emit hazardous emissions or the handle hazardous or acutely hazardous materials, substances, or wastes within 0.25-mile of an existing or proposed school. No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

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

The project site is not listed pursuant to Government Code Section 65962.5.¹ Thus, no impact would result in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The nearest public airport to the project site is the Compton/Woodley Airport located approximately 1.7 miles to the northeast at 901 West Alondra Blvd, in the City of Compton. Based on the *Los Angeles County Airport Land Use Plan*, the project site is located outside of the Airport Influence Area for the Compton/Woodley Airport.² As such, the proposed project is not anticipated to result in a safety hazard based on proximity to the

¹ California Environmental Protection Agency, *Cortese Listing*, <https://calepa.ca.gov/sitecleanup/corteselist/>, accessed January 22, 2020.

² Los Angeles County Department of Regional Planning, *Los Angeles County Airport Land Use Plan*, dated December 1, 2004.



Compton/Woodley Airport. There are no private airports or airstrips within two miles of the project site.³ Therefore, project implementation would not introduce a safety hazard for people residing or working in the project area and a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact with Mitigation Incorporated. The City prepared the Natural Hazards Mitigation Plan (Mitigation Plan) in 2013 as mandated by the Disaster Mitigation Act of 2000. The Mitigation Plan provides resources and information to assist the City's residents, public and private sector organizations, and others in planning for natural, man-made, and technological hazards. The Mitigation Plan also includes a five-year action plan matrix with long- and short-term action items that aims to reduce risk and prevent loss in future hazard events. In addition, the City complies with the Los Angeles County Emergency Management Plan.

As indicated in Section 4.17, *Transportation*, the project does not propose changes to the City's circulation system, such as sharp curves or dangerous intersections, and would not introduce incompatible uses to area roadways (e.g., farm equipment). Roadway improvements are proposed to provide site access (two full access driveways) and circulation. The proposed driveways and interior vehicular circulation are designed to meet the fire truck turning radii and fire access requirements and would not result in inadequate emergency access. The project also proposes replace the existing sidewalk, curb, and gutter along the project's frontage at West Gardena Boulevard. Partial road closures would also be required during installation of undergrounded utilities. Last, full closure of the public alley (along the western project boundary) would be required for approximately five working days due to proposed widening and repaving activities. For full closure of the public alley, access to the surrounding area would still be afforded via 164th Street. During periods when partial and/or full road closures are required (along W. Gardena Boulevard, the public alley, 164th Street, and Figueroa Street), the Applicant would be required to implement a traffic management plan (Mitigation Measure TRA-1). The traffic management plan would ensure at least one lane remains open (for W. Gardena Boulevard, 164th Street, and Figuero Street) and emergency access is maintained during installation of the project's undergrounded utilities. As a result, with implementation of Mitigation Measure TRA-1, impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measure TRA-1 in Section 4.17, *Transportation*.

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

No Impact. The project site is generally surrounded by urban/developed land and no wildland areas are present in the project vicinity. According to the California Department of Forestry and Fire Protection's *Fire Hazard Severity Zone (FHSZ) Map for Los Angeles County*, the project site is not located in a high fire hazard area for either local or State or Federal responsibility.⁴ Therefore, project implementation would not expose people or structures to a significant risk involving wildland fires, and no impacts would occur in this regard

Mitigation Measures: No mitigation is required.

³ The Goodyear Blimp Airship Base is located approximately 1.7 miles south of the project site at 19200 South Main Street, in the City of Carson. Due to the infrequent operations of blimp airships, the Goodyear Blimp Airship Base is not considered an airport and does not have airport safety zones.

⁴ California Department of Forestry and Fire Protection, *Los Angeles County Fire Hazard Severity Zones in SRA*, dated November 7, 2007.



4.10 HYDROLOGY AND WATER QUALITY

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

This section is based on the following hydrology and water quality documentation (refer to [Appendix F, *Hydrology and Water Quality Reports*](#)):

- *Preliminary Hydrology Calculations for CTCIP Gardena Boulevard, 333 West Gardena Boulevard, Carson, California* (Preliminary Hydrology Calculations), prepared by Thienes Engineering, Inc., dated February 21, 2020.
- *Low Impact Development (LID) for 333 West Gardena Boulevard, Carson, California 90248, APNs: 6125-019-24, -41, -42, -43, -44 & -50 (LID)*, prepared by Thienes Engineering, Inc., dated October 24, 2019.



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

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the Environmental Protection Agency (EPA) has established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct storm water discharges. In California, the State Water Regional Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the nine Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The project site is within the jurisdiction of the Los Angeles RWQCB.

Impacts related to water quality typically range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

CONSTRUCTION

Project construction could result in short-term impacts to water quality due to the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities. Potential pollutants associated with these activities could damage downstream waterbodies. Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the SWRCB's *General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ* (General Construction Permit). The General Construction Permit requires the project Applicant to prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP would specify best management practices (BMPs) to be used during construction of the project to minimize or avoid water pollution, thereby reducing potential short-term impacts to water quality. Upon completion of the project, the Applicant would be required to submit a Notice of Termination to the SWRCB to indicate that construction has been completed.

Further, project construction activities would be required to comply with the water quality BMPs set forth in Municipal Code Chapter 8, *Storm Water and Urban Runoff Pollution Control*. This chapter contains the City's Storm Water Management and Discharge Control Ordinance and includes conditions and requirements established to control urban pollutant runoff into the City's stormwater system. Compliance with the General Construction Permit requirements and Municipal Code Chapter 8 would reduce the project's short-term impacts to water quality to less than significant levels.

OPERATIONS

According to the LID prepared for the proposed project, project operations are anticipated to generate pollutants of concern with the potential to impact downstream receiving waters including heavy metals and nutrients; refer to Appendix F.

The proposed project is subject to the Los Angeles County Department of Public Works (LACDPW) requirements in the *2014 Low Impact Development (LID) Standards Manual* under the "Industrial parks with 10,000 square feet or more of surface area" category. Pursuant to Municipal Code Section 5809, *Storm Water Pollution Control Measures for New Development and Redevelopment Projects*, the proposed project would be required to implement low impact development (LID) structural and non-structural BMPs; 2) source control BMPs, and 3) structural and nonstructural BMPs for specific types of land uses in order to minimize operational impacts to water quality. In conformance with County LID and Municipal Code Section 5809 requirements, a project-specific LID was prepared to reduce pollutant discharges to the maximum extent practicable for the protection of water quality at receiving water bodies and the



support of designated beneficial uses; refer to [Appendix F](#). The LID includes project-specific BMPs to minimize stormwater pollutants of concern, including construction of a biofiltration unit to the north of the proposed building, which would treat runoff via plants and engineered soil media. Other source control BMPs identified in the project's LID include locating trash enclosures away from the roof drainage, stenciling storm drains with prohibitive language and/or graphical icons to prevent dumping, and installation of irrigation systems that utilize a weather-based smart irrigation controller to minimize water usage and reduce dry weather urban runoff. Following compliance with project-specific BMPs identified in the project's LID, long-term water quality impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The proposed project would increase impervious surfaces at the project site compared to existing conditions. However, implementation of the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Although groundwater was encountered at a depth of approximately 44 feet below ground surface (bgs), the project site is not currently used for groundwater extraction or groundwater recharge purposes. Last, as the project is consistent with General Plan land use assumptions and Golden State Water Company has confirmed that water services are available to serve the proposed project from existing commitments, groundwater extraction for the purposes of water supply would be less than significant; refer to [Appendix H](#), *Will Serve Letters*.¹ For these reasons, project implementation is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

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

Less Than Significant Impact. The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river. As discussed in Response 4.10(a), compliance with the General Construction Permit requirements and Municipal Code Chapter 8 would minimize erosion and water quality impacts during construction to less than significant levels.

Although the project would result increase impervious surfaces compared to existing conditions, long-term operation of the project would not have the potential to result in substantial erosion or siltation given the nature of proposed use and the urbanized project setting. The project site would not include large areas of exposed soils that would be subject to runoff. Rather, any unpaved areas would be improved with landscaping to minimize the potential for erosion or siltation on- or offsite; refer to [Exhibit 2-4](#), *Conceptual Landscape Plan*. As stated in Response 4.10(a), the proposed project would include operational BMPs in conformance with County LID and Municipal Code requirements in order to reduce long-term water quality impacts to less than significant levels. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

¹ Written Correspondence: Joseph Zhao, P.E., PhD., Operations Engineer Southwest District, Golden State Water Company, July 15, 2019



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

Less Than Significant Impact. There is no existing drainage system on-site and surface runoff currently drains southerly and westerly toward Gardena Boulevard and 164th Street, or pond at the western boundary of the site in the alley. Currently, the project site is almost entirely pervious. Development of the proposed warehouse facility, associated parking, and landscaping would result in an increase in impervious areas. As a result, the project would increase surface flows compared to existing pre-project conditions.

As noted in Section 2.4, *Project Characteristics*, development of the proposed project would install a new storm drain system on-site that would ultimately connect to the existing 8.5-foot by 10-foot public reinforced concrete box (RCB) Storm Drain in Figueroa Street, approximately 640 feet west of the project site; refer to Exhibit 2-7, *Proposed Storm Drain System*. The project would construct a new network of 12-inch storm drain lines on-site that would ultimately connect to a new 24-inch public reinforced concrete pipe (RCP) in 164th Street. The new 24-inch public RCP would then connect to the existing 8.5-foot by 10-foot RCP storm drain in Figueroa Street, approximately 640 feet west of the project site.

Runoff from the majority of the building roof, the northerly and easterly parking lot, and the truck loading dock and storage area would drain easterly towards the eastern portion of the project site, toward a proposed detention system; refer to Exhibit 2-7. The detention system would temporarily detain stormwater via underground chambers, then release flows toward a biofiltration unit to the north of the proposed building. This runoff would be treated via plants and engineered soil media within the biofiltration unit. Treated runoff would then discharge (via an outlet flow control) into one of the new 12-inch on-site storm drains that would then convey this stormwater westward toward 164th Street. Other areas of stormwater flow would enter the system via catch basins in the parking lot. Each catch basin would be equipped with a drain insert to filter pollutants prior to entering the storm drain system. The landscaped swath to the south of the new building would sheet flow to West Gardena Boulevard.

According to the project's Preliminary Hydrology Calculations, runoff from the site draining via the proposed storm drain lines to Figueroa Street would be limited to the allowable peak flow rate provided by the County (approximately 6.6 cubic feet per second [cfs]); refer to Appendix F. Based on the Preliminary Hydrology Calculations, the project's proposed detention system would ensure the project's peak flow rate does not exceed the allowable peak flow rate of 6.6 cfs. Thus, as the proposed storm drain system would meet County requirements and alleviate existing ponding conditions, impacts concerning on- or off-site flooding would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. As discussed in Response 4.10(c)(2), although the proposed project would involve an increase in impervious surfaces, the project's proposed storm drain system would ensure the project's peak flow rate does not exceed the allowable peak flow rate provided by the County (6.6 cfs). Therefore, the proposed project is not anticipated to exceed the capacity of an existing or planned stormwater drainage system. As stated in Response 4.10(a), operations of the proposed project would be subject to compliance with NPDES requirements and County LID standards in order to reduce long-term water quality impacts to less than significant levels. Therefore, project implementation is not anticipated to 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. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.



4) **Impede or redirect flood flows?**

Less Than Significant Impact. Refer to Responses 4.10(c)(2) and 4.10(d).

Mitigation Measures: No mitigation is required.

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

No Impact.

FLOOD HAZARD

According to the Federal Emergency Management Agency *Flood Insurance Rate Map Los Angeles County, California and Incorporated Areas, Map No. 06037C1935F* and General Plan EIR Exhibit 4.7-2, *Flood Zone Map*, the project site is located outside of the 100-year flood hazard area.² As a result, no impacts would occur in this regard.

TSUNAMI

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

SEICHE

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

Mitigation Measures: No mitigation is required.

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

No Impact. The *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) establishes water quality standards for ground and surface waters within the Los Angeles region, which includes the City, and is the basis for the Los Angeles RWQCB's regulatory programs. The 2014 Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or prepare an alternative to a groundwater sustainability plan. The project is located within the Coastal Plain of Los Angeles – West Coast groundwater basin, which is designated as a Very Low priority basin.³ Therefore, there is no groundwater sustainability plan established for the basin. However, the Water Replenishment District of Southern California developed the *Groundwater Basins Master Plan* (GBMP), which identifies projects and programs to enhance basin replenishment, increase reliability of groundwater resources, and improve and protect groundwater quality in the Los Angeles West Coast and Central groundwater basins.⁴ As indicated in Response 4.10(b), the proposed project would not substantially increase water demands above existing conditions and would not substantially deplete groundwater supplies or interfere with groundwater recharge. As a result,

² Federal Emergency Management Agency, *Flood Insurance Rate Map Los Angeles County, California and Incorporated Areas, Map No. 06037C1935F, Panel 1935 of 2350*, September 26, 2008.

³ California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, <https://gis.water.ca.gov/app/bp-dashboard/p2/>, accessed December 26, 2019.

⁴ Water Replenishment District of Southern California, *Groundwater Basins Master Plan*, September 2016.



the proposed project is not anticipated to conflict with or obstruct with the projects or programs identified in the GBMP and no impact would occur.

Mitigation Measures: No mitigation is required.



4.11 LAND USE AND PLANNING

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

a) ***Physically divide an established community?***

No Impact. Factors that could physically divide a community include, but are not limited to:

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

The key factor with respect to this threshold is the potential to create physical barriers that change the connectivity between areas of a community to the extent that persons are separated from other areas of the community. The proposed project would not physically divide an established community, as the project is surrounded predominantly by light industrial and commercial uses, and would itself, develop an industrial warehouse facility on-site. The two existing residential dwellings are not within an established community and thus, project development would not physically divide any established communities. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

b) ***Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

Less Than Significant Impact.

GENERAL PLAN CONSISTENCY

Based on the General Plan *Land Use Map*, the project site is designated Light Industrial (LI). The LI designation is intended to provide for a wide variety of industrial uses and to limit those involving hazardous or nuisance effects. This designation typically includes manufacturing, research and development, wholesaling, and warehousing, with a very limited amount of supportive retail and services uses. The proposed warehouse facility would be utilized for distribution, warehousing, and manufacturing uses with offices and truck loading docks. The project would not conflict with the General Plan's intended LI designation for the project site. Additionally, Table 4.11-1, Project Consistency with Applicable General Plan Land Use Element Policies, analyzes the project's consistency with applicable goals and policies in the General Plan Land Use Element.



Table 4.11-1
Project Consistency with Applicable General Plan Land Use Element Policies

Applicable General Plan Land Use Element Policies	Project Consistency Analysis
Policy LU-3.2: Through the zoning ordinance, control uses such as salvage yards, automobile dismantling, and scrap metal recycling operations which are not compatible with existing and anticipated development.	<u>Consistent</u> . The former salvage yard on-site would be redeveloped into a warehousing facility that is compatible and similar to other adjacent industrial uses in the project area.
Policy LU-7.2: Locate truck intensive uses in areas where the location and circulation pattern will provide minimal impacts on residential and commercial uses.	<u>Consistent</u> . The proposed warehousing facility is located in a LI designated area of the City and is adjacent to existing industrial uses. Thus, truck trips generated by the project would not adversely impact residential and commercial uses.
Policy LU-12.3: Review landscape plans for new development to ensure that landscaping relates well to the proposed land use, the scale of structures, and the surrounding area.	<u>Consistent</u> . <u>Exhibit 2-4, Conceptual Landscape Plan</u> , illustrates the project's conceptual landscape plan. The landscape plan would be reviewed and approved by City staff during the plan check review process to ensure the proposed landscaping is consistent with the proposed warehousing use, building scale, and surrounding area.
Policy LU-12.5: Improve City appearance by requiring landscaping to screen, buffer and unify new and existing development. Mandate continued upkeep of landscaped areas.	<u>Consistent</u> . The proposed project would include landscaping improvements, including variety of ornamental trees, shrubs, accents, and groundcover; refer to <u>Exhibit 2-4</u> . The street frontage along West Gardena Boulevard would include an approximately 20-foot swath of landscape area in addition to a reconstructed sidewalk. The swath of landscaping would include trees (i.e., Palo Verdes, London Plane Trees, Australian Willows, and Mondell Pines), as well as a variety of shrubs. The project's main entry, at the southeastern corner of the site, would also be landscaped with a variety of tree species (i.e., Holly Oaks, African Sumac, flowering accent trees) and assorted succulents. The perimeter of the site would be landscaped with Holly Oaks and shrubs and various opportunities for planters on-site would accommodate shrubs and African Sumacs. The project Applicant would be responsible for maintaining the landscaped areas.
Policy LU-13.5: Continue to require landscaping treatment along any part of a building site which is visible from City streets.	<u>Consistent</u> . Refer to response to Policy LU-12.5.
Policy LU-13.7: Ensure proper maintenance of parkways along arterial streets and landscaping of private property visible from the public right-of-way.	<u>Consistent</u> . Refer to response to Policy LU-12.5.

Source: City of Carson, Carson General Plan Land Use Element, 2004.

As analyzed in Table 4.11-1, the project would be consistent with applicable General Plan policies and impacts would be less than significant.



ZONING CODE CONSISTENCY

According to the *City of Carson Zoning Map*, the project is zoned Manufacturing, Light with a Design Overlay (ML-D). The ML zone is created primarily for small and medium size industrial uses which are not likely to have adverse effects upon each other or upon neighboring residential and commercial zones. The D Overlay allows for special site plan and design review for selected areas throughout the City. Table 4.11-2, *Light Manufacturing Development Standards Consistency Analysis*, details the project's consistency with applicable ML zone development standards.

**Table 4.11-2
Light Manufacturing Zone Development Standards Consistency Analysis**

Development Standard	ML Zoning Requirement	Proposed Project	Does Project Satisfy Requirement?
Setbacks			
Front Yard	25 feet or 25 percent of the lot depth, whichever is less	25 feet	Yes
Side Yard	10 feet if abutting a street; 10 percent of lot width if abutting residential (at least five feet but not greater than 10 feet); or No setback required if abutting non-residential zone and building height is not over 50 feet	52 feet along western boundary and 95 feet along eastern boundary	Yes
Rear Yard	10 percent of lot width if abutting residential (at least five feet but not greater than 10 feet); or No setback required if abutting non-residential zone and building height is not over 50 feet	57 feet	Yes
Minimum Lot Area	20,000 square feet	286,679 square feet	Yes
Minimum Lot Width	100 feet	457 feet	Yes
Maximum Building Height	No maximum height limit	42 to 45 feet	Yes
Maximum Roof Mounted Structures/ Equipment Height	10 feet above roof, measures from point of attachment	3 feet for roof appurtenances	Yes
Mechanical Equipment	Shall not be enclosed within a building and shall be screened from view from adjoining public streets or walkways	Heating, ventilation, and air conditioning (HVAC) equipment would be roof-mounted and screened from public view via parapets	Yes
Parking Spaces	Office: 1 space per 300 square feet Warehouse: 1 space per 1,500 square feet	146 spaces provided (120 spaced required)	Yes



Development Standard	ML Zoning Requirement	Proposed Project	Does Project Satisfy Requirement?
Street Frontage/ Access	Required vehicular access directly from public street/alley and with street frontage of at least 100 feet	Vehicular access provided via two full access driveways along West Gardena Avenue	Yes
Maximum Wall Height	50 feet	10-foot concrete screen wall along eastern boundary and 8-foot tube steel fence along northern and western boundaries	Yes

Source: City of Carson, *Carson Municipal Code*, current through 19-1936, passed September 3, 2019.

Based on the analysis above, the proposed project would not conflict with the General Plan or applicable Municipal Code regulations. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.



4.12 MINERAL RESOURCES

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

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

No Impact. According to the General Plan EIR, no known mineral resources are located within the City. In addition, according to the State Division of Mines and Geology, no lands within the City have been identified to contain significant aggregate resources.¹ No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. Refer to Response 4.12(a).

Mitigation Measures: No mitigation is required.

¹ California Department of Conservation, *Special Report 209: Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County, California, 2010.*



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4.13 NOISE

<i>Would the project result in:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b. Generation of excessive groundborne vibration or groundborne noise levels?		✓		
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

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

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

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10 dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.



REGULATORY FRAMEWORK

Local

Carson General Plan

The General Plan includes interior and exterior noise standards as summarized in Table 4.13-1, Interior and Exterior Noise Standards. Table 4.13-1 shows standards and criteria that specify acceptable limits of noise for various land uses throughout Carson.

Table 4.13-1
Interior and Exterior Noise Standards

Categories	Type Uses	CNEL	
		Interior ^{1,3}	Exterior ^{2,4}
Residential	Single family Duplex, Multiple Family	45 – 55	50 – 60
	Mobile Home	45	65
Commercial Industrial Institutional	Hotel, Motel, Transient Lodging	45	—
	Commercial Retail, Bank, Restaurant	55	—
	Office Building, Research and Development, Professional Offices, City Office Building	50	—
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	—
	Gymnasium (Multipurpose)	50	—
	Sports Club	55	—
	Manufacturing, Warehousing, Wholesale, Utilities	65	—
	Movie Theaters	45	—
	Institutional	Hospital, Schools Classrooms	45
Church, Library		45	—
Open Space	Parks	—	65

Notes: CNEL = community noise equivalent level

1. Indoor environment includes bedrooms, living areas, bathrooms, toilets, closets, and corridors.
2. Outdoor environment is limited to private yards of single family residences; multi-family private patios or balconies that are served by a means of exist from inside the dwelling; balconies six feet deep or less are exempt; mobile home parks; park picnic areas; and school playgrounds.
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as required pursuant to Uniform Building Code Chapter 12, Section 1205.
4. Exterior noise levels should be such that interior noise levels do not exceed 45 CNEL.

Source: City of Carson, *Carson General Plan*, 2004.

City of Carson Municipal Code

Chapter 5 of the Municipal Code contains noise control regulations. The City adopted the “Noise Control Ordinance of the County of Los Angeles” as the City’s Noise Control Ordinance in 1995. The Noise Control Ordinance derived from *Los Angeles County Code* Section 12.08.390, *Exterior Noise Standards — Citations for Violations Authorized When*, and Section 12.08.400, *Interior Noise Standards*, establishes exterior and interior noise standards to regulate operational intrusive noises within specific land use zones. These noise standards are summarized in Table 4.13-2, Noise Ordinance Standards.



**Table 4.13-2
Noise Ordinance Standards**

Noise Zone	Land Use (Receptor Property)	Time Interval	Noise Level (dBA)	
			Exterior	Interior
I	Noise Sensitive-Area	Anytime	45	—
II	Residential Properties	10:00 p.m. to 7:00 a.m. (nighttime)	45	—
		7:00 a.m. to 10:00 p.m. (daytime)	50	—
III	Commercial Properties	10:00 p.m. to 7:00 a.m. (nighttime)	55	—
		7:00 a.m. to 10:00 p.m. (daytime)	60	—
IV	Industrial Properties	Anytime	70	—
All Zones	Multi-family	10:00 p.m. to 7:00 a.m.	—	40
	Residential	7:00 a.m. to 10:00 p.m.	—	45

Notes: dBA = A-weighted decibel scale

Source: County of Los Angeles, *Los Angeles County Code*, Section 12.08.490 and 12.08.400, current through Ordinance 2019-0073, passed December 17, 2019.

Municipal Code Section 5502(c), *Amendments to Noise Control Ordinance*, provides exterior noise standards that regulate construction noise near residential uses. Noise standards for non-scheduled, intermittent, short-term operations (less than 20 days), as well as standards for repetitively scheduled and relatively long-term construction operations (periods of 21 days or more) of equipment are summarized in Table 4.13-3, *Maximum Construction Noise Limits*.

**Table 4.13-3
Maximum Construction Noise Limits**

Construction Time		Maximum Allowed Noise Level (dBA)	
		Single Family Residential	Multi-Family Residential
Maximum noise levels for non-scheduled, intermittent, short-term operation of 20 days or less for construction equipment.	Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80
	Daily, except 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60	64
Maximum noise level for repetitively scheduled and relatively long-term operation of 21 days or more for construction equipment.	Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	65	70
	Daily, except 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	55	60

Notes: dBA = A-weighted decibel scale

Source: City of Carson, *City of Carson Municipal Code*, Section 5502(c), current through Ordinance No. 19-1936, passed September 3, 2019.



EXISTING CONDITIONS

Stationary Sources

Noise sources in the project area include the use of mechanical equipment (use of heating, ventilation, and air conditioning [HVAC] units, etc.) and parking lot noise (cars parking, open and closing doors, truck back-up beepers, etc.) at light industrial, commercial, and residential land uses surrounding the project site. The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

Mobile Sources

The majority of the existing noise in the project area is generated from vehicle sources along West Gardena Boulevard and Broadway. According to the General Plan, traffic noise levels along South Figueroa Street, West Gardena Boulevard, and Broadway range from 60 to 70 dBA CNEL.^{1, 2} Additionally, aircraft overflights and trains are a source of noise in the City of Carson.

Noise Measurements

In order to quantify existing ambient noise levels in the vicinity of the project site, three noise measurements were taken on January 15, 2020; refer to Exhibit 4.13-1, Noise Measurement Locations and Table 4.13-4, Noise Measurements. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. The three, ten-minute measurements were taken between 10:30 a.m. and 12:00 p.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day.

**Table 4.13-4
Noise Measurements**

Site No.	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Peak (dBA)	Time
1	Along Figueroa Street, approximately 160 feet north of the Figueroa Street and West Gardena Boulevard intersection.	72.5	53.9	94.9	101.7	10:56 a.m.
2	Along Gardena Boulevard, north of the residence located at 348 West Gardena Boulevard.	68.7	50.9	91.1	113.5	11:12 a.m.
3	Along Broadway, approximately 290 feet north of the Broadway and West Gardena Boulevard intersection.	68.1	49.0	88.1	102.6	11:29 a.m.

Source: Michael Baker International, January 15, 2020.

Meteorological conditions were partially cloudy, cool temperatures, with light wind speeds (0 to 3 miles per hour), and low humidity. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for sound level meters. The results of the field measurements are included in Appendix G, Noise Data.

¹ City of Carson, *Carson General Plan*, Exhibit N-4, Future Noise Contours (2020), October 11, 2004.

² The Community Noise Equivalent Level (CNEL) is a rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 p.m. to 10:00 p.m., and +10 dBA for the night, 10:00 p.m. to 7:00 a.m.



NOT TO SCALE

Michael Baker
INTERNATIONAL



1 NOISE MEASUREMENT LOCATIONS

02/2020 JN 176054

CT WAREHOUSE PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
Noise Measurement Locations

Exhibit 4.13-1



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

Less Than Significant Impact With Mitigation Incorporated. It is difficult to specify noise levels that are generally acceptable to everyone; noise that is considered a nuisance to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels, or based on studies of the ability of people to sleep, talk, or work under various noise conditions.

CONSTRUCTION

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., demolition, site preparation, grading, paving, building construction, and architectural coatings). Noise generated by construction equipment, including graders and excavators, can reach high levels. During construction, exterior noise levels could affect the residential uses in the vicinity of the project site. Specifically, project construction could occur as close as approximately 112 feet from existing residential structures to the south of the project site.

Construction of the proposed project would occur over approximately ten months and would include demolition, grading, building construction, paving, and the application of architectural coatings. Groundborne noise and other types of construction-related noise impacts would typically occur during the grading construction phase and have the potential to create the highest levels of noise. The primary construction equipment noise sources used during construction would be during earthwork activities (use of graders and scrapers) and building construction (use of excavators, tractors/loaders/backhoes, and a crane). Graders typically generate the highest noise levels, emitting a maximum noise level of approximately 85 dBA at a distance of 50 feet. Point sources of noise emissions are atmospherically attenuated by a factor of 6 dBA per doubling of distance. This assumes a clear line-of-sight and no other machinery or equipment noise that would mask project construction noise. The shielding of buildings and other barriers that interrupt line-of-sight conditions further reduce noise levels from point sources.

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

The City has established noise standards for construction activity in Municipal Code Section 5502(c). Pursuant to Municipal Code Section 5502(c), maximum construction noise levels should not exceed the noise standard of 65 dBA during normal daytime hours (between 7:00 a.m. and 8:00 p.m.).³ Construction noise impacts generally happen when construction activities occur in areas immediately adjoining noise sensitive land uses, during noise sensitive times of the day, or when construction durations last over extended periods of time. The closest existing sensitive receptors are residences located approximately 112 feet south of proposed construction areas. At this distance, the maximum construction noise levels from graders would be approximately 78 dBA. However, traffic along Gardena Boulevard would likely mask construction noise and grading activities would occur over a short duration (i.e., approximately 25 days). As stated in [Table 4.13-4](#), the existing ambient noise levels near the project site range from 68.1 to 72.5 dBA, which already exceeds the City's construction noise standard of 65 dBA. To further attenuate construction noise levels at the nearest sensitive receptors, Mitigation Measure NOI-1 would be implemented. Mitigation Measure NOI-1 would include the designation of a "Noise Disturbance Coordinator" and orientation of stationary construction equipment away from nearby sensitive receivers, among other requirements. Further, Mitigation Measure NOI-1 requires

³ Project construction would not occur at night (8:00 p.m. to 7:00 a.m.), on Sundays, or legal holidays.



construction equipment to be equipped with properly operating and maintained mufflers, as well as other State required noise attenuation devices. A less than significant impact would occur in this regard.

OPERATIONS

Off-Site Mobile Noise

Future development generated by the proposed project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. According to the *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, a doubling of traffic volumes would result in a 3 dB increase in traffic noise levels, which is barely detectable by the human ear.⁴ Based on the *333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis (TIA)* prepared by RK Engineering Group, Inc. (dated January 20, 2020), the proposed project is projected to generate a total of approximately 918 passenger car equivalent⁵ (PCE) daily trips. Table 4.13-5, Existing and Project Traffic Volumes, depicts existing and project generated peak hour intersection turning movement volumes in the project vicinity. As shown in Table 4.13-5, the project's traffic volumes would not double existing traffic volumes and an increase in traffic noise along local roadways would be imperceptible. Therefore, project-related traffic noise would be less than significant.

**Table 4.13-5
Existing and Project Traffic Volumes**

Peak Hour Intersection Turning Movement Volumes					
Segment	Existing (daily trips)		Project (daily trips)		Doubling of Traffic Volumes?
Figueroa Street/Gardena Boulevard	a.m.	1,503	a.m.	15	No
	p.m.	1,708	p.m.	43	No
Broadway/Gardena Boulevard	a.m.	1,084	a.m.	80	No
	p.m.	1,873	p.m.	72	No
Main Street/Gardena Boulevard	a.m.	1,511	a.m.	51	No
	p.m.	2,348	p.m.	46	No
Broadway/Albertoni Street	a.m.	1,434	a.m.	14	No
	p.m.	2,251	p.m.	12	No
Main Street/SR-91 Westbound Ramps	a.m.	1,879	a.m.	51	No
	p.m.	2,029	p.m.	39	No
Main Street/Albertoni Street	a.m.	2,188	a.m.	35	No
	p.m.	2,945	p.m.	27	No
SR-91 Eastbound Ramps/ Albertoni Street	a.m.	1,440	a.m.	22	No
	p.m.	2,695	p.m.	23	No
Figueroa Street/164th Street	a.m.	1,158	a.m.	41	No
	p.m.	1,657	p.m.	37	No

⁴ U.S. Department of Transportation, *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, updated August 24, 2017, https://www.fhwa.dot.gov/Environment/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed on January 23, 2020.

⁵ One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.



Table 4.13-5 (continued)
Existing and Project Traffic Volumes

Segment	Existing		Project		Doubling of Traffic Volumes?
	a.m.		a.m.		
164th Street/Gardena Boulevard	a.m.	499	a.m.	97	No
	p.m.	861	p.m.	88	No

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, Exhibit D (Existing Traffic Volumes) and Exhibit G (Project Traffic Volumes), January 20, 2020.

On-Site Operational Noise

Mechanical equipment, slow-moving trucks, parking lot activities, and back-up alarms for trucks would generate noise during on-site operations. The operations would be typical of a distribution/warehousing/manufacturing facility.

Mechanical Equipment

Heating, ventilation, and air conditioning (HVAC) units would be installed on the roof of the proposed warehouse building. Typically, mechanical equipment, such as HVAC units, generate noise levels of 55 dBA at 50 feet from the source.⁶ As noted above, noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance from the source. HVAC units would be located approximately 120 feet from the nearest sensitive receptor (i.e. residences to the south of the project site). As such, noise levels from the HVAC units could reach approximately 47 dBA at the nearest residences to the south without an enclosure or noise attenuation features. However, the HVAC units would be shielded by parapets which would further attenuate operation noise from HVAC units. The parapets would provide a minimum attenuation of 5 dBA from HVAC noise, resulting in an exterior noise level of approximately 42 dBA.⁷ Therefore, operation of the HVAC units would not exceed the City's daytime (50 dBA) and nighttime (45 dBA) noise standards. Impacts would be less than significant in this regard.

Slow-Moving Trucks

On-site truck operations would be considered a mobile noise source subject to the City's noise regulations. It is anticipated that the project would operate 24 hours per day, seven days per week. Most of the project operations would be conducted during daytime business hours (assumed to be 7:00 a.m. to 6:00 p.m.); however, some degree of operation would take place between 6:00 p.m. and 7:00 a.m. The predominant noise source during on-site operations would be from on-site truck movements and idling.

Based on the TIA, the proposed project would generate up to 93 PCE-adjusted truck trips per day, including 49 PCE-adjusted truck trips during the a.m. peak hour and 44 PCE-adjusted truck trips during the p.m. peak hour. Typically, slow movements from these trucks can generate a maximum noise level of approximately 79 dBA at a distance of 50 feet.⁸

For the purposes of this analysis, the distance to the nearest receptor was measured from the closest on-site truck-movement area (located approximately 175 feet north of the southern project site boundary) to the property line of the receptor being analyzed. The nearest sensitive receptor (i.e., a residence to the south of the project site) would be

⁶ U.S. Environmental Protection Agency, Noise From Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971.
⁷ City of Carson, Carson General Plan Noise Element, October 11, 2004.
⁸ Elliot H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010.



located approximately 260 feet south of slow-moving trucks at the project site. At this distance, on-site noise levels from slow-moving trucks would be approximately 65 dBA. In addition, the landscaped frontage along West Gardena Boulevard and the southern portion of the warehouse building would further attenuate back-up beeper noise levels. The warehouse building would provide a minimum attenuation of 20 dBA from slow-moving truck noise, resulting in an exterior noise level of approximately 44.7 dBA.⁹ Therefore, the anticipated noise levels from slow-moving trucks would not exceed the City's daytime (50 dBA) and nighttime (45 dBA) noise standards at the nearest residential receptors. Interior noise levels from slow-moving trucks at the nearest residence would be attenuated by 20 dBA, decreasing interior noise levels to approximately 24.7 dBA,¹⁰ which is below the City's allowable interior standard of 45 dBA. Therefore, slow-moving truck noise levels would not exceed the City's applicable noise standards at the nearest off-site receptor, and a less than significant impact would occur in this regard.

Back-Up Alarms

The project would also provide 25 truck loading docks along the eastern perimeter of the project site. Medium and heavy-duty trucks reversing into truck loading docks would produce noise from back-up alarms (also known as back-up beepers). Back-up beepers produce a typical volume of 97 dBA at one meter (i.e., 3.28 feet) from the source.¹¹ The property line of the nearest sensitive receptor (i.e., a residence) would be located approximately 260 feet south of the truck loading docks where trucks would be reversing/parking. At this distance, exterior noise levels from back-up beepers would be approximately 59 dBA. In addition, the landscaped frontage along West Gardena Boulevard and the southern portion of the warehouse building would further attenuate back-up beeper noise levels. The warehouse building would provide a minimum attenuation of 20 dBA from back-up beeper noise, resulting in an exterior noise level of approximately 39 dBA.¹² Therefore, the anticipated noise levels from back-up beepers would not exceed the City's daytime (50 dBA) and nighttime (45 dBA) noise standards at the nearest residential receptors. Thus, noise impacts from back-up beepers associated with the project would be less than significant.

Parking Areas

A total of 154 parking spaces would be provided for employees and visitors in surface parking lots located along the warehouse building perimeters. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys may be an annoyance to nearby noise-sensitive receptors. Estimates of the maximum noise levels associated with some parking lot activities are presented in Table 4.13-6, *Typical Maximum Noise Levels Generated by Parking Lots*.

As shown in Table 4.13-6, parking lot noise levels would range between 53 dBA and 61 dBA at a distance of 50 feet. The property line of the nearest sensitive receptor (i.e., a residence) is located approximately 162 feet south of the nearest proposed parking area on western portion of the project site. At this distance, parking lot noise levels would range between 43 dBA and 51 dBA. According to Municipal Code Section 5502, exterior noise levels exceeding the daytime (50 dBA) or nighttime (45 dBA) noise standards for a cumulative period of 15 minutes in any 30 minute period would exceed the City's noise standard. As parking lot noise is temporary and short in duration, it is not anticipated the parking lot activities depicted in Table 4.13-6 would exceed 15 minutes in duration. A less than significant impact would occur in this regard.

⁹ City of Carson, Carson General Plan Noise Element, October 11, 2004.

¹⁰ Assuming a 20-dBA outdoor-indoor noise attenuation rate per the U.S. Department of Housing and Urban Development, The Noise Guidebook, page 14, March 2009.

¹¹ Environmental Health Perspectives, Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018517/>, accessed January 23, 2020.

¹² City of Carson, Carson General Plan Noise Element, October 11, 2004.



Table 4.13-6
Typical Maximum Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source
Car door slamming	61 dBA L_{eq}
Car starting	60 dBA L_{eq}
Car idling	53 dBA L_{eq}
Source: Kariel, H. G., <i>Noise in Rural Recreational Environments</i> , Canadian Acoustics 19(5), 3-10, 1991.	

Mitigation Measures:

NOI-1 To reduce noise levels during construction activities, the Applicant must demonstrate, to the satisfaction of the City of Carson Community Development Director, that the project complies with the following:

- Construction contracts must specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.
- A sign, legible at a distance of 50 feet, shall be posted at the project construction site providing a contact name and a telephone number where residents can inquire about the construction process and register complaints. This sign shall indicate the dates and duration of construction activities. In conjunction with this required posting, a noise disturbance coordinator shall be identified to address construction noise concerns received. The coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the disturbance coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City. All signs posted at the construction site shall include the contact name and the telephone number for the noise disturbance coordinator.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Per Section 5502 (c) of the Municipal Code, construction shall be limited to the hours between 7:00 a.m. and 8:00 p.m. daily (except Sundays and legal holidays). All construction activities shall be prohibited at night (between 8:00 p.m. and 7:00 a.m.) and on Sundays and legal holidays.

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

Less Than Significant Impact With Mitigation Incorporated. Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.



The Caltrans *Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. As the nearest structures are industrial buildings located approximately ten feet to the north and east of project construction activities, the architectural damage criterion for continuous vibrations at modern industrial/commercial buildings of 0.5 inch-per-second peak particle velocity (PPV) is utilized. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural.

The highest degree of groundborne vibration would be generated during the paving construction phase due to the operation of a vibratory roller. The nearest structures would be light industrial and commercial buildings located approximately ten feet to the north and east of project construction activities. Based on the Federal Transit Administration (FTA) data, vibration velocities from vibratory roller operations would be 0.83 inch-per-second PPV at ten feet from the source of activity.¹³ Therefore, vibration from construction activities experienced at the closest structure would exceed the 0.5 inch-per-second PPV Caltrans significance threshold. Thus, groundborne vibration generated from vibratory roller operations would be considered potentially significant. Mitigation Measure NOI-2 would be required to reduce vibration impacts to a less than significant level. Mitigation Measure NOI-2 would require the use of a static (non-vibratory) roller, as an alternative to vibratory rollers, within 15 feet of the northern and eastern industrial structures to ensure vibration levels would not exceed the 0.5 inch-per-second PPV significance threshold. Impacts would be less than significant with implementation of Mitigation Measure NOI-2.

Mitigation Measures:

NOI-2 Prior to the initiation of construction, the Applicant shall prepare a paving control plan to ensure that the paving process does not result in damage to the northern and eastern light industrial/commercial structures. The paving control plan shall be subject to the Building and Safety Department's approval prior to issuance of a grading permit. To reduce groundborne vibration levels, the paving control plan shall stipulate that static (non-vibratory) rollers shall be used as an alternative to vibratory rollers within 15 feet of the northern and eastern industrial structures.

c) ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

No Impact. The nearest airport to the project site is the Compton/Woodley Airport located approximately 1.7 miles to the northeast in the City of Compton. According to the General Plan, the 60 dBA and 65 dBA noise contours from the Compton/Woodley Airport do not extend into the City of Carson. Additionally, the project site is not located within the vicinity of a private airstrip or related facilities.¹⁴ Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels associated with aircraft. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

¹³ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

¹⁴ The Goodyear Blimp Airship Base, situated approximately 1.8 miles to the south of the project site, is not considered an airport, as blimp operations are only infrequent compared to aircraft activity at airports, and produce much lower sound levels than traditional aircraft.



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4.14 POPULATION AND HOUSING

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

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

Less Than Significant Impact. A project could induce population growth in an area either directly, through the development of new residences or businesses, or indirectly, through the extension of roads or other infrastructure. As described in Section 2.0, Project Description, the project involves the construction of a new warehouse facility on a project site that is currently developed with two residential dwellings (and associated ancillary structures) and a former salvage yard facility.

Employment opportunities resulting from the proposed project could directly increase the City’s population, as employees (and their families) may choose to relocate to the City. It would be highly speculative to estimate the number of future employees who would relocate to the City, as many factors influence personal housing location decisions (i.e., family income levels and the cost and availability of suitable housing in the local area). Further, many project employees could already live in the City. The project would employ up to 80 full-time employees. Based on a “worst case” scenario of 80 full-time employees relocating to Carson and the City’s average household size of 3.61, project implementation would result in a population increase of approximately 289 persons.¹ Therefore, population growth associated with the project would represent only a 0.3 percent increase over the City’s 2019 population of 93,604 persons.²

Potential population growth impacts are also assessed based on a project’s consistency with adopted plans that have addressed growth management from a local and regional standpoint. The Southern California Association of Governments (SCAG) growth forecasts estimate the City’s population to reach 107,900 persons by 2040, representing a total increase of 15,900 persons between 2012 and 2040.³ SCAG’s regional growth forecasts are based upon long-range development assumptions (i.e., General Plans) of the relevant jurisdiction. The project’s anticipated population increase (289 persons) would represent 0.3 percent of the City’s anticipated 2040 population.

Although the project would result in direct population growth, the proposed project would not induce substantial unplanned population growth exceeding existing local conditions (0.3 percent increase) and/or regional populations

¹ California Department of Finance Demographic Research Unit, Report E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2019, with 2010 Benchmark, Sacramento, California, May 1, 2019.

² Ibid.

³ Southern California Association of Governments, 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction, https://www.scag.ca.gov/Documents/2016_2040RTPSCS_FinalGrowthForecastbyJurisdiction.pdf, accessed January 2, 2020.



projections (0.3 percent of the total projected 2040 population of the City). Additionally, buildout of the project site under the Manufacturing, Light with a Design Overlay (ML-D) zoning was already contemplated under the General Plan and regional growth forecasts. As a result, the project would result in less than significant impacts to unplanned population growth.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The southeastern portion of the project site is currently developed with two residential dwellings. Project implementation would demolish the existing residential dwellings to construct a new warehouse facility. Based on the City's average household size of 3.61, project implementation would result in the displacement of approximately eight individuals and two dwelling units. This represents less than 0.01 percent of the City's 2019 population of 93,604 persons.⁴ As such, the project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Additionally, buildout of the proposed project would not conflict with the General Plan's intended light industrial (LI) designation and ML-D zoning for the project site; refer to Section 4.11, Land Use and Planning. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

⁴ Southern California Association of Governments, *2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction*, https://www.scag.ca.gov/Documents/2016_2040RTPSCS_FinalGrowthForecastbyJurisdiction.pdf, accessed January 2, 2020.



4.15 PUBLIC SERVICES

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

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

1) ***Fire protection?***

Less Than Significant Impact. The County of Los Angeles Fire Department (LACoFD) provides fire protection services to the City and project site. According to the General Plan EIR, there are six primary fire stations that provide both fire and emergency services to the City, four of which are within the City’s boundaries. The closest fire station to the project is Station #95, located approximately 0.6 mile to the northeast of the project site at 137 West Redondo Beach Boulevard, Gardena.

The proposed project would create an increased demand for fire protection services. However, as a light industrial facility, the proposed project would be consistent with land uses anticipated for the area; refer to Section 4.11, Land Use and Planning. Although the project would result in direct population growth (through employment generation), the proposed project would not induce unplanned population growth since the project is consistent with the General Plan designation and zoning for the site. Furthermore, the overall project design would be subject to compliance with the requirements set forth in the 2019 California Fire Code (CFC), 2019 California Building Standards Code (CBC), and the Municipal Code, *Chapter 1 Building Code*, and LACoFD requirements. As such, less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.



2) **Police protection?**

Less Than Significant Impact. The Los Angeles County Sheriff's Department (LASD) provides sheriff protection services to the City and the project site. The project site is within the service area of the LASD Carson Station, which provides sheriff services to the City of Carson, and unincorporated County areas in Gardena, Torrance, and Rancho Dominguez. The Carson Station is located approximately 3.4 miles to the southeast of the site at 21356 South Avalon Boulevard.

As discussed in Response 4.15 (a)(1) above, the proposed project is consistent with land uses anticipated for the site and would not induce unplanned population growth. Thus, implementation of the project would not significantly increase demand for police protection services provided by the LASD. In addition, the project would be subject to site plan review by the City prior to project approval to ensure that it meets City requirements in regard to safety (e.g., nighttime security lighting). As such, less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

3) **Schools?**

Less Than Significant Impact. The Los Angeles Unified School District (LAUSD) and the Compton Unified School District (CUSD) provides school services for the City of Carson. The project site is located within LAUSD. The closest LAUSD schools in the project vicinity include Gardena Elementary (located at 647 West Gardena Boulevard, Gardena 0.3-mile from the project site), Robert E Peary Middle School (located at 1415 West Gardena Boulevard, Gardena approximately 1.1 miles from the project site), and Gardena Senior High (located at 1301 West 182nd Street, Gardena approximately 1.1 miles from the project site).¹

The project includes the development of a light industrial facility, which could generate additional students in the project area as a result of employee generation; refer to Section 4.14, Population and Housing. However, the proposed project would not significantly increase the need for school facilities, as the project is consistent with land uses anticipated and would not result in unplanned population growth. Furthermore, the project would be required to comply with Senate Bill (SB) 50 requirements, which allow school districts to collect impact fees from developers of new residential projects. According to Section 65996 of the California Government Code, payment of statutory fees is considered full mitigation for new development projects. Thus, upon payment of required fees by the project Applicant consistent with existing State requirements, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

4) **Parks?**

Less Than Significant Impact. The project does not propose new or physically altered parks or recreational facilities. According to the City of Carson Parks and Recreation Department, the City maintains 12 full-service parks among other programs and services.² Several parks including Hemingway Park (located at 701 East Gardena Boulevard approximately 0.8-mile from the project site) and Walnut Mini-Park (located at 440 East Walnut Street approximately 0.7-mile from the project site) are located in close proximity of the project site. As discussed above, the proposed project is consistent with land uses anticipated for the area and would not result in unplanned population growth. The project proposes a light industrial facility; as such, implementation of the project would not increase the demand for, or use of, existing local or regional park facilities. Moreover, the City adopted the Interim Development Impact Fee ("IDIF")

¹ Los Angeles Unified School District, *Local District South Map*, dated May 2015, <https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/33/South.pdf>.

² City of Carson, Community Services Parks and Recreation, *About Us*, https://ci.carson.ca.us/CommunityServices/Parks_Rec_AboutUs.aspx, accessed January 14, 2020.



Program on April 16, 2019 (Municipal Code *Article XI, Interim Development Impact Fees*). The IDIF Program requires payment of fees to offset the project's impacts on existing public facilities, or demands for new facilities, such as parks. Thus, upon payment of the IDIF by the project Applicant, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

5) Other public facilities?

Less Than Significant Impact. As the proposed project would not result in any unplanned growth, the project's increase in the demand for other public facilities, such as libraries, would not be significant; refer to Responses 4.15(a)(1) through 4.15(a)(4). Less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.



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4.16 RECREATION

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

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

No Impact. Refer to Response 4.15(a)(4).

Mitigation Measures: No mitigation is required.

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

No Impact. Refer to Response 4.15(a)(4).

Mitigation Measures: No mitigation is required.



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4.17 TRANSPORTATION

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

This section is primarily based upon the *333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson* (Traffic Impact Analysis) prepared by RK Engineering Group, Inc. (dated January 20, 2020); refer to [Appendix I, Traffic Impact Analysis](#).

The purpose of the Traffic Impact Analysis is to evaluate potential project impacts related to transportation near the project site. The following analysis scenarios are evaluated in this section:

- Existing Conditions (2019);
- Existing Plus Project Conditions (2019);
- Opening Year (2021) Without Project Conditions¹; and
- Opening Year (2021) With Project Conditions.

The Traffic Impact Analysis is based on the traffic study guidelines, requirements, and thresholds of significance for the City, County, and California Department of Transportation (Caltrans), and is consistent with the Congestion Management Program analysis guidelines for Los Angeles County.

STUDY AREA

The Traffic Impact Analysis identified the following signalized and unsignalized study intersections; refer to Traffic Impact Analysis Exhibit A, *Location Map*. The study intersections are under the jurisdiction of different agencies, including the City of Carson, City of Los Angeles, County, and Caltrans.

1. Figueroa Street and Gardena Boulevard (Signalized) – City of Carson and City of Los Angeles;
2. Broadway and Gardena Boulevard (Signalized) – City of Carson;
3. Main Street and Gardena Boulevard (Signalized) – City of Carson;
4. Broadway and Albertoni Street (Signalized) – City of Carson;

¹ Opening Year (2021) considers the existing traffic, area-wide growth, and traffic generated by cumulative projects.



5. Main Street and State Route 91 (SR-91) Westbound Ramps (Signalized) – City of Carson and Caltrans;
6. Main Street and Albertoni Street (Signalized) – City of Carson;
7. SR-91 Eastbound Ramps and Albertoni Street (Signalized) – City of Carson and Caltrans;
8. Interstate 110 (I-110) Southbound Ramps and Redondo Beach Boulevard (Signalized) – City of Los Angeles and Caltrans;
9. I-110 Northbound Ramps and Redondo Beach Boulevard (Signalized) – City of Los Angeles and Caltrans;
10. Figueroa Street and Redondo Beach Boulevard (Signalized) – City of Los Angeles and Los Angeles County;
11. Figueroa Street and 164th Street (Unsignalized) – City of Carson and City of Los Angeles;
12. 164th Street and Gardena Boulevard (Unsignalized) – City of Carson;
13. Project Driveway 1 and Gardena Boulevard (Unsignalized) – City of Carson; and
14. Project Driveway 2 and Gardena Boulevard (Unsignalized) – City of Carson.

Existing conditions intersection level of service calculations detailed below are based upon manual a.m. and p.m. peak hour turning movement counts taken in July 2019 during weekday conditions. The a.m. peak hour traffic volumes were determined by counting the three-hour peak period between 7:00 a.m. and 10:00 a.m. and using the highest hour within that three-hour peak period. Similarly, the p.m. peak hour traffic volumes were identified by counting the three-hour peak period between 3:00 p.m. and 6:00 p.m. and using the highest hour within that three-hour peak period. The existing traffic control and geometry conditions and existing traffic volumes are shown on Traffic Impact Analysis Exhibits C, *Existing Traffic Control & Study Intersection Geometry*, and D, *Existing Traffic Volumes*, respectively.

LEVEL OF SERVICE CRITERIA

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection.

Intersection Capacity Utilization (ICU) Methodology

The ICU analysis method is utilized by the City of Carson, City of Los Angeles, and the County to determine the operating LOS of signalized intersections. To calculate the ICU, the volume of traffic using the intersection is compared with the capacity of the intersection. ICU is usually expressed as a ratio. This ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The ICU analysis utilizes a lane capacity of 1,600 vehicles per hour per lane and a clearance time of 10 percent.

The ICU analysis methodology describes the operation of an intersection from LOS A (free-flow conditions) to LOS F (severely congested conditions) based on corresponding ranges of volume-to-capacity (V/C) at the intersection. Table 4.17-1, ICU Intersection LOS and V/C Ranges, details each LOS and corresponding V/C ratio range.

**Table 4.17-1
ICU Intersection LOS and V/C Ranges**

Level of Service	Critical Volume to Capacity Ratio
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91 – 1.00
F	> 1.00

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to Appendix I.



Highway Capacity Manual (HCM) Methodology

The HCM methodology is the adopted methodology for evaluation of State highway facilities. This methodology is also utilized for the evaluation of unsignalized study intersections and driveways in the City of Carson and County jurisdictions.

The HCM methodology defines LOS as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

For signalized intersections and all-way stop-controlled intersections, average control delay per vehicle is used to determine the LOS. For intersections and driveways with stop control on the minor approach only, the calculation of LOS is dependent on the occurrence of gaps occurring in the free-flow traffic movement of the main street, and the LOS is determined based on the worst individual movements on the stop-controlled minor approach or movements sharing a single lane on the stop-controlled minor approach.

The HCM analysis methodology describes the operation of an intersection using LOS A (free-flow conditions) to LOS F (severely congested conditions) based on corresponding ranges of stopped delay experienced per vehicle for signalized and unsignalized intersections; refer to Table 4.17-2, HCM Intersection LOS and Delay Ranges.

**Table 4.17-2
HCM Intersection LOS and Delay Ranges**

Level of Service	Average Control Delay Per Vehicle (seconds)	
	Signalized	Unsignalized
A	0.00 – 10.00	0.00 – 10.00
B	10.01 – 20.00	10.01 – 15.00
C	20.01 – 35.00	15.01 – 25.00
D	35.01 – 55.00	25.01 – 35.00
E	55.01 – 80.00	35.01 – 50.00
F	> 80.00	> 50.00

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to Appendix I.

TRAFFIC IMPACT CRITERIA AND THRESHOLDS

The following are the jurisdictional performance criteria and thresholds of significance applicable to the study area.

City of Carson, City of Los Angeles, and County Thresholds of Significance

The acceptable LOS for the City of Carson, City of Los Angeles, and the County is LOS D or better.

Significant traffic impacts for signalized locations in the City of Carson, City of Los Angeles, and the County are determined based on the criteria detailed in Table 4.17-3, City of Carson, City of Los Angeles, and County Thresholds of Significance.



Table 4.17-3
City of Carson, City of Los Angeles, and County Thresholds of Significance

Level of Service Without Project	Volume to Capacity Ratio Difference
C	≥ 0.040
D	≥ 0.020
E, F	≥ 0.010

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).

The Traffic Impact Analysis assumes for City of Carson unsignalized study intersections, a significant impact occurs if the LOS is deficient (either LOS E or F) and the intersection satisfies a traffic signal warrant.

Caltrans Thresholds of Significance

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities. While Caltrans has not established traffic thresholds of significance, the Traffic Impact Analysis utilizes the following traffic thresholds of significance based on discussions with Caltrans staff:

- A significant project impact occurs at a State highway signalized study intersection when the addition of project-generated trips causes the peak hour LOS of the study intersection to change from acceptable operation (LOS A, B, C, or D) to deficient operation (LOS E or F).

EXISTING CONDITIONS

Table 4.17-4, City and County Study Intersection LOS Analysis Summary – Existing Conditions, summarizes the results of the LOS analysis for the study area intersections under existing conditions. As shown in Table 4.17-4, the study intersections are currently operating at an acceptable LOS (LOS D or better) during a.m. and p.m. peak hours.

Table 4.17-4
City and County Study Intersection LOS Analysis Summary – Existing Conditions

Intersection	Traffic Control	Methodology	Delay ¹ (seconds)		V/C Ratio ²		Level of Service		
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
			1	Figueroa Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.385
2	Broadway (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.317	0.441	A	A
3	Main Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.358	0.531	A	A
4	Broadway (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.370	0.552	A	A
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	ICU	--	--	0.570	0.560	A	A
6	Main Street (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.532	0.717	A	C
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.442	0.785	A	C
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.670	0.728	B	C
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.583	0.755	A	C
10	Figueroa Street (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.586	0.760	A	C



Table 4.17-4 (cont'd)
City and County Study Intersection LOS Analysis Summary – Existing Conditions

Intersection	Traffic Control	Methodology	Delay ¹ (seconds)		V/C Ratio ²		Level of Service		
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
11	Figuroa Street (NS) and 164th Street (EW)	CSS	HCM	12.6	13.9	--	--	B	B
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.3	11.9	--	--	B	B
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	--	--

Notes: TS = traffic signal; CSS = cross-street stop; ICU = Intersection Capacity Utilization; HCM = Highway Capacity Manual; V/C = volume to capacity ratio

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² ICU Analysis Software: Traffix, Version 8.0.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).

Additionally, [Table 4.17-5, State Highway Study Intersection LOS Analysis Summary – Existing Conditions](#), summarizes the results of the LOS analysis for State highway study intersections under existing conditions. As shown, State highway study intersections are currently operating at an acceptable LOS (LOS D or better) during a.m. and p.m. peak hours.

Table 4.17-5
State Highway Study Intersection LOS Analysis Summary – Existing Conditions

Intersection	Traffic Control	Methodology	Delay ¹ (seconds)		Level of Service		
			a.m.	p.m.	a.m.	p.m.	
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	HCM	27.1	18.3	C	B
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	HCM	15.2	20.2	B	C
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	21.0	19.7	C	B
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	34.4	42.1	C	D
11	Figuroa Street (NS) and 164th Street (EW)	CSS	HCM	12.6	13.9	B	B
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.3	11.9	B	B
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--

Notes: TS = traffic signal; CSS = cross-street stop; HCM = Highway Capacity Manual

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).



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

Less Than Significant Impact.

Roadway Facilities

Project Trip Generation

In order to accurately assess traffic conditions with the proposed project, trip generation estimates were developed for the project. Trip generation rates for the project are based on nationally recognized recommendations contained within the Institution of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*. Trip generation rates utilized in the Traffic Impact Analysis are detailed in Table 4.17-6, ITE Trip Generation Rates.

**Table 4.17-6
ITE Trip Generation Rates**

Land Use	Units	Peak Hour						Daily
		a.m.			p.m.			
		In	Out	Total	In	Out	Total	
Light Industrial	TSF							
Trip Generation Rates ¹		0.619	0.081	0.700	0.080	0.550	0.630	4.960
PCE Inbound/Outbound Splits ²		88%	12%	100%	13%	87%	100%	--
Passenger Car Equivalent Rates Calculations								
Passenger Cars								
Recommended Mix (%) ³		78.60%	78.60%	78.60%	78.60%	78.60%	78.60%	78.60%
PCE Factor ⁴		1.0	1.0	1.0	1.0	1.0	1.0	1.0
PCE Rates		0.486	0.064	0.550	0.063	0.432	0.495	3.899
Two-Axle Trucks								
Recommended Mix (%) ³		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
PCE Factor ⁴		1.5	1.5	1.5	1.5	1.5	1.5	1.5
PCE Rates		0.074	0.010	0.084	0.010	0.066	0.076	0.595
Three-Axle Trucks								
Recommended Mix (%) ³		3.90%	3.90%	3.90%	3.90%	3.90%	3.90%	3.90%
PCE Factor ⁴		2.0	2.0	2.0	2.0	2.0	2.0	2.0
PCE Rates		0.048	0.006	0.055	0.006	0.043	0.049	0.387
Four-Axle+ Trucks								
Recommended Mix (%) ³		9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
PCE Factor ⁴		3.0	3.0	3.0	3.0	3.0	3.0	3.0
PCE Rates		0.176	0.023	0.200	0.023	0.157	0.180	1.414
Final Rates (in Passenger Car Equivalents)								
Passenger Cars		0.486	0.064	0.550	0.063	0.432	0.495	3.899
Two-Axle Trucks		0.074	0.010	0.084	0.010	0.066	0.076	0.595
Three-Axle Trucks		0.048	0.006	0.055	0.006	0.043	0.049	0.387
Four-Axle+ Trucks		0.176	0.023	0.200	0.023	0.157	0.180	1.414

Notes: TSF = thousand square feet

¹ Trip Generation Source: ITE Trip Generation, 10th Edition, 2017.

² Inbound/Outbound Splits per ITE Trip Generation, 10th Edition, 2017.

³ Recommended Vehicle Mix Percentages per *City of Fontana Truck Trip Generation Study for Light Industrial Uses*, August 2003, Page 22.

⁴ Recommended PCE Factor per *San Bernardino County Congestion Management Program*, 2005.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to Appendix I.



Since the proposed land use is industrial, it is expected to attract heavy vehicle traffic, mainly in the form of large multi-axle trucks. Large trucks generally occupy more space on the roadway; therefore, in order to show the equivalent impacts of project-generated trucks, the project trip generation is converted to passenger car equivalents (PCE). The *City of Fontana Truck Trip Generation Study for Light Industrial Uses* (August 2003) was used to estimate the heavy vehicle mix for the proposed project. The following PCE factors are used to convert truck trips into PCE based on County of San Bernardino recommended PCE-factors for conversion of trucks into passenger vehicles; refer to Table 4.17-7, Vehicle Type PCE Factors.

**Table 4.17-7
Vehicle Type PCE Factors**

Vehicle Type	PCE Factor
Passenger Car	1.0
2-Axle Trucks	1.5
3-Axle Trucks	2.0
4-Axle+ Trucks	3.0

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to Appendix I.

Table 4.17-8, Project Trip Generation, summarizes the daily and peak hour trip generation for the proposed project without applying the PCE factors. As shown, the project is forecast to generate approximately 723 daily trips, including approximately 102 a.m. peak hour trips and approximately 92 p.m. peak hour trips.

**Table 4.17-8
Project Trip Generation**

Land Use/Vehicle Mix	Peak Hour						Daily
	a.m.			p.m.			
	In	Out	Total	In	Out	Total	
Trip Generation							
Light Industrial – 145,840 square feet	90	12	102	12	80	92	723
Trip Generation in PCE							
Passenger Cars	71	9	80	9	63	72	569
Two-Axle Trucks	11	1	12	1	10	11	87
Three-Axle Trucks	7	1	8	1	6	7	56
Four-Axle+ Trucks	26	3	29	3	23	26	206
Final Trip Generation (in PCE)	115	14	129	14	102	116	918

Notes: PCE = passenger car equivalents

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to Appendix I.

As also shown in Table 4.17-8, after applying PCE factors, the proposed project is forecast to generate approximately 918 PCE daily trips, including approximately 129 PCE a.m. peak hour trips and approximately 116 PCE p.m. peak hour trips.

Project Trip Distribution

Trip distribution represents the directional orientation of trips to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of residential, retail, employment, recreational opportunities, and the proximity to the regional freeway system. The directional orientation of project-generated trips was determined by evaluating existing and proposed land uses and highways within the community.



Forecast trip distribution for the proposed project has been developed as part of the Traffic Impact Analysis. Traffic Impact Analysis Exhibit E, *Project Trip Distribution – Passenger Vehicles*, shows the forecast trip distribution for passenger vehicles, and Traffic Impact Analysis Exhibit F, *Project Trip Distribution – Trucks*, shows the forecast trip distribution for truck trips.

Existing Plus Project Conditions (2019)

Table 4.17-9, City and County Study Intersection LOS Analysis Summary – Existing Plus Project Condition, summarizes the results of the LOS analysis for City and County study intersections under existing plus project conditions. As shown, the City and County study intersections are forecast to operate at an acceptable level of service (LOS D or better) during a.m. and p.m. peak hours, and based on established thresholds of significance, the project would not result in a significant traffic impact at the City and County study intersections under existing plus project conditions.

Table 4.17-10, State Highway Study Intersection LOS Analysis Summary – Existing Plus Project Conditions, summarizes the results of the LOS analysis for State highway study intersections under existing plus project conditions. As shown in Table 4.17-10, the State highway study intersections are forecast to operate at an acceptable level of service (LOS D or better) during the peak hours, and based on established thresholds of significance, would not result in significant traffic impacts under existing plus project conditions.



Table 4.17-9
City and County Study Intersection LOS Analysis Summary – Existing Plus Project Conditions

Intersection	Traffic Control	Methodology	Existing Conditions				Existing Plus Project Conditions										
			Delay ¹ (seconds)		V/C Ratio ²		Delay ¹ (seconds)		V/C Ratio ²		Change in V/C Ratio		Level of Service		Significant Impact?		
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
1	Figueroa Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.385	0.568	--	--	0.386	0.572	0.001	0.004	A	A	No	No
2	Broadway (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.317	0.441	--	--	0.344	0.457	0.027	0.016	A	A	No	No
3	Main Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.358	0.531	--	--	0.384	0.544	0.026	0.013	A	A	No	No
4	Broadway (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.370	0.552	--	--	0.375	0.557	0.005	0.005	A	A	No	No
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	ICU	--	--	0.570	0.560	--	--	0.588	0.573	0.018	0.013	A	A	No	No
6	Main Street (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.532	0.717	--	--	0.545	0.721	0.013	0.004	A	C	No	No
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.442	0.785	--	--	0.454	0.785	0.012	0.000	A	C	No	No
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.670	0.728	--	--	0.676	0.729	0.006	0.001	B	C	No	No
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.583	0.755	--	--	0.594	0.772	0.011	0.017	A	C	No	No
10	Figueroa Street (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.586	0.760	--	--	0.589	0.774	0.003	0.014	A	C	No	No
11	Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.6	13.9	--	--	12.7	14.2	--	--	--	--	B	B	No	No
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.3	11.9	--	--	10.5	12.3	--	--	--	--	B	B	No	No
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.2	13.8	--	--	--	--	B	B	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.3	13.5	--	--	--	--	B	B	--	--

Notes: TS = traffic signal; CSS = cross-street stop; ICU = Intersection Capacity Utilization; HCM = Highway Capacity Manual; V/C = volume to capacity ratio

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² ICU Analysis Software: Traffix, Version 8.0.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).



Table 4.17-10
State Highway Study Intersection LOS Analysis Summary – Existing Plus Project Conditions

Intersection		Traffic Control	Methodology	Existing Conditions				Existing Plus Project Conditions					
				Delay ¹ (seconds)		Level of Service		Delay ¹ (seconds)		Level of Service		Significant Impact?	
				a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	HCM	24.3	18.9	C	B	24.4	19.1	C	B	No	No
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	HCM	15.2	20.1	B	C	15.2	20.0	B	B	No	No
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	22.5	22.6	C	C	21.2	19.8	C	B	No	No
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	45.4	51.2	D	D	36.5	48.4	D	D	No	No
11	Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.8	14.1	B	B	12.7	14.2	B	B	No	No
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.4	12.0	B	B	10.5	12.3	B	B	No	No
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.2	13.8	B	B	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.3	13.5	B	B	--	--

Notes: TS = traffic signal; CSS = cross-street stop; HCM = Highway Capacity Manual

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control.

For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).



Future Traffic Conditions

To assess future conditions, project traffic is combined with existing traffic, area-wide growth, and traffic generated by cumulative project. Consistent with the *Alondra Boulevard & Ball Avenue Project Traffic Impact Analysis*, prepared by Kunzman Associates, Inc., and dated January 6, 2016, opening year (2021) traffic volumes were derived by applying an annual growth rate of 0.5 percent per year over a two-year period to existing traffic volumes to account for background growth in 2021. It should be noted this is a conservative assumption since the growth rate is applied to all movements at the study intersections and driveways.

Information on cumulative projects in the vicinity of the study area was obtained from the *Alondra Boulevard & Ball Avenue Project Traffic Impact Analysis*. The Alondra Boulevard & Ball Avenue Project itself is also accounted for as a cumulative project in this analysis. Traffic Impact Analysis Table 3, *Cumulative Projects Trip Generation*, and Exhibit I, *Cumulative Projects Location Map*, show the cumulative projects locations and forecasted trip generation. Overall, cumulative projects are forecast to generate approximately 7,004 daily trips, which include approximately 452 a.m. peak hour trips and approximately 523 p.m. peak hour trips.

Some of the cumulative projects may be downsized or may not be developed by project opening year (2021). In addition, many of the cumulative projects have been or will be subject to a variety of mitigation measures to reduce potential traffic impacts associated with those projects. However, those mitigation measures have not been taken into account in projecting the potential traffic impact of the cumulative projects. Therefore, the cumulative analysis in this analysis is conservative. Additionally, the cumulative analysis utilizes an annual growth rate of 0.5 percent which would likely already capture and account for most cumulative projects in the area. As stated, the annual growth rate methodology is conservative since it is applied to all movements at the study intersections and driveways.

Opening Year (2021) Without Project Conditions

Opening year (2021) without project conditions traffic volumes consist of existing traffic volumes, a 0.5 percent annual growth rate, and traffic generated by cumulative projects; this scenario does not include project-generated traffic.

Table 4.17-11, City and County Study Intersection LOS Analysis Summary – Opening Year (2021) Without Project Conditions, summarizes the results of the LOS analysis for the City and County study intersections during opening year (2021) without project conditions. As shown, the City and County study intersections are forecast to operate at an acceptable level of service (LOS D or better) during the peak hours under this scenario.

**Table 4.17-11
City and County Study Intersection LOS Analysis Summary – Opening Year (2021) Without Project Conditions**

Intersection	Traffic Control	Methodology	Delay ¹ (seconds)		V/C Ratio ²		Level of Service	
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
1 Figueroa Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.405	0.576	A	A
2 Broadway (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.320	0.446	A	A
3 Main Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.369	0.544	A	A
4 Broadway (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.373	0.557	A	A
5 Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	ICU	--	--	0.591	0.578	A	A
6 Main Street (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.548	0.737	A	C
7 SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.450	0.792	A	C



Table 4.17-11 (cont'd)
City and County Study Intersection LOS Analysis Summary – Opening Year (2021) Without Project Conditions

Intersection	Traffic Control	Methodology	Delay ¹ (seconds)		V/C Ratio ²		Level of Service	
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
8 I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.714	0.785	C	C
9 I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.637	0.823	B	D
10 Figueroa Street (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.620	0.804	B	D
11 Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.8	14.1	--	--	B	B
12 164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.4	12.0	--	--	B	B
13 Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	--	--
14 Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	--	--

Notes: TS = traffic signal; CSS = cross-street stop; ICU = Intersection Capacity Utilization; HCM = Highway Capacity Manual; V/C = volume to capacity ratio

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² ICU Analysis Software: Traffix, Version 8.0.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).

Additionally, [Table 4.17-12, State Highway Study Intersection LOS Analysis Summary – Opening Year \(2021\) Without Project Conditions](#), summarizes the results of the LOS analysis for State highway study intersections during opening year (2021) without project conditions. As shown, the State highway study intersections are forecast to operate at an acceptable level of service (LOS D or better) during the peak hours under this scenario.



Table 4.17-12
State Highway Study Intersection LOS Analysis Summary – Opening Year (2021) Without Project Conditions

Intersection		Traffic Control	Methodology	Delay ¹ (seconds)		Level of Service	
				a.m.	p.m.	a.m.	p.m.
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	HCM	24.3	18.9	C	B
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	HCM	15.2	20.1	B	C
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	22.5	22.6	C	C
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	45.4	51.2	D	D
11	Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.8	14.1	B	B
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.4	12.0	B	B
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--

Notes: TS = traffic signal; CSS = cross-street stop; HCM = Highway Capacity Manual

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).

Opening Year (2021) With Project Conditions

Opening year (2021) with project conditions traffic volumes consist of existing traffic volumes, a 0.5 percent annual growth rate, traffic generated by cumulative projects, and project-generated traffic.

Table 4.17-13, City and County Study Intersection LOS Analysis Summary – Opening Year (2021) With Project Conditions, summarizes the results of the LOS analysis for the City and County study intersections under opening year (2021) with project conditions. As shown, the City and County study intersections are forecast to operate at an acceptable level of service (LOS D or better) during the peak hours under this scenario and would not result in a significant traffic impact under this scenario.

Table 4.17-14, State Highway Study Intersection LOS Analysis Summary – Opening Year (2021) With Project Conditions, summarizes the results of the LOS analysis for the State highway study intersections under opening year (2021) with project conditions. As shown, the State highway study intersections are forecast to operate at an acceptable level of service (LOS D or better) during the peak hours and would not result in significant traffic impacts under this scenario.



Table 4.17-13
City and County Study Intersection LOS Analysis Summary – Opening Year (2021) With Project Conditions

Intersection	Traffic Control	Methodology	Opening Year (2021) Without Project Conditions				Opening Year (2021) With Project Conditions										
			Delay ¹ (seconds)		V/C Ratio ²		Delay ¹ (seconds)		V/C Ratio ²		Change in V/C Ratio		Level of Service		Significant Impact?		
			a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
1	Figueroa Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.405	0.576	--	--	0.406	0.581	0.001	0.005	A	A	No	No
2	Broadway (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.320	0.446	--	--	0.347	0.462	0.027	0.016	A	A	No	No
3	Main Street (NS) and Gardena Boulevard (EW)	TS	ICU	--	--	0.369	0.544	--	--	0.395	0.557	0.026	0.013	A	A	No	No
4	Broadway (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.373	0.557	--	--	0.378	0.562	0.005	0.005	A	A	No	No
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	ICU	--	--	0.591	0.578	--	--	0.608	0.591	0.017	0.013	B	A	No	No
6	Main Street (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.548	0.737	--	--	0.558	0.741	0.010	0.004	A	C	No	No
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	ICU	--	--	0.450	0.792	--	--	0.462	0.792	0.012	0.000	A	C	No	No
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.714	0.785	--	--	0.719	0.786	0.005	0.001	C	C	No	No
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.637	0.823	--	--	0.650	0.840	0.013	0.017	B	D	No	No
10	Figueroa Street (NS) and Redondo Beach Boulevard (EW)	TS	ICU	--	--	0.620	0.804	--	--	0.624	0.818	0.004	0.014	B	D	No	No
11	Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.8	14.1	--	--	12.9	14.5	--	--	--	--	B	B	No	No
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.4	12.0	--	--	10.6	12.4	--	--	--	--	B	B	No	No
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.3	14.1	--	--	--	--	B	B	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.4	13.8	--	--	--	--	B	B	--	--

Notes: TS = traffic signal; CSS = cross-street stop; ICU = Intersection Capacity Utilization; HCM = Highway Capacity Manual; V/C = volume to capacity ratio

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² ICU Analysis Software: Traffix, Version 8.0.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).



Table 4.17-14
State Highway Study Intersection LOS Analysis Summary – Opening Year (2021) With Project Conditions

Intersection		Traffic Control	Methodology	Opening Year (2021) Without Project Conditions				Opening Year (2021) With Project Conditions					
				Delay ¹ (seconds)		Level of Service		Delay ¹ (seconds)		Level of Service		Significant Impact?	
				a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
5	Main Street (NS) and SR-91 Westbound Ramps (EW)	TS	HCM	24.3	18.9	C	B	25.3	19.6	C	B	No	No
7	SR-91 Eastbound Ramps (NS) and Albertoni Street (EW)	TS	HCM	15.2	20.1	B	C	15.3	21.2	B	C	No	No
8	I-110 Southbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	22.5	22.6	C	C	22.7	22.7	C	C	No	No
9	I-110 Northbound Ramps (NS) and Redondo Beach Boulevard (EW)	TS	HCM	45.4	51.2	D	D	48.5	54.5	D	D	No	No
11	Figueroa Street (NS) and 164th Street (EW)	CSS	HCM	12.8	14.1	B	B	12.9	14.5	B	B	No	No
12	164th Street (NS) and Gardena Boulevard (EW)	CSS	HCM	10.4	12.0	B	B	10.6	12.4	B	B	No	No
13	Project Driveway 1 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.3	14.1	B	B	--	--
14	Project Driveway 2 (NS) and Gardena Boulevard (EW)	CSS	HCM	--	--	--	--	11.4	13.8	B	B	--	--

Notes: TS = traffic signal; CSS = cross-street stop; HCM = Highway Capacity Manual

¹ HCM Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

Source: RK Engineering Group, Inc., 333 W. Gardena Boulevard Industrial Project Preliminary Traffic Impact Analysis, City of Carson, January 20, 2020; refer to [Appendix I](#).



CMP Consistency

The 2010 *Congestion Management Program* (CMP), prepared by the Los Angeles County Metropolitan Transportation Authority, is intended to reduce traffic congestion and provide a mechanism for coordinating land use and development decisions throughout Los Angeles County.² The CMP states that if a project generates 50 or more trips during either the a.m. or p.m. weekday peak hours for CMP arterial monitoring intersections, or more than 150 trips on the freeway in either direction during either the a.m. or p.m. weekday peak hours for mainline freeway monitoring locations, a CMP traffic analysis is required.

As detailed in the Traffic Impact Analysis, the project is not forecasted to generate 50 or more trips during weekday peak hours at any CMP-monitored study intersection or 150 or more trips during weekday peak hours at any mainline freeway location. As such, a CMP traffic analysis is not required for the proposed project. Less than significant impacts would occur in this regard.

Transit, Bicycle, and Pedestrian Facilities

The project site is located adjacent to a variety of existing transportation facilities. Pedestrian sidewalks are provided along both sides of West Gardena Boulevard and South Broadway. Additionally, bus stops serviced by GTrans, the City of Gardena's transit service, and Torrance Transit are located along West Gardena Boulevard. While no bicycle facilities are currently located in the project vicinity, future road diet and buffered bicycle lanes are proposed along the project frontage on West Gardena Boulevard from Figueroa Street to Avalon Boulevard in the *Carson Master Plan of Bikeways*.³

Implementation of the proposed warehouse development would not impair existing pedestrian sidewalks and transit services or future planned bicycle facility improvements along West Gardena Boulevard. Additionally, the project proposes to widen and repave the existing alley to the west, as well as replace the existing sidewalk, curb, and gutter along the project's frontage. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

No Impact. The California Natural Resources Agency finalized and adopted updates to the CEQA Guidelines in December 2018, which includes the new Section 15064.3. Section 15064.3 describes specific considerations for evaluating a project's transportation impacts based on vehicle miles traveled. As detailed in Section 15064.3(c), the provisions of the section shall apply Statewide beginning on July 1, 2020.

The Traffic Impact Analysis concluded that the project's traffic impacts would be less than significant based on the traditional level of service methodology. As application of the vehicle miles traveled methodology is not required until July 1, 2020, the project would not be in conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). No impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The project does not propose changes to the City's circulation system, such as sharp curves or dangerous intersections, and would not introduce incompatible uses to area roadways (e.g., farm equipment).

² Los Angeles County Metropolitan Transportation Authority, *2010 Congestion Management Program*, 2010.

³ City of Carson, *Carson Master Plan of Bikeways*, August 2013.



The project proposes driveway improvements to provide site access and circulation. Site access would be provided via two full access driveways along West Gardena Boulevard: one full access unsignalized driveway serving mainly passenger vehicles on the west end of the site, and one full access unsignalized driveway serving mainly trucks on the east end. Internal access would be provided via the perimeter of the building, as depicted on Exhibit 2-3, *Conceptual Site Plan*. The proposed driveways and interior vehicular circulation are designed to meet County fire truck turning radii and fire access requirements, as well as truck turnout requirements as shown on Exhibit 4.17-1, *Truck Turnout Access*. As such, the project would not increase hazards due to geometric design features or incompatible uses and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

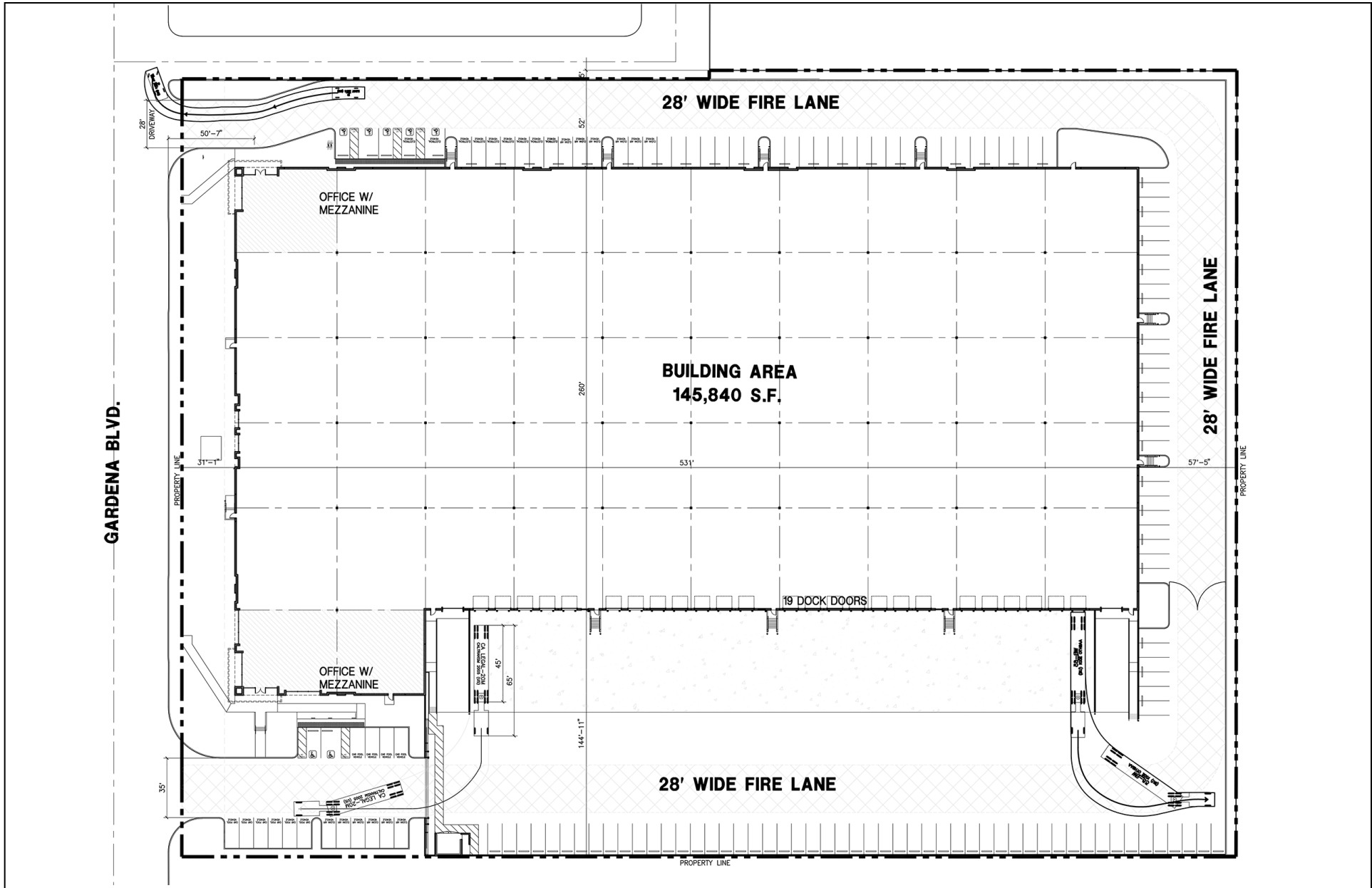
d) *Result in inadequate emergency access?*

Less Than Significant Impact with Mitigation Incorporated. As detailed above in Response 4.17(c), the project would install two driveways on the east and west side of the project frontage and internal circulation drive aisles. The proposed access and circulation improvements would meet fire access and truck turning radii requirements and would not result in inadequate emergency access. Impacts in this regard would be less than significant.

The project has the potential to result in safety hazards during the short-term construction process. Partial road closures would be required during installation of undergrounded utilities (along W. Gardena Boulevard, 164th Street, and Figueroa Street) and full closure of the public alley would be required during widening and repaving activities. W. Gardena Boulevard, 164th Street, and Figueroa Street would remain open to traffic at all times. For full closure of the public alley, access to the surrounding area would still be afforded via 164th Street. During periods when partial and/or full road closures are required, the Applicant would be required to implement a temporary Traffic Management Plan (TMP) to maintain emergency access during the construction process (Mitigation Measure TRA-1). The TMP would include potential measures such as construction signage, limitations on timing for lane closures to avoid peak hours, temporary striping plans, and the need for a construction flagperson to direct traffic during heavy equipment use, among others. The TMP would ensure emergency access is maintained during short-term construction activities. Thus, with implementation of Mitigation Measure TRA-1, impacts would be reduced to less than significant levels in this regard.

Mitigation Measures:

TRA-1 Prior to the initiation of construction, the project Applicant shall prepare a Traffic Management Plan (TMP) for approval by the City of Carson Traffic Engineer. The TMP shall include measures such as construction signage, limitations on timing for lane closures to avoid peak hours, temporary striping plans, and the need for a construction flagperson to direct traffic during heavy equipment use. The TMP shall specify that one direction of travel in each direction must always be maintained for W. Gardena Boulevard and Figueroa Street throughout project construction. For required lane closure along 164th Street, a flagperson must be present. The TMP shall be incorporated into project specifications for verification prior to final plan approval.



NOT TO SCALE

Michael Baker
INTERNATIONAL



02/2020 JN 176054

CT WAREHOUSE PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

Truck Turnout Access

Exhibit 4.17-1



4.18 TRIBAL CULTURAL RESOURCES

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

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

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.



- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
- 1) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

No Impact. As detailed in Response 4.5(a), no historic resources listed or eligible for listing in a State or local register of historic resources are located on the project site. Therefore, no impacts related to historic tribal cultural resources defined in Public Resources Code Section 5020.1(k) would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant With Mitigation Incorporated. In compliance with AB 52, the City of Carson distributed letters notifying each tribe that requested to be on the City's list for the purposes of AB 52 of the opportunity to consult with the City regarding the proposed project. The letters were distributed by certified mail on December 10, 2019. The tribes had 30 days to respond to the City's request for consultation. The Gabrieleno Band of Mission Indians – Kizh Nation tribal representative replied within the 30 days requesting consultation and the City consulted with the tribe on February 25, 2020.

The Gabrieleno Band of Mission Indians – Kizh Nation indicated that the project site is located within the vicinity of known tribal cultural resources. However, no specific known tribal cultural resources were identified at the project site. As such, the project site is sensitive for unknown tribal cultural resources.

As such, to avoid impacting or destroying tribal cultural resources that may be inadvertently unearthed during the project's ground disturbing activities, Mitigation Measure TCR-1 would ensure a qualified Native American Monitor is present during excavation activities involving native soils. If evidence of potential subsurface tribal cultural materials is found during site disturbance/excavation activities and the qualified archaeologist/Native American Monitor determines that the find is prehistoric or includes Native American materials, Mitigation Measure TCR-1 would ensure affiliated Native American groups are invited to contribute to the assessment and recovery of the found resource. With implementation of Mitigation Measure TCR-1, impacts would be reduced to less than significant levels.

Mitigation Measures:

- TCR-1 Prior to issuance of any grading permits, the project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the Native American Heritage Commission's (NAHC's) Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant shall be present on-site during the construction phases that involves ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching within the project area. The Tribal Monitor/consultant shall complete daily monitoring logs that provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.



Upon discovery of any tribal cultural or archaeological resources, all construction activities shall cease in the immediate vicinity of the find until the find can be assessed. All tribal cultural and archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist (Mitigation Measure CUL-1) and the tribal monitor/consultant. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe requests preservation in place or recovery for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, additional protective mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource” (per Mitigation Measure CUL-1), time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be made available by the Applicant. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.

Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. All Tribal Cultural Resources shall be returned to the Tribe. Any historic archaeological material that is not Native American in origin shall be curated at a public, nonprofit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to the Tribe or a local school or historical society in the area for educational purposes.

Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, or associated grave goods defined in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Upon discovery of human remains, the tribal monitor/consultant and/or qualified archaeologist (Mitigation Measure CUL-1) shall immediately divert work at minimum of 150 feet and place an exclusion zone around the discovery location. The monitor/consultant(s) shall then notify the Tribe, the qualified lead archaeologist, and the construction manager who shall call the coroner. Work shall continue to be diverted while the coroner determines whether the remains are human and subsequently Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner shall notify the NAHC as mandated by state law who shall then appoint a Most Likely Descendent (MLD).

If the Gabrieleño Band of Mission Indians – Kizh Nation is designated MLD, the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.



Archaeological and Native American monitoring and excavation during construction shall be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The qualified archaeologist (Mitigation Measure CUL-1) shall ensure that all other personnel are appropriately trained and qualified.



4.19 UTILITIES AND SERVICE SYSTEMS

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

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

Less Than Significant Impact.

Water

The project site is served by Golden State Water Company's (GSWC) Southwest District. The proposed project would construct two on-site water pipelines, each with associated meter and back flow preventor (BFP), to connect to GSWC's existing water facilities in West Gardena Boulevard. Further, a new irrigation service line (with associated meter and BFP) and two new fire service laterals would be installed and connect to the existing irrigation main and water main, in West Gardena Boulevard, respectively. As the project is consistent with the land use designation and zoning for the site, payment of standard water connection fees and ongoing user fees would ensure that sufficient water supplies are available. Additionally, GSWC provided a "Will Serve" letter for use of this waterline by the proposed project; refer to Appendix H, Will Serve Letters.¹ Based on the project's consistency with anticipated land use for the project area,

¹ Written Correspondence: Joseph Zhao, P.E., PhD., Operations Engineer Southwest District, Golden State Water Company, July 15, 2019.



project implementation would not require construction of new or expansion of existing water facilities. Less than significant impacts would occur in this regard.

Wastewater

According to the Sanitation Districts of Los Angeles County (LACSD), demolition of the existing uses and construction of the proposed project is anticipated to generate approximately 2,461 net gallons of wastewater per day (gpd).² The project proposes to construct a new on-site sewer system consisting of 6-inch sewer lines that would connect to a new sewer lateral at the western portion of the site. The new sewer would then flow westward to an existing local sewer line located west of the site in 164th Street. Wastewater generated by the proposed project would be treated at the LACSD's Joint Water Pollution Control Plant (JWPCP) located in the City of Carson, which has a capacity of 400 million gallons per day (mgd) and currently processes an average flow of 261.1 mgd.

As the project is consistent with the land use designation and zoning for the site, payment of standard sewer connection fees and ongoing user fees would ensure that sufficient capacity is available. Additionally, the LACSD provided a "Will Serve" letter for the proposed project; refer to [Appendix H](#). Therefore, it is not anticipated that project implementation would require construction of new or the expansion of existing wastewater facilities. Impacts would be less than significant in this regard.

Stormwater

The proposed project would construct a new network of storm drain lines on-site that would ultimately connect to a new public reinforced concrete pipe (RCP) in 164th Street. The new public RCP would then connect to the existing public storm drain in Figueroa Street, approximately 640 feet west of the project site. Once in Figueroa Street, stormwater runoff would flow to a County-maintained storm drain that ultimately outlets to the San Gabriel River. The project would also install an on-site infiltration system in the northeast portion of the project site; refer to [Section 4.10, Hydrology and Water Quality](#). The infiltration system consists of detention underground chambers and a biofiltration unit to treat runoff. It is acknowledged that other areas of stormwater flow would enter the system via catch basins located along perimeter of the building. Each catch basin would be equipped with a drain insert to filter pollutants prior to entering the on-site storm drain system. It is noted that the landscaped swath to the south of the new building would sheet flow to West Gardena Boulevard.

The project's potential environmental effects for construction of the abovementioned storm drain improvements are analyzed throughout this Initial Study. Construction of the new storm drain improvements would be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations, as well as the specific mitigation measures in this Initial Study. Compliance with the relevant laws, ordinances, and regulations, as well as the specified mitigation measures, would ensure the project's construction-related environmental impacts associated with the proposed storm drain improvements are considered less than significant.

Dry Utilities

The project would result in the construction of new private on-site dry utilities associated with electricity, natural gas, and telecommunication services. Specifically, the project involves undergrounding on-site power lines. These improvements require the removal of multiple existing power poles and the construction of new power poles along the northern and western perimeters to accommodate the undergrounding. The project would continue to utilize the existing gas main located along West Gardena Boulevard. No new natural gas line improvements are proposed. Telecommunication services for the proposed warehouse building would be provided by AT&T Inc. and Time Warner Cable.

² Written Correspondence: Adriana Raza, Customer Service Specialist, Sanitation Districts of Los Angeles County, July 25, 2019.



The project's potential environmental effects for construction of dry utilities on-site are analyzed throughout this Initial Study. Construction activities would be subject to compliance with all applicable local, state, and federal laws, ordinances, and regulations referenced in this Initial Study. Compliance with the relevant laws, ordinances, and regulations would ensure the project's construction-related environmental impacts are less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. As stated in Response 4.19(a), GSWC provided a "Will Serve" for water use at the project site; refer to Appendix H. Thus, GSWC would have a sufficient water supply available to serve the project. The project is consistent with the land use designation and zoning for the site. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. As stated in Response 4.19(a), the proposed project would result in the generation of additional wastewater above existing conditions. However, there is substantial remaining capacity for wastewater treatment at LACSD's JWPCP to serve the project's projected demand in addition to existing commitments. The project-generated wastewater (estimated at 2,461 gpd, or 0.002 mgd) would represent only 0.001 percent of JWPCP's remaining capacity (estimated at 138.9 mgd).³

Payment of standard sewer connection fees and ongoing user fees would ensure that sufficient capacity is available. Additionally, LACSD provided a "Will Serve" letter for the proposed project. As such, the project's potential impacts on wastewater treatment provider would be fully mitigated via payment of fees and LACSD's service commitment. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Waste Resources provides commercial solid waste collection services for the City.⁴ In 2018, a total of 206,759 tons of solid waste were disposed in the 19 permitted landfills serving the City.⁵ Among the 19 sites, El Sobrante Landfill, Holloway Landfill, and Chiquita Canyon Sanitary Landfill admitted the majority of City's waste.⁶

³ Written Correspondence: Adriana Raza, Customer Service Specialist, Sanitation Districts of Los Angeles County, July 25, 2019.

⁴ City of Carson, *City Transition Letter*, <https://ci.carson.ca.us/content/files/pdfs/publicworks/CityTransitionLetter-WR-Signed.pdf>, accessed January 7, 2020.

⁵ CalRecycle, *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed January 7, 2020.

⁶ CalRecycle, *Transported Solid Waste*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Statewide/TransportedSolidWaste>, accessed January 7, 2020.



Construction

The proposed project would require demolishing the existing single-family residential buildings to construct a warehousing/distribution facility. Based on the Data, Equipment and Time Estimate survey provided by the project Applicant, project demolition is expected to generate approximately 100 tons of demolished material. As existing landfills in the area accept up to 16,054 tons per day, the project’s nominal disposal of materials would not result in significant impacts to the regional landfill capacity. Further, all construction activities would be subject to conformance with relevant Federal, State, and local requirements related to solid waste disposal. Specifically, the project would be required to demonstrate compliance with the California Integrated Waste Management Act of 1989 (AB 939), which requires all California cities to “reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible.” The California Integrated Waste Management Act of 1989 requires that at least 50 percent of waste produced is recycled, reduced, or composted. The project would also be required to demonstrate compliance with the 2016 (or most recent) Green Building Code, which includes design and construction measures that act to reduce construction-related waste through material conservation measures and other construction-related efficiency measures. Compliance with these programs would ensure the project’s construction-related solid waste impacts would be less than significant.

Operation

Based on the project’s Air Quality and Greenhouse Gas modeling (Appendix A, Air Quality/Greenhouse Gas/Energy Data), project operations are expected to generate approximately 45.22 tons of waste per year, or approximately 0.12 tons per day (tpd); refer to Appendix A. This represents less than one percent of the daily permitted throughput capacities identified in Table 4.19-1, Landfills Serving the City, below. As such, the project is not anticipated to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts in this regard would be less than significant.

**Table 4.19-1
Landfills Serving the City**

Landfill/Location	Amount Disposed by City in 2018 (tons/day)	Maximum Daily Throughput (tons per day)	Remaining Capacity (cubic yards)	Anticipated Closure Date
El Sobrante Landfill 10910 Dawson Canyon Road, Corona, CA 91719	89,673	16,054	143,977,170	01/01/2051
Holloway Landfill 14045 Holloway Road, Lost Hills, CA 93249	60,390	2,000	7,522,934	12/01/2030
Chiquita Canyon Sanitary Landfill 29201 Henry Mayo Drive, Castaic, CA 91384	33,307	12,000	60,408,000	04/01/2047
Frank R. Bowerman Sanitary Landfill 11002 Bee Canyon Access Road, Irvine, CA 92618	7,420	11,500	205,000,000	12/31/2053
Sunshine Canyon City/County Landfill 14747 San Fernando Road, Sylmar, CA 91342	3,825	12,100	77,900,000	10/31/2037

Notes:

1. Antelope Valley Public Landfill, Azusa Land Reclamation Co. Landfill, Clean Harbors Buttonwillow LLC, Commerce Refuse-To-Energy Facility, Kettleman Hills - B18 Nonhaz Codisposal, Lancaster Landfill and Recycling Center, McKittrick Waste Treatment Site, Mid-Valley Sanitary Landfill, Olinda Alpha Landfill, Prima Deshecha Landfill, San Timoteo Sanitary Landfill, Scholl Canyon Landfill, Simi Valley Landfill & Recycling Center, and Southeast Resource Recovery Facility are excluded from Table 4.19-1 as these facilities accepted less than one percent of the City’s solid waste in 2018 (the last available reporting year).

Sources:

CalRecycle, *SWIS Facility/Site Search*, <https://www2.calrecycle.ca.gov/SWFacilities/Directory>, accessed January 7, 2020.
 CalRecycle, *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed January 7, 2020.



CalRecycle, *Transported Solid Waste*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Statewide/TransportedSolidWaste>, accessed January 7, 2020.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Refer to Response 4.19(d) above. The proposed project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City requirements for solid waste generated during project construction and operation. Less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation is required.



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4.20 WILDFIRE

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

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

No Impact. According to the California Department of Forestry and Fire Protection's *Los Angeles County Fire Hazard Severity Zones in SRA Map*, the City of Carson, including the project site, is not designated as a very high fire hazard severity zone.¹ No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. Refer to Response 4.20(a).

Mitigation Measures: No mitigation is required.

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

No Impact. Refer to Response 4.20(a).

Mitigation Measures: No mitigation is required.

¹ California Department of Forestry and Fire Protection, *Los Angeles County Fire Hazard Severity Zones in SRA Map*, updated November 7, 2007.



- d) ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

No Impact. Refer to Response 4.20(a).

Mitigation Measures: No mitigation is required.



4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

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

Less Than Significant Impact With Mitigation Incorporated. As concluded in Section 4.4, Biological Resources, the project site is heavily disturbed and is located within an urbanized area of the City. Based on the site's condition, no sensitive plant or animal species would be present. Thus, the project would have no impacts on sensitive plant or animal species. As indicated in Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, project implementation is not anticipated to result in impacts to cultural or tribal cultural resources based on the site's disturbed condition and past use as an organic refuse landfill site. However, in the unlikely event that buried archaeological resources are encountered during ground disturbance activities, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and recommends a course of action. To avoid impacting or destroying tribal cultural resources that may be inadvertently unearthed during the project's ground disturbing activities, Mitigation Measure TCR-1 would ensure a qualified Native American Monitor is present during excavation activities involving native soils. If evidence of potential subsurface tribal cultural materials is found during site disturbance/excavation activities and the qualified archaeologist/Native American Monitor determines that the find is prehistoric or includes Native American materials, Mitigation Measure TCR-1 would ensure affiliated Native American groups are invited to contribute to the assessment and recovery of the found resource. In the unlikely event that paleontological resources are encountered during project construction, Mitigation Measure GEO-2 would require all project construction activities to halt until a paleontologist identifies the paleontological significance of the find and recommends a course of action. Therefore, the proposed project would not



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

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

Less Than Significant Impact With Mitigation Incorporated. A significant impact may occur if a proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. As concluded in Sections 4.1 through 4.20, the proposed project would not result in any significant impacts in any environmental categories with implementation of project mitigation measures. Implementation of mitigation measures at the project-level would reduce the potential for the incremental effects of the proposed project to be less than considerable when viewed in connection with the effects of past projects, current projects, or probable future projects.

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

Less Than Significant Impact With Mitigation Incorporated. Previous sections of this Initial Study reviewed the proposed project’s potential impacts related to aesthetics, air quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly, following conformance with the existing regulatory framework and mitigation measures. Impacts would be reduced to less than significant levels in this regard.



4.22 REFERENCES

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Written Correspondence: Adriana Raza, Customer Service Specialist, Sanitation Districts of Los Angeles County, July 25, 2019.

Written Correspondence: Joseph Zhao, P.E., PhD., Operations Engineer Southwest District, Golden State Water Company, July 15, 2019.



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5.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study/Environmental Checklist, we recommend that the City of Carson prepare a mitigated negative declaration for the CT Warehouse Project. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the City of Carson's determination (see Section 6.0, Lead Agency Determination).

March 13, 2020

Date



Kristen Bogue, Project Manager
Michael Baker International



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6.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature:

Title: Assistant Planner

Printed Name: Manraj Bhatia

Agency: City of Carson

Date: March 13, 2020



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